



Maa Mahamaya Industries Limited is introducing Mangal TMT, which is superior product with high durability, ductility and strength to meet latest market demands.

Managal TMT is the one stop solution to your premium construction requirements.

8mm to 32mm HSD-STEELBARS

ABOUT US

Maa Mahamaya Industries Ltd is the first Mini Integrated Steel Plant in Andhra Pradesh. Founder and Managing Director of our Industry is **Sri Ashok Kumar Agarwal**, The plant was inaugurated by then Hon'ble Chief Minister Late Sri Y S Rajasekhara Reddy Garu on May 20th 2006. The final product namely 'MANGAL TMT' is well established brand in the market. Our plant is located in Vizianagaram District, near to Visakhapatnam.

Why MAGAL TMT

MMIL is using the best Iron Ore in the country, which is available in NMDC, Bachel, Raw material is Transported through rail road to Kantakapally near to the Plant. Imported Coal as required for power plant is transported from Visakhapatnam port. Our Market is established in Andhra Pradesh, Chattisgarh, Chennai and Bangalore. Mangal TMT have supplied to all major and prestigious projects in Andhra Pradesh, Chennai and Bangalore.

At Mangal TMT, we believe in stringent quality control from the start of the manufacturing process till the finished product is produced. When you want to construct load-bearing structures that last for years together, choose Mangal TMT Fe-500D and Fe-550D grade TMT steel bars for a stress free construction experience. If you want to build it right choose Mangal TMT.

IS : 1786



CML-6635477



MANGAL TMT Fe 550 D 12 565477

Technical Literature

TMT – Thermo mechanical process is a metallurgical process that combines mechanical deformation process like rolling with thermal process like heat treatment, water quenching, heating and cooling at various rates into single process.

This process produces a high strength bar from low carbon steel.

Steel billets are heated up to 1200 degree C temp approx in reheat furnace progressive rolled to final size shape of a reinforcing bar of grade Fe 500, Fe 500D, Fe 550.

The physical properties are in accordance to IS 1786:2008.

Advantages of the Product:

We at Mangal TMT, prejudice give top priority to quality.

The Raw materials are sourced from NMDC, Mines with a long term agreement signifies the values of company. We are also having a stringent QAP at all levels from Raw materials to finished products to ensure the compliance of IS code requirements.

Being centrally located at R.G.Peta, 50km away from Visakhapatnam city enables a easy transport to various cities directly from factory.

Further we would also like to bring your notice that we are the first mini integrated steel plant in Andhra Pradesh. We also have a technical team of qualified civil/mechanical Engineers for after sales and pre sales technical discussions with Engineer In charge for improving & maintaining the established standards.







**For any other
communication**

Address: Vishakapatnam Branch Office-
1st Floor, C-Block, Udyog
Bhavan, VUDA Complex,
Siripuram, Vishakaptanam,
VISA KHAPATNAM, ANDHRA
PRADESH, 530003

Phone: 0891-2712833

Fax: 08912540861

E-Mail: vzbo@bis.gov.in

Web: www.bis.org.in,
www.manakonline.in

BUREAU OF INDIAN STANDARDS

Attachment to Licence No. CM/L- 6635477

CM/L-No	Name of the Licensee with the Factory Address	Name of the Product	Indian Standard No.
6635477	Maa Mahamaya Industries Ltd. -R.G.Peta village, L.Kota Mandal , , L. Kota, VZM : 535161	High strength deformed steel bars and wires for concrete reinforcement-	IS 1786 : 2008

Endorsement No. 20 Dated 21-Dec-2021

Whereas, the licence was valid upto First January Two Thousand Twenty Two.

Now, consequent upon renewal, the validity of the licence given in schedule of the Licence Dated 31-DEC-2021 has been extended from First January Two Thousand Twenty Two to Thirty First December Two Thousand Twenty Three

Other terms and conditions of licence remain same.

Branch Head (Vishakapatnam Branch Office)

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002. 9 Bahadur Shah Zafar Marg, ,DELHI,110002

Contact No: +91 11 23230131,
23233375, 23239402

Fax: +91 11 23234062, 232

Email: info@bis.gov.in



भारतीय प्रमाणांमूल ब्यूरो

भारतीय मानक ब्यूरो, अन्ध्र प्रदेश राज्य, अन्ध्र प्रदेश सरकार
संयुक्त राज्य अन्ध्र प्रदेश, एन.टी. रोड, विसाखपट्टणम

BUREAU OF INDIAN STANDARDS

Under the Ministry of Consumer Affairs,
Food and Public Distribution, GOVT. OF INDIA

भारतीय मानक ब्यूरो

उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय
के अंतर्गत, भारत सरकार

एन.टी. रोड, सी ब्लॉक, उद्योग भवन, वी.यु.डी.ए. कॉम्प्लेक्स,
सिरपुरम जंक्शन, विशाखपट्टणम - 530 003. (ए.पी.)
1st Floor, C Block, Udyog Bhavan, VUDA Complex
Sipuram Junction, Visakhapatnam - 530 003. (A.P.)

GSTIN : 37AAATB0431G1ZA email : vbo@bis.gov.in, Fax : 0891-2712837, दूरभाष / Phones : 0891-2712831, 0891-2712834

SPEED POST

46H
01/01/2020

पंजीकृत / पावती

हमारा संदर्भ : MDV/136/L- 6635477

दिनांक: 02/01/2020

विषय: प्रमाणन मुहर लाइसेंस संख्या सी एम/एल- 6635477 का नवीकरण आई एस- 1786 : 2008

M/s Maa Mahamaya Industries
R. G. Peta Village,
L. Kota Mandal,
Distt: Vizianagaram
Andhra Pradesh- 535161

महोदय,

कृपया अपने नवीकरण के संदर्भ में भेजे गए आवेदन पत्र का अवलोकन करें। हमें यह जानकारी देते हुए प्रसन्नता है कि आपके प्रमाणन लाइसेंस का दिनांक 01/01/2020 से 31/12/2021 तक नवीकरण हो गया है।

कृपया ध्यान दें कि यह लाइसेंस उपरोक्त लिखी अवधि के बाद समाप्त हो जाएगा, अतः आपसे अनुरोध है कि आप अपना लाइसेंस नवीकरण कराने के लिए आवेदन पत्र, नवीकरण आवेदन शुल्क, वार्षिक शुल्क तथा मुहरांकन शुल्क के साथ अगले नवीकरण की तिथि से कम से कम एक मास पूर्व भेजें।

लाइसेंस नवीकरण और निरीक्षण और परीक्षण की योजना की पृष्ठांकन शीट संख्या- 19 संलग्न है। इसे कृपया आपके पास उपलब्ध मूल लाइसेंस के साथ जोड़ लें।

धन्यवाद,

भवदीय



(Handwritten Signature)

(एम श्रीनिवास)
अनुभाग अधिकारी

संलग्नक: यथोक्त

लाइसेंस सी. एम / एल - का संलग्नक
Attachment to Licence No. CM/L

6635477



लाइसेंस संख्या CM/L No.	लाइसेंसधारी का नाम और पता Name of the Licensee with Address	वस्तु का नाम Name of the Product	आईएस : संख्या और वर्ष IS No. & Year
6635477	M/s Maa Mahamaya Industries R. G. Peta Village, L. Kota Mandal, Distt: Vizianagaram Andhra Pradesh- 535161	High strength deformed steel bars and wires for concrete reinforcement Sizes: 8 mm to 32 mm Grade: Fe 415, Fe 500, Fe 550 & Fe 500D	IS 1786: 200

ENDORSEMENT NO: 19 DATED

02 January 2020

Whereas the licence was valid up to 31/12/2019, now consequent upon renewal, the validity of licence given in the Endorsement No. 18 has been extended from 01/01/2020 to 31/12/2021.

Consequent upon the revision of rate of marking fee, column (3) of the Second Schedule of the licence has been revised as under with effect from 26.04.2018.

Rs. 3.00 per unit for all units (Unit = 1 Ton)

With the minimum marking fee of Rs. 1,05,000.00 during an operative period of twelve months.

Consequent upon revision of the Scheme of Inspection and Testing (SIT) attached to the licence has been replaced by the revised scheme, Document: PM/IS 1786/3/August 2019.

Other terms and conditions of the licence remain the same.



बी. संध्या

(B SANDHYA)

SCIENTIST-D & HEAD

BUREAU OF INDIAN STANDARDS
VISAKHAPATNAM BRANCH OFFICE



VISAKHAPATNAM PORT TRUST
ENGINEERING DEPARTMENT
ISO 9001: : ISO 14001: : OHSAS 18001: : ISPS PORT

5253
14/7/22



No. IENG/SE-III/steel/471
Dt. 05.07.2022

To
M/s Maa Mahamaya Industries Ltd.
R.G.Peta - Village,
L.Kota - Mandal
Vizianagaram - District - 535 161
A.P

Kind Attn. D.S.R. Sujana

Sir,

Sub: Enlistment of our brand MANGAL TMT on your ongoing and upcoming
Projects as an approved steel producer - Reg.

Ref: Your Lr. No. MMIL/S&TVPT/03, dt.12.12.2021

Kind reference is invited to the letter cited.

In this connection, it is to inform that the Chairman, VPA accorded approval to include your reinforcement steel products in the approved suppliers list of vendors for procurement, subject to confirming the BIS specifications including Physical and Chemical properties.

Yours Sincerely,


Chief Engineer



Dhruv Consultancy Services Limited
Joint Venture with
Global Infra Solutions
Associate with
Kaius Consulting Pvt. Ltd.



Consultancy Services for IE for Supervision of Development of six lane access control of Raipur-
Visakhapatnam EC under BMP from Design Chainage km 421.100 Korum to Design Chainage 464.662
Sabbavaram in Andhra Pradesh on HAM Mode (Package-II)
OFFICE OF the Team leader, Malli Krishna Nilayam , 2nd floor, Opp water tank, SBI Street, LAXMINARAYANPURAM,
MANAGALPALEM (POST) , Kothavalasa Mandal- 535183, VIJAYNAGRAM DISTRICT.

No.IE/TL /Raipur-Visakhapatnam/PKG-II/2022/033

Date: 26.04.2022

To,
The Authorized Signature,
KorlamKantakapalle Expressways
Private Limited,
8-2-248/1/7/51, Plot No.51,
Nagarjuna Hills, Panja gutta,
Hyderabad – 500082.

Sub:Development of six lane korlam to kantakapalle section of NH-130 road from km.421.100 to
km.445.100 under Raipur -Visakhapatnam economic corridor in the state of Andhra Pradesh (Pkg- 03),
India under Bharatmalapariyojana on hybrid Annuity mode. – Source Approval of Steel (MANGALA
TMT) From Mahamaya Industries Ltd.- Reg.

Ref: Lr. No. KKEPL/NHAI/HAM/VSP-PKG3/2021-22/S-096
Lr. No. KKEPL/NHAI/HAM/VSP-PKG3/2021-22/S-0139

Dated:14 .03.2022
Dated:26.04.2022

Dear Sir,

We here with acknowledge the test reports /Results vide reference 2nd cited above, subsequent to
Factory visit was carried out by our Senior Quality Cum Material Engineer along with contractor's
representative on 16.03.2022.

The following observations were made during factory visit.

- Mahamaya Industries (Mangal TMT) produces its billet for making their TMT through own integrated process from Iron Ore.
- In house QC Laboratory is well equipped like spectrometer analysis and Universal Testing machine to conduct all Mechanical and Chemical test.
- Sample of different diameter bars were tested for physical and chemical composition and found satisfactory as per IS: 1786 2008.

From the submitted documents vide ref. 2nd cited above, it was noted that the properties of steel from the
above source is fulfilling the project specifications and it is also noted that the above steel is being used in
various prestigious projects.

H.O 501,PlotNo.67,Pu/Plaza,Opp.K-StarHotel,Sector-11,C.I.D.Belapur,NaviMumbai-406147,Telephone: +91 22
27570710, Mobile: - +91 9619497305 Website: www.dhruvconsultancy.in
Email:Info@dhruvconsultancy.in,services@dhruvconsultancy.in,CINNo.L74999MH0303PLC141887



T. Hari Babu
26/04/2022

Hence the above-mentioned source material from manufactured at M/S Mahamaya Industries Ltd. (Mangal TMT) is provisionally approved with the following conditions

- Each consignment must be supported with manufacturing test certificate.
- Each lot of supply should be tested in recognized independent NABL accredited laboratory and sampling must be done in presence of IE,
- Procurement, storage and use of the material shall be in conformity with relevant IS/IRC codes and manuals issue from time to time.

Thanking you and assuring you of our best services at all times.

With regards

For M/s Dhruv consultancy services ltd JV with Global infra solutions
Associate with Kaius consulting Pvt Ltd.



(T. Harihabu)
Team Leader

26/06/2022



CC:1. The Project Director PIU NHAI-Vizianagaram.



Ref-CPC/AK/IE-NH130/04

Date: 12th April 2022

To
Authorized Signatory
M/s. NKC JK Expressway private Limited.
Sy.no: 358,Devupalli(vi),
Bondapalli(M),
Vizayanagaram District,
Andhra pradesh Pin-535260.

Sub: NHAI-PIU-Vizianagaram-Consultancy Services for supervision of Development of Six Lane from Aluru to Jakkuva (from Km 365+033 to Km 396+800) and from Jakkuva to Korlam (from Km 396+800 to Km 421+100) Section of NH-130 CD Road under Raipur-Visakhapatnam Economics Corridor in the state of Andhra Pradesh under Bharatmala Pariyojana on Hybrid Annuity Mode – *Source approval of steel (Mangal TMT) - Reg.*

Ref: 1. NKC/JK/PLNG/RV/AP-02/2022-23/047 Dated -12.04.2022.

Dear Sir,

We refer to your above cited letters wherein Source Approval of procurement of Steel from Mangal TMT was requested. Submittals were reviewed and subsequent plant visit was carried out by IE along with Contractor representative on 16th March 2022.

We hereby communicate our consent for procurement of Mangal TMT Steel.

However, we informing to fulfill the following requirements before you incorporate these materials in the permanent works.

- ❖ Each consignment must be supported with manufacturing test certificate.
- ❖ Each lot of supply should be tested in recognized independent NABL accredited laboratory and sampling must be done in presence of IE.
- ❖ Material stock shall be maintained at site and shall be produced as when required.
- ❖ Quality control test should be done at the required frequency, as specified in IS:1786 & Morth.

Yours faithfully

*For Isan Corporation in JV with
Chaitanya Projects Consultancy Pvt. Ltd.*

(G.P. Maddulety)
Team Leader
Independent Engineer



Date: 7th April 2022

Ref-CPC/AK/IE-NH 130/02

To

Authorized Signatory

M/s. HG.infra Engineering Ltd.

S.no: 183/2c, Marurthi Colony,

S chintala Valasa villiage rajam road,

Ramabadrapuram mandal, Vizayanagaram District,

Andhra pradesh Pin-535579.

Sub- NHAI-PIU-Vizianagaram-Consultancy Services for supervision of Development of Six Lane from Aluru-Jakkuva (from Km 365+033 to Km 396+800) and from Jakkuva to Korlam (from Km 396+800 to Km 421+100) Section of NH-130 CD Road under Raipur-Visakhapatnam Economics Corridor in the state of Andhra Pradesh under Bharatmala Pariyojana on Hybrid Annuity Mode – *Source approval of steel (Mangal TMT) -Reg*

Ref- 1.HG/AP-1/NH-130-CD Road/02 dated: 10.03.2022

2.HG/AP-1/NH-130-CD Road/05 dated : 30.03.2022

Dear Sir,

We refer to your above cited letters wherein Source Approval of procurement of Steel from Mangal TMT was requested. Submittals were reviewed and IE carried out subsequent plant visit along with Contractor representative on 16th March 2022.

We hereby communicate our consent for procurement of Mangal TMT Steel for Fe500D.

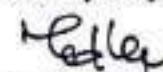
However, we informing to fulfill the following requirements before you incorporate these materials in the permanent works.

- ❖ Each consignment must be supported with manufacturing test certificate.
- ❖ Each lot of supply should be tested in recognized independent NABL accredited laboratory and sampling must be done in presence of IE .
- ❖ Material stock shall be maintained at site and shall be produced as when required.
- ❖ Quality control test should be done at the required frequency ,as specified in IS:1786 & Morth.

Yours faithfully

For Isan Corporation in JV with

Chaitanya Projects Consultancy Pvt. Ltd.


(G.P.Maddulety)
Team Leader
Independent Eng



LION ENGINEERING CONSULTANTS PVT. LTD.

"Contributing in Building the Infrastructure of the Nation"

CIN No. U74999MP2020PTC050788

Sri Sobha Rani Nilayam,
1st Floor, Satyanarayana Nagar,
Opp. Durga Temple, Kusalapuram (Village),
Farad Peta (Post), Etcherla (Mandal),
Srikakulam (District), Andhra Pradesh-532405,
Tel: 08942-271799.

Date: 09.04.2021.

Letter No. LION/IE-0418/2018/NHAI-APCO-NR /1537

To,
Mr. B. Eswara Rao,
M/s APCO Arasavalli Expressway Pvt. Ltd.
Km: 615, S.M. Puram Road,
Beside Kesava Reddy School, Etcherla,
Srikulam, Andhra Pradesh-532410, India.
Email: berao@apcoinfra.com, dc.nrmp@apcoinfra.com

Sub : Independent Engineer Services for Supervision of Six Laning of Narsannapeta-Ranastalam Section of NH-16 (Old NH-5) from design km 580.671 (Existing km 580.700) to design km 634.861 (Existing length 634.000) (Design Length=54.19 km) in the State of Andhra Pradesh under NHDP Phase-V on Hybrid Annuity Mode. **"Consent on Credential of M/s Maa Mahamaya Industries Ltd. brand of "Mangal TMT" Reinforcement Steel bars - R. G. Peta (V), L. kota (M), Vizianagaram District - 535161, A.P. - for Source Approval of Mangal TMT Reinforcement Steel bars."-Reg.**

Ref: 1. Concession Agreement dated 18th January 2018;
2. MORHT 5th Revision, Section 1000.
3. IS code: 1786.2008.
4. Your letter No: AAEP/ NR/-APCO/IE/2020-21/1558; dated on: 07.04.2021.

Dear Sir,

This has reference of above mentioned subject the Concessionaire submitted the credentials of M/s Maa Mahamaya Industries Ltd, brand of "Mangal TMT" Reinforcement Steel bars - R. G. Peta (V), L. kota (M), Vizianagaram District - 535161, A.P. - for Source Approval of Mangal TMT Reinforcement Steel bars to this office for review.

IE reviewed the submitted same and found that the submitted credential is meeting the MORTH 5th revision - 2013, section 1000 & IS code 1786-2008 and specification and requirement.

Please arrange for factory inspection to verify the Quality management system of the plant before procuring proposed material from this manufacturer.

This is for your information and necessary action.

Thanking You.

Yours sincerely,

For & On Behalf of M/s Lion Engineering Consultants Pvt Ltd,


(G. Ellappan)
Team Leader

Copy for information: -

1. The Project Director, Project Implementation Unit (GQ)-National Highways Authority of India (NHAI) Enclave, KM. 2/8 NH-16 Hanumanthavaka, Visakhapatnam-530 040 (AP).
Email-vis@nhai.orgnhaipluvs@gmail.com.
2. Corporate office, Lion Engineering Consultants Pvt Ltd, Bhopal.



Lr. No: TL/NH-234/LOT-II/Chik/2016/200

Date: 29-07-2016

To

M/s Ashoka Buildcon Ltd,
S.No. 861, Ashoka House,
Ashoka Marg, Vadala
Nashik-422011,
Maharashtra.

Sub:- Rehabilitation and Upgrading to 2 lanes/ 2 lane with paved Shoulders Configuration and Strengthening of Madhugiri- Mulbagal section from km 343.800 to km 483.151 of NH-234 in the state of Karnataka for Lot-II (Km . 400.330 to km 483.151) under Phase-I of NHIP –Maa Mahamaya Industries Ltd - reg

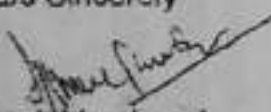
- Ref:**
- 1) Your letter no. ABL/MORTH/NH234/site/16-17/248 dated 04/07/2016
 - 2) Our letter no: TL/NH-234/LOT-II/Chik/2016/ 190 dated 13-07-2016
 - 3) Your letter no. ABUMORTH/NH234/site/16-17/248 dated 04/07/2016
 - 4) No.CNH/ TA2/ AE8/ MMIL/ vendor/ 2016-17/ 652 dated 28-05-2016

Dear Sir,

In continuation with the above letters and Chief Engineer's office letter, we have no objection to procure steel from above source. However, before Steel is delivery at site, you have to arrange our representative to conduct essential tests to be carried out at Manufacturers plant Laboratory.

Thanking you.

Yours Sincerely


(Jacob Varghese)

Team Leader

(EE-Theme JV)

- Copy to 1) SE, PPP Cell, Bangalore,
2) SE RO Bangalore
3) EE, PIU, Chikkaballapur for information
4) Eurostudios - S. L, Delhi for information
5) Theme Engineering Services Pvt. Ltd. Jaipur for information
6) PMC Roughton-Aarvee

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
EAP (ZONE)

1-Parliament Street
Transport Bhawan
New Delhi-110001
Dated: 30.01.2017

RW/NH-12013/33/6/2010/SP(A-2)/P-9/EAP

(Certificate No. NH-234/Excise/Ashoka Buildcon Limited/Lot-II-10) ³¹
TO WHOMSOEVER IT MAY CONCERN

This is certify that work of "Rehabilitation and upgrading to 2 line with/without paved shoulders configuration and strengthening of Madugiri-Mulbagal section (km 343.800 to km 483.151) of NH-234 in the State of Karnataka Lot-II (from km. 400.330 to km. 483.151) under Phase-I of National Highways Inter-Connectivity Improvement Projects (NHIIP)" (Package No. NHIIP-KA-234-10) has been awarded to M/s Ashoka Buildcon Limited, Ashoka House, Ashoka Marg, Ashoka Nagar, Nashik, Maharashtra-422011. The Contract Agreement was signed on 24.03.2015. The project is being implemented by the Government of India with Loan assistance from the World Bank under Loan Agreement No. 8301 IN.

Certified further that M/s Ashoka Buildcon Limited has proposed to procure the following materials and the same are required for execution of the project:


S. NO	Material	Manufacturer/Supplier	Quantity approved by Ministry	Type of Exemption
1.	Steel(HSD of grade Fe-500)	M/s MAA Mahamaya Industries Ltd. R.G. Peta Village, L. Kota Mandal, Vizianagaram Dist-535161, Andhra Pradesh		Excise
	8 mm		120 MT	
	10 mm		150 MT	
	12 mm		125 MT	
	16 mm	200 MT		
		Total	595	


It is further certified that the aforesaid material is required for the execution of the above said project has duly been approved by the Government of India. Construction work is scheduled to be completed by 17.01.2018.

It is requested that the necessary exemption from Excise Duty may be allowed against above referred material to M/s Ashoka Buildcon Limited as per Government of India (Ministry of Finance, Department of Revenue) Notification No. 108/95-C.E. dated 28.08.1995 as amended time to time. This certificate is being issued subject to condition that product should meet the minimum standard as fixed by BIS and confirming to specification of MORT&H/IRC.

This certificate shall remain valid for six months from the date of issue.

Countersigned by:


(Leena Nandan)
Joint Secretary (EAP)
MoRTH, New Delhi


(Khushal Chand)
Superintending Engineer (EAP)

CEMOSAARMENGE/IEAPA/NHAI/VSKP/2020/551

22.02.2020

TO
The General Manager,
M/s DILIP BUILDCON LIMITED,
Anandapuram - Anakapalli Road Project
Neelakundilu village, Sontyam,
Anandapuram, Visakhapatnam,

Sub : Consultancy Services for Independent Engineer for Supervision of Six laning of Anandapuram-Pendurthi-Anakapalli Section of NH-5 (new NH-16) from Km.681.000 (Existing Km.681.000) to Km.731.780 (Existing Km.742,400) (Design Length=50.78 Km) in the State of Andhra Pradesh under Bharatmala Pariyojana on Hybrid Annuity Mode - Source Approval Of Steel (MANGAL TMT) From Mahamaya Industries Ltd.-Reg.

Ref: 1) Circular No. 11041/218/2007-Admin.	Dated: 18.08.2010
2) DBL/NHAI/DBLAAHPL/19-20/384	Dated: 04.10.2019
3) CEMOSAARMENGE/IEAPA/NHAI/VSKP/2019/265	Dated: 16.10.2019
4) DBL/NHAI/DBLAAHPL/19-20/586	Dated: 17.02.2020

Dear Sir,

In reference to the above cited letter (4), the concessionaire had submitted the credentials of M/S Mahamaya Industries Ltd. (Mangal TMT) plant/Factory located at L kota mandal, Vijaynagaram District, (Andhra Pradesh) has been inspected by our under signed person along with our SQME on 28.12.2019 along with your Authorized Representative and found in order as per standards IS 1786 2008, For the procurement of TMT steel for construction of structural works of the project, we noticed the following observations during visiting of steel factory,

- Mahamaya Industries Ltd. (Mangal TMT) produces its own billet for making their TMT through own integrated process from Iron Ore.
- In house QC Laboratory is well equipped like spectrometer analysis and Universal Testing machine to conduct all Mechanical and Chemical test.
- Sample of different diameter bars were tested for physical and chemical composition and found satisfactory as per IS: 1786 2008.
- This approval has accorded as per guidelines of Ministry of Steel, Government of India Gazette notification as appended.

Therefore, we accord source approval for TMT reinforcement steel in the Structures of the project, from manufactured at M/S Mahamaya Industries Ltd. (Mangal TMT).

However, we inform to fulfill the following requirements before you incorporate these materials in the permanent works.

- Each consignment must be supported with manufacturing test certificate.
- Only new materials shall be supplied to the site and defective or non confirming material to be discarded.
- Each lot of supply should be tested in recognized independent NABL accredited laboratory and sampling must be done in presence of IE.

Site office:

G-1, Dinesh Homes, Penderthi, Andhra Pradesh, PIN - 530047

Mob: 9414184839 email: cemosarmenge.apa@gmail.com

Central Offices India:

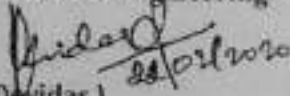
502, 5th Floor, DDA-5 Building, District Centre, Janakpuri, New Delhi - 210058, India. Tel.: (+91) 011-47503189.

Letter no: SSI dated 22/2/20

- Material stock shall be maintained at site and shall be produced as and when required.
- Storage and protection needs to be assured as per MORT&I section 1603. Only fresh lot of material shall be delivered at site.
- If test on selected piece do not confirm with the specification, the entire lot is liable for rejection without any consideration for retesting.
- Quality control test should be done at the required frequency, as specified.
- Approval shall not relieve the contractor from any of his responsibilities under the contract.
- Procurement, storage and use of the material shall be in conformity with relevant IS/IRC codes and manuals issue from time to time.

Yours truly,

For Centro de Estudios de Materials y Control de Obra, SA in association with
ARMENGE Engineering and Management Consultants Pvt Ltd


(P. Devidas)

Team Leader cum Senior Highway Engineer.

Copy To :- 1.PD-PIU, NHAI, Visakhapatnam.

C/C

Ref: PMC/GVSCCL/ISA/2019/18

4 Sept. 2019

To
M/s. RKEC Projects Limited
#10-12-L, 3rd floor, Rednam Alcazar,
Rednam Gardens, Opp SBI Main Branch,
Visakhapatnam – 530 002.

Subject: Submission of Updated Vendor details of M/s MAA MAHAMAYA INDUSTRIES LIMITED (MANGAL TMT), for Fe 500D, for structural steel.

Ref: i) Ref. Material Approval Request (MAR) No: RKEC/GVMC/MAR_26.
ii) Your letter No: RKEC/2018 -19/GVSCCL/AECOM/096
iii) PMC Letter: PMC/GVSCCL/ISA/2019/17, dated 20 Aug 2019.

Dear Sir,

The Material Approval Request (MAR) for Fe 500D, for structural steel of Vendor details of M/s MAA MAHAMAYA INDUSTRIES LIMITED (MANGAL TMT) has been reviewed for the following

- 1) The Validity for Certificate of Registration for ISO 9001: 2015, is up to 22/08/2022.
- 2) The Validity for Certificate of Registration for ISO 14001: 2015, is up to 22/08/2022.
- 3) The Validity for Certificate of Registration for ISO 45001: 2018, is up to 22/08/2022.

And Renewal of Certification from Bureau of Indian standards have been attached. Hence, Material Approval Request (MAR) is approved for Procurement.

Yours Sincerely,

For AECOM Asia Company Limited



Prabhu Sheelavantha
Programme Director

CC: Managing Director,
GVSCCL, Visakhapatnam.

V. Akhilesh Kumar
05/09/2019



Reference: URS SW/APRSP-B/TL/ECI-SEPL JV/PNV-08-B/2017/287

Date: 07th August 2017

The Authorized Representative,
M/s ECI - SEPL JV,
Plot No. A12, A13, Panchavati Township,
Manikonda - Village, Rajendra Nagar - Mandal,
Rangareddy, Hyderabad -500 089

Sub: Construction Package PNV-08-B: Widening and Strengthening of Pedana - Nuzvid - Vissannapet Road from Km. 22+100 to Km. 40+000 in Krishna District, A.P (Balance Work).
MANGAL TMT STEEL (Maa Mahamaya Industries Ltd) Provisional Source approval - Reg

Ref: (i) ECI-SEPL (JV)/PNV-08(B)/RE/2017/038 dated 03.07.2017

Gentlemen,

In the lime light of the above cited subject and reference, profile and credentials of M/s Maa Mahamaya Industries Ltd. Brand Name Mangal Steel have been reviewed by this office and found in order.

M/s Maa Mahamaya (Mangal TMT) Industries Ltd Plant/Factory located at RG peta, L kota Mandal, Vizainagaram District, AP has been inspected by our Senior Quality Materials Engineer on 08.07.2017 along with your Authorized Representative and found in order as per standards laid down in IS1786:2008.

In house QC Laboratory is well equipped like Spectrometer analysis and Universal Testing machine to conduct all Mechanical and Chemical tests.

The Plant has instituted a Quality Management System (QMS) and had a defined Quality assurance plan in place.

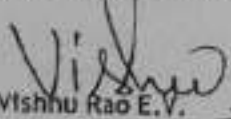
Hence considering the above merits M/S Maa Mahamaya Industries Ltd, Mangal Steel herewith provisionally approved as source to procure steel as and when required. Final Source approval Shall be accorded on submission of TPA Test report to this office.

Further Sampling, inspection and Testing shall be in accordance with IS:1786-2008 .

This approval has accorded as per guidelines of Ministry of Steel, Government of India Gazette notification as appended.

Thanking You,

For AECOM Infrastructure & Environment UK Limited.,
JV with URS Scott Wilson India Pvt. Ltd.


Vishnu Rao E.V.

Project Manager/Engineer



Enclosure: As appended

Copy to:

- Srl. G. Jagannadha Rao, Engineer in-Chief (R&B) Admn, SH, EAP, CP & Managing Director, APRDC - for information please.
- Resident Engineer, PNV-08-B, AECOM-URS Scott Wilson, - for info & necessary action.

AECOM Infrastructure & Environment UK Limited.,
JV with URS Scott Wilson India Pvt. Ltd.
1st and 2nd Floor, Door No: 54-14-3/7-2, H. No. 409
7th Right Road, Sdnivas Nagar, Bank Colony,
Vijayawada (Urban) - 520 008 India
Tel: +91 866 2544971
www.aecom.com



ಬೆಂಗಳೂರು ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಮಂಡಳಿ

BANGALORE WATER SUPPLY AND SEWERAGE BOARD.

Office of Chief Engineer (Project)

Cauvery Bhavan, III Floor, Bangalore 560009

No. BWSSB /CE(P)/ACE (P-2)/

/2018-19

Date: /11/2018

To,

EE CMC-12, EE CMC -13,

EE CMC -14, EE CMC-15

EE Stores

Sub: Work of Providing Water Supply to 110 Villages of BBMP and UFW reduction in Core Area and Construction and Rehabilitation of GLR in Malleshwaram, Bangalore - regarding approval of makes/manufacturers for TMT Steel for civil works.

Ref:- 1) No. SSC IPL/SO/21a/BWSSB/110OHT & GLR/20/2017-18 dt:16.11.2018

2) No:TCE/JT/WS-110/P816/2018 Date:20.11.2018

With reference to the above subject, approval is hereby accorded to Mangal TMT by vendor M/s Maa Mahamaya Industries Ltd for procurement of TMT steel for the above said work.

Further, it is herewith informed to submit vendor QAP for TMT Steel incorporating project details and obtain approval for the same before procurement.

Chief Engineer (Projects)

BWSSB

Copy to M/s Sri Srinivasa Constructions India Private Limited, Siva Shankar Nilayam, Opp. Shakthi Nursing Home, Talur Road, Bellary - 583 103 for information and needful.

Also note that the validity of the licence of Maa Mahamaya Industries Limited is valid upto 31.12.2019.

Hope this clarifies the matter.

Regards / सादर

Pankaj Bhattacharjee
for,

Regards / सादर

S R Sahu / एस आर साहू

Resident Construction Manager / आवासीय निर्माण प्रबंधक

Engineers India Limited. / इंजीनियर्स इंडिया लिमिटेड

VRMP Project, HPCL Refinery/ वी.आर.एम.पी परियोजना, एचपीसीएल रिफाइनरी

Visakhapatnam / विशाखपट्टणम

(0891-2513053) Mb: 70777 00162

**EASTERN POWER DISTRIBUTION COMPANY OF A.P. LIMITED
CORPORATE OFFICE :: VISAKHAPATNAM**

Phone: 0891-2582300

Phone : 9703216883

From
The Chief General Manager,
Purchase & Material Management,
A.P.E.P.D.C.L., Corporate Office,
T.P.T. Colony, Near Gurudwara,
Seethammadhara,
Visakhapatnam-530 013.

To
M/s Maa Mahamaya Industries Ltd.
R.G.Peta Village,
L.Kota Mandal,
Vizianagaram Dist,
535 161

Lt.No.CGM/P&MM/EPDCL/VSP/VR/P2/E/CI/D.No. 5262 /15, Dt. 29/09/2015.

Sirs,

Sub: EPDCL, VSP - Registration of your firm as approved vendor for supply of "TMT Bars" -
Regarding

Ref: 1) Vendor Application No.EVR2147/2015

2) Inspection Report of AEE / Civil / Vizianagaram on 09.09.2015

0-0-0

Referring to the above, you are registered as an approved vendor for supply of "TMT Bars"
with registration No **CGM/P&MM/VR/CI/ No. 1393 / 2015-2016.**

The registration is subject to the following conditions:

- 1) APEPDCL reserves the right to cancel your registration at any time without assigning any reason.
- 2) It is noted that you are a Manufacturer for the above materials.
- 3) This registration, however, would not hold good for the global tenders to be floated under IDA/IBRD/USAID loan.
- 4) This registration will be valid upto 30-09-2017.
- 5) For considering renewal of vendor registration, you have to remit renewal fee of Rs.500/- in the shape of DD drawn in favour of Pay Officer, APEPDCL, Visakhapatnam from any Nationalized bank along with your application before 6 months of the expiry of validity period i.e. on or before 31-03-2017 along with the details of orders executed in APEPDCL. You have to enclose a copy of reference of this letter to the tenders to be submitted to APEPDCL.

Copy to the Chief General Manager/P&MM/SPDCL, NPDCL, CPDCL.

Copy to the Chief General Manager/Expenditure/EPDCL/Visakhapatnam

Copy to the Chief General Manager/Projects/EPDCL/Visakhapatnam

Copy to the Superintending Engineer/Operation/Srikakulam, Vizianagaram,

Visakhapatnam,Rajmundry,Eluru

Yours faithfully,

CHIEF GENERAL MANAGER(P&MM)
VISAKHAPATNAM.

Signature valid

Digitally signed by
KANCHUMURTHY PRASAD
Date: 2015.09.28 12:20:38 IST
Reason: Approved

Greater Visakhapatnam Smart City Corporation Limited

Registered Office C/o. GVMC, Room No. 308, Tenneti Bhavan, Asilmetta Junction,
Visakhapatnam- 530002, Andhra Pradesh, India. CIN No. U74900AP2016PLC098495

VISAKHAPATNAM

Dt: 25-03-2021

To

M/s. MAA MAHAMAYA Industries Limited
R.G.Peta Viloge, L.Kota Mandal
Vizianagaram District-535161.
Andhra Pradesh

Ref: (1) Your letter ref MIP/S&T/GVMC/01 dated 22-03-2021
(2) AECOM Lr no : PMC/GVSCCL/ISA/2019/18 DATED 04 SEPT 2019

With reference to request in 1st reference cited, M/s. MAA MAHAMAYA Industries Limited is approved for usage as TMT MANGAL Fe500D as per above cited letter no 2 subject to the following conditions:

- 1) M/s. MAA MAHAMAYA Industries Limited MANGAL TMT branded bars should be supplied conforming to 15 1786-2008 and valid BIS license (8mm to 32mm dia bars). No rerolled material/secondary steel producer conversion agent material will be accepted or allowed for any structural works.
- 2) Company should provide all necessary reports and certificates that ensures traceability between billets and supplied furnished products every time of the supply
- 3) M/s. MAA MAHAMAYA Industries Limited Shall ensure maintenance of quality of supplies intact.
- 4) GVSCCL reserves the right to conduct mandatory quality control checks in approved laboratories when ever steel is procured from the company by contractors who are entrusted with the projects.
- 5) Any feedback on deterioration in the quality as also abnormal delays in Supply if noticed would render suspension cancellation of this approval.
- 6) GVSCCL is not bound in any way to purchase your products for its projects.

Note: The letter is issued upon the request of the company.

Yours faithfully

V. Sreenivasulu Reddy
25/3/2021
SUPERINTENDING ENGINEER
(PROJECTS - I)
GVMC
SUPERINTENDING ENGINEER
Projects
Greater Visakhapatnam Smart City Corporation Limited



भारतीय प्रौद्योगिकी संस्थान भुवनेश्वर
INDIAN INSTITUTE OF TECHNOLOGY BHUBANESWAR

9th May, 2016

TO WHOMSOEVER IT MAY CONCERN

On request of M/S Maa Mahamaya Industries Limited, we visited their works located at R G Peta Village, L Kota Mandal, Vizianagaram District, A P State-535161, for assessment of their Quality Control Laboratory and Quality Assessment Plan.

The following are our observations:

- 1.0 Maa Mahamaya Industries Limited is a Steel Plant which produces TMT Steel bars starting from Iron ore through Sponge Iron-Steel Melting-Rolling Mill route. They also have a captive power plant.
- 2.0 Their in house Laboratory is well equipped for the testing of Raw Materials and Finished Products, the list of equipments annexed. The calibration certificates were also found to be in order.
- 3.0 The Plant has a defined Quality Assurance Plan in place.
- 4.0 The Plant is producing TMT bars as per IS 1786:2008 in sizes 8mm to 32mm, in Grades Fe 415, Fe 500, Fe 550, and Fe 500D. The BIS Licenses found to be valid Also Test Certificates examined and found to be in order.

AB
9/5/16
Dr. Akhilesh Barve

V. Pandu Ranga
9/5/16
Dr. V. Pandu Ranga

डॉ. अखिलेश बर्वे / Dr. Akhilesh Barve
सहायक प्राध्यापक / Assistant Professor
संरचनात्मक विज्ञान विभाग / School of Mechanical Sciences
Indian Institute of Technology Bhubaneswar
Bhubaneswar-751013, Odisha, India

डॉ. वि. पांडुरंगा / Dr. V. Pandu Ranga
सहायक प्राध्यापक / Assistant Professor
संरचनात्मक विज्ञान विभाग / School of Mechanical Sciences
Indian Institute of Technology Bhubaneswar
Bhubaneswar-751013, Odisha, India



KARNATAKA ROAD DEVELOPMENT CORPORATION LTD.

No. KRDC/CE/EE-1/MMIL./2016-17/799

Dated: 23.06.2016

24

To,

✓ M/s. MAA MAHAMAYA Industries Limited
R.G.Peta Village, L.Kota Mandal,
Vizianagaram District-535161,
Andhra Pradesh.

Sub: Enlistment of M/s. MAA MAHAMAYA Industries Limited as a "Primary Producer of Steel" for supply or reinforcement steel for ongoing and upcoming projects in KRDC.

Ref: Additional General Manager Marketing letter dated: 13.05.2016.

===

With reference to above, and your request for enlistment of your company as a prime Producer of reinforcement steel to be used in the ongoing and upcoming projects of KRDC is examined.

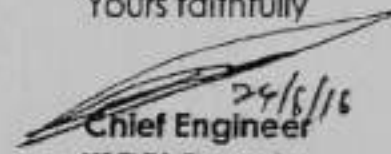
It is stated that M/s. MAA MAHAMAYA Industries Limited is an IMS (ISO 9001-2015/ISO 14001:2015/OHSAS 18001-2007) certified company. The company produces the MANGAL TMT branded HYSD Steel bars of Fe 415, Fe500, Fe500D and Fe550 grade of sizes 8mm to 32mm bars conforming to IS 1786:2008, which confirmed after inspection of the factory site on 10.06.2016 and 11.06.2016 by the officers of KRDC.

In view of above, M/s. MAA MAHAMAYA Industries Limited is enlisted for TMT MANGAL brand as a primary producer of HYSD steel bars and approved to be used in the ongoing & upcoming projects of KRDC subject to the following conditions:

- 1) M/s. MAA MAHAMAYA Industries Limited MANGAL TMT branded bars should be supplied conforming to IS 1786-2008 (8mm to 32mm dia bars).
- 2) No re-rolled material/secondary steel producer conversion agent material will be accepted or allowed for any structural works of KRDC.
- 3) Company should provide all necessary reports and certificates that ensures traceability between billets and supplied furnished products.
- 4) M/s. MAA MAHAMAYA Industries Limited, Shall ensure maintenance of quality of supplies intact.

- 5) KRDCCL reserves the right to conduct mandatory quality control checks in approved laboratories when ever steel is procured from the company by contractors who are entrusted with the projects in KRDCCL.
- 6) Any feedback on deterioration in the quality as also abnormal delays in supply if noticed would render suspension/cancellation of this approval.
- 7) The KRDCCL wholly reserves the right to suspend/cancel this approval.
- 8) The KRDCCL is not bound in any way to purchase your products for KRDCCL projects.
- 9) Any changes in the name of company/Plant etc. shall be informed to KRDCCL immediately.

Yours faithfully


24/8/16
Chief Engineer
KRDCCL, Bengaluru

OP

MSV**MSV INTERNATIONAL INC.**

In Association with

**JSV ASSOCIATES ENGINEERS &
CONSULTANTS PVT. Ltd**Sub Office
Vedakkal
Punalayam
Alappuzha
Email: msy
CIN: EQ42

ENGINEERING SERVICES FOR ALAPPUZHA CITY ROADS IMPROVEMENT PROJECT (ACRIP) PHASE I THROUGH DBFOMT HYBRID- ANNUITY

Ref. No: MSV-JSV/RRAPL/IE/ACRIP-1/2019/35

Date: 06-

To,
The Project Manager,
Rohan Rajdeep Alappuzha Projects Ltd,
Shalom House,
Behind DTDC Courier Service,
Opp. LIC Office, Vellakkinar Junction,
Alappuzha-688001, Kerala,
Alappuzha.

Kind Attn: Mr. Vijay Kumar Pillai (Project Manager)

Sub: - Development of Alappuzha City Roads Improvement Project in the state of Kerala to be under Public Private Partnership (Design, Building, Finance, Operate, Maintain and Transport) DBFOMT) Hybrid Annuity Basis: Source Approval for TMT Steel-Reg

Ref: - 1) Concession Agreement for between KRFB and Rohan Rajdeep Alppuzha Projects L Alappuzha city Roads Improvement Project Phase -I, through DBFOMT Hybrid-Annuity dated:03-08-2018.

2) Your Letter No. RRAPL/Site/17/2019-20 dt 19.06.2019

3) MSV-JSV/RRAPL/IE/ACRIP-1/2019/28 dt 26.06.2019

Dear Sir,

With reference to the above mentioned letter and plant visit by our Material Eng and the test reports, the documents submitted by you for source approval of Mangal TN verified and our observations are as under.

- a) *M/S Maa Mahamaya Industries Ltd* is an integrated Steel plant which produces making TMT bars.
- b) They produce billets from Sponge iron from the iron ore of NMDC.
- c) After verification of the profile it is noted that there is an agreement between *Mahamaya Industries Ltd* to extract Iron Ore.
- d) During the plant visit Mechanical properties of the TMT bars had been tested and found satisfactory as per IS 1786-1985.
- e) *M/S Maa Mahamaya Industries Ltd* is making their TMT bars in the brand name

MSV INTERNATIONAL INC.

In Association with

JSV ASSOCIATES ENGINEERS & CONSULTANTS PVT. Ltd

MSV In
House N
Sundara
Vadacke
Punnapp
Alappu:
Email
CIN. F

ES FOR ALAPPUZHA CITY ROADS IMPROVEMENT PROJECT (ACRIP)-PHASE 1 THROUGH DBFOT HYBRID- A'

of the above, we are hereby accorded our approval of Mangal TMT for the procure
our project works (ACRIP) subject to

Every consignment of steel brought to site should be supported with MTC.

Only new steel lots shall be delivered to the site.

Each consignment of steel shall be tested third party laboratory as per specification.

You,

Sincerely,

MSV International INC., In association with JSV Associates Engineers & Consult:

Handwritten signature
arghese
ader



CEO, KRFB, Thiruvananthapuram.

The Project Manager, KRFB, Alappuzha.

MSV International Inc., Delhi- For Information.

JSV AECPL, Hyderabad-For information

Received
Handwritten signature
06/7/2019

apto.ap.gov.in P.O.No.427,dt:03-11-15
SOUTHERN POWER DISTRIBUTION COMPANY OF A.P. LIMITED
TIRUPATI

From
The Chief General Manager,
P&MM
APSPDCL,
19-13-65/A,
Kesavayana Gunta
Ph:0877-2284109, Extn.200
Fax: 0877-2284111.

To
M/s. Maan Mahamaya Industries Ltd.,
Industrial Ward, Dharmtari,
Chhattisgarh - 493 773
Fax:08966-267361
Cell:09703216883

Lr.No.CGM/P&MM/SPDCL/VR/CI-150-1/2015-16/P5/D.No.6513/15,dt:02-11-15

Sir,

Sub: SPDCL - P&MM - TPT - Registration of your firm as approved vendor for supply of Steel TMT Bars (**Manufacturer**) - Issued -Reg.

Ref: 1. Lr.No.CGM/P&MM/SPDCL/P5/D.No.5510/15,dt: 15-09-2015
2. Lr.No.DE(T)/F.Doc/Insp/D.No.2718/2015,dt:15-10-15

* * *

Referring to the above, your firm is registered as an approved vendor in APSPDCL for supply of Steel TMT Bars (**Manufacturer**) registered as VR/CI-15-01/2015-16.

The registration is subjected to the following conditions.

- 1) The APSPDCL reserves the right to cancel your registration at any time without any reasons.
- 2) It is noted that you are a **manufacturer** for the above materials
- 3) The registration will be valid for a period of two years i.e., up to **31-10-2017**
- 4) For considering renewal of vendor registration, you have to remit non refundable renewal fee of Rs.500/- per each item in the shape of DD drawn in favour of Accounts Officer/CPR/ APSPDCL/Tirupati along with your performance of supplies with APSPDCL before (6) months of the expiry of validity period of Vendor Registration.
- 5) You have to super scribe this letter reference on the tender cover to be submitted in future to APSPDCL.

The receipt of this letter may be acknowledged.

Yours sincerely

for **CHIEF GENERAL MANAGER/P&MM**
APSPDCL :: TIRUPATI

Copy to Chief Engineer/Zone/Vijayawada, Tirupati & Kumool
Copy to Chief General Manager/P&MM/APEPDCL/Visakhapatnam,
Copy to Chief General Manager/Projects/APSPDCL/C.O./Tirupati
Copy to Chief General Manager/Expenditure & Costing /APSPDCL/Tirupati.
Copy to General Manager/Internal Audit /APSPDCL/Tirupati
Copy to General Manager/Expenditure/APSPDCL/Tirupati
Copy to Superintending Engineer/Operation/Vijayawada,Guntur, Ongole,Nellore, Tirupati
Kadapa,Ananthapur & Kumool



Ltr: No 34/C/13923/KSR/2016/205

Dt: 31st December, 2016

To,

BSCPL Infrastructure Limited,
#8-2-502/1/A, JVI Towers,
Road No.7, Banjara Hills,
Hyderabad - 500034

Attn: Mr. B Mallikarjunaiah, Project Manager

Subj: Design and Construction of multilevel /Grade Separators at Four junctions at LB Nagar and Surroundings in Hyderabad under engineering procurement and construction (EPC) – Turnkey (Package – II) – **Source approval for "Mangal TMT"** – reg.

Ref: Your letter no. GHMC/FO/PKG-IVF.No-1/ BM/16/26, Dated: 29/12/16

Sir,

With reference to your letter mentioned above and plant visit by our Construction Engineer on 26.12.16, the proposals/documents submitted by you for source approval of "Mangal TMT" Steel of M/s Maa Mahamaya Industries Ltd. which have been examined and following observations made:

- a. **M/s Maa Mahamaya Industries Ltd** is an integrated steel plant which produces their billets for making their TMT bars through their own integrated process.
- b. They produce billets from sponge iron directly extracted from Iron ore from NMDC.
- c. From verification of documents which have been submitted by them, they have an agreement with NMDC for the period of 3 years for extracting the Iron ore from NMDC.
- d. During the plant visit, tests were conducted for mechanical properties of TMT bars in their in house laboratory and results found satisfactory
- e. **M/s Maa Mahamaya Industries Ltd** is making their TMT bars in the brand name of "Mangal TMT"

In view of the above, we confirm our approval of Mangal TMT for procurement of TMT bars for the subject project works. Subject to:

1. Every consignment of steel brought to site should be supported with MTC.



STUP Consultants Pvt. Ltd.

Five Decades of Sustainable Design of Infrastructures & Real Estate through Innovation



//2//

- ii. Only new steel lots shall be delivered to the site.
- iii. Each consignment of steel shall be tested in outside laboratory as per specification.

Thanking you,

Yours faithfully,
For STUP Consultants P. Ltd.

K. Srinivasa Rao
Project Manager

CC: Executive Engineer – PD-NZ-1, GHMC

Regd. Office: Plot No. 6-3-218, A Block, Maheshwari Towers, Behind Oil Bank ATM, 3rd Lane from Maheshwari Towers,
Banjara Hills, Road No. 1, Hyderabad - 500 024, Telangana, India
Ph: 0226130-21281, 0 Fax: 040-2328144 E-mail: hyd@stupa.com

Regd. Office: 104 & B, Pooja Chambers, 215, Marriam Road, Karimnagar - 505 011, Dist: NTR, TS
Tel: 022-4666436, Fax: 022-2204424 E-mail: mumbai@stupa.com

Lux Arcades • Paris • Ahmedabad • Mysuru • Chennai • Coimbatore • Hyderabad • Kolar • Nellore • Rajahmundry • New Delhi • Pune • Mumbai



TAMIL NADU HOUSING BOARD: QUALITY CONTROL WING

CERTIFICATE OF PRODUCT APPROVAL File No. SF/QC/12140/2016 dated 24.06.2016

The Quality Control Wing of Tamil Nadu Housing Board examined various aspects of your following product with reference to your letter dated:09.06.2016 to The Chief Engineer TNHB and have accorded approval on 24.06.2016 to use "Mangal TMT" from "MAA MAHAMAYA INDUSTRIE LIMITED" following items on works carried out by TNHB:

1) Name of the Products/Product Range	Mangal TMT High Strength deformed steel bars and wires for concrete reinforcement Steel Fe 415, Fe 500 & Fe 550 from MAA MAHAMAYA INDUSTRIE LIMITED.
2) Brand Name	MANGAL TMT Fe 415, Fe 500 & Fe 550.
3) Trade Mark Reg No.	Not Furnished.
4) Testing / Certifying Agencies and Test Certificates / Certifications References;	1. ISO 9001:2015, Certificate No. 160505019101 dt: 05.05.2016. 2. ISO 14001:2015, Certificate No. 160505029101 dt: 05.05.2016. 3. OHSAS 18001:2007, Certificate No. 160505039101 dt: 05.05.2016.
5) Address of Manufacturer/Factory	M/s. Maa Mahamaya Industries Ltd. R.G. Peta village, L. Kota Mandal, Dist: Vizianagaram Andhra Pradesh-535161.
6) BIS License Number/Reference	IS 1786:2008, Licence No: CM/L-6635477.
7) Standards/Specifications No.	IS 1786:2008.

Limitations ::

1. This Approval is to use the materials on works carried out by TNHB.
2. Approval is subject to validity of BIS License for the product.
3. Test results copy of the lot should be produced along with all supplies to TNHB site (adhering to the test result produced at the time of this approval).
4. You should inform any change of your address of office, factory, contact telephone numbers, partnership deed, or any other articles of association of your organizations, materials, manufacturing process, quality control routines that may affect the validity of this approval, to the undersigned (or) The Chief Engineer, Tamil Nadu Housing Board who is empowered to cancel the use of the products in TNHB works and hence its approval also.
5. This approval is subject to satisfactory field performance, continuing surveillance Audits, and strict conformity to the constructions of TNHB. This approval shall not bind TNHB to give any preference in placement of purchase orders.



To
 M/s. Maa Mahamaya Industries Ltd,
 R.G. Peta village,
 L. Kota Mandal,
 Dist: Vizianagaram
 Andhra Pradesh-535161

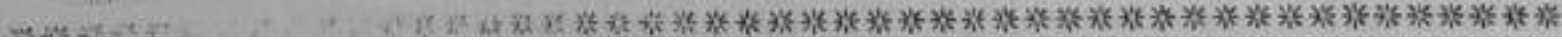
M. Thayumanasamy
 24/6/16

Er. M. THAYUMANASAMY, B.E.
 Superintending Engineer (Quality Control),
 Tamil Nadu Housing Board,
 493, Anna salai, Nandanam, Chennai-55.

Subb
 24/6/16

Submitted to: The CEs of TNHB ✓

All the SEs and the EEs of TNHB (By this approval, Mangal TMT can be used in all TNHB Works and incorporated in the list of approved brand and appended to the Tender Schedule/Agreement. EEs may send feedback about this product in satisfactory field performance to the undersigned and authority in the TNHB constructions)



VISAKHAPATNAM METROPOLITAN REGION DEVELOPMENT AUTHORITY

VISAKHAPATNAM
Dt.31-03-2021.

To
Ms. MAA MAHAMAYA Industries Limited
R.G.Peta Viloge, L.Kota Mandal,
Vizianagaram District-535161,
Andhra Pradesh

Ret: (1) Your letter ref MIPI/S&T/VMRDA/01 dated 22-03-2021

With reference to your letter, it is to inform that usage of TMT Mangal Fe-500/Fe-500D Manufactured by M/s. MAA MAHAMAYA Industries Limited can be allowed for usage in our projects subject to the following conditions:

- 1) MAA MAHAMAYA Industries Limited MANGAL TMT branded bars should be supplied conforming to IS 1786-2008 and valid BIS license (8mm to 32mm dia bars).NO rerolled material/secondary steel producer conversion agent material will be accepted or allowed for any structural works.
- 2) Company should provide all necessary reports and manufacturer test certificates that ensures traceability between billets and supplied furnished products every time of the supply
- 3) The Manufacturer shall ensure maintenance of quality of supplies intact.
- 4) VMRDA Engineers reserve the right to conduct mandatory quality control checks in approved laboratories when ever steel is procured from the company by contractors who are entrusted with the projects.
- 5) VMRDA is not bound in any way to insist the contractor to purchase your products for its projects.


31/3/21
Chief Engineer
VMRDA
Chief Engineer
VMRDA, Visakhapatnam

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE DEV.
CORPN. DIVISION, VISAKHAPATNAM
1st Floor of Central Medicine Store, Opp. ENT Hospital,
Govt Mental Care Hospital Compound, Visakhapatnam - 17.

From
D.A.Naidu, B.Tech,
Executive Engineer,
APMSIDC Division,
Visakhapatnam.

To
The Material Testing House(India) Ltd,
Seethammadhara,
Visakhapatnam.

LT.No.DB/APMSIDC/EE-VSP/2021-22|761 Dated 22-03-2022

Sir,

Sub: APMSIDC Division, Visakhapatnam - NABARD-XXIV,XXV & XXVI
Strengthening/ Upgradation of AHs/CHCs at (1) Narsipatnam
(2) Aganampudi (3) Chintapalli 30 bed (4) Chintapalli 30-100
bed (5) Kotauratla (6) Nakkapalli (7) Yelamanchili (8) Madugula
(9) K.Kotapadu (10) Pendurthi (11) Gopalpatnam in
Visakhapatnam District (Package No.3) - Testing of Fe-500D steel
of Mangal TMT make - Requested-Reg.

Ref: Agreement No.05/APMSIDC/2020-21, dated 26.10.2020.


With reference above subject, it is requested to conduct the tests for Steel
and arrange for test reports. The material samples are here with submitted.
Steel to be used Mangal TMT (Fe-500D)

Tests for 8mm, 10mm, 12mm, 16mm, 20mm, 25mm

- Tests required -
- Weight per meter length
 - 0.2% proof stress
 - Ultimate tensile strength
 - Elongation(Percentage)
 - bend test & rebend test
 - Nominal Diameter

Necessary charges will be paid accordingly.

Yours faithfully,


Executive Engineer,
APMSIDC Division,
Visakhapatnam.



Form No. MTH / F/81: Rev: 00
MATERIAL TESTING HOUSE (INDIA) LTD

मेटीरियल टेस्टिंग हाउस (इंडिया) लिमिटेड
Accredited by National Accreditation Board for Testing and Calibration Laboratories
(NABL) vide Certificate number TC-8024

50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013

Tel: 0891- 2791342, Email: mthindialab@gmail.com

TEST REPORT

Unique Lab Report Number: ULR-TC802422000000057F

Test report number MTH/TR/21697	Date 07-04-2022	Page number 01 of 01
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Name of Customer: *The Executive Engineer, APMSIDC Division, Visakhapatnam. For NABARD-XXIV, XXV & XXVI strengthening / Upgradation of Ahs/CHCs at 1) Narsipatnam 2) Aganampudi 3) Chintapalli 30 bed 4) Chintapalli 30-100 bed 5) Kotauratla 6) Nakkapalli 7) Yelamanchili 8) Madugula 9) K.Kotapadu 10) Pendurthi 11) Gopalapatnam in Visakhapatnam District (Package No. 3).
Ref: Agreement No. 05/APMSIDC/2020-21, dated 26-10-2020.

Customer reference: Letter No. DB/APMSIDC/EE-VSP/2021-22/761 dated 22-03-2022.

Requisition No. RQ- 11416	Sample No. S-25786	Date of receipt 06-04-2022	Date of testing 06 to 07-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019
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TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *8mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests :		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	0.383	0.395+(- 8 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	572	Minimum, 500
c)	Tensile strength, N/mm ²	639	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.12	≥1.10
e)	Elongation, percent	19	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
2. Tests witnessed by: Sri N.Kalyan, J.E. of Office of E.E. APMSIDC, Visakhapatnam and Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. ♦ Tolerance on the nominal mass given for individual sample.
7. Standard specification given for reference. If customer requirement is different, do not consider it.



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Conditions: 1. The results reported relate only to the items tested, endorsement of product is neither inferred nor implied. 2. Our total liability is limited to the billed amount. 3. The Balance quantity of the tested sample wherever possible shall be retained only for a period of three months from the date of test report unless otherwise specified. 4. This report shall not be reproduced except in full and cannot be used as an evidence in the court of Law and shall not be used in any advertising media without our written approval. 5. The test report relate to the sample submitted to us and not collected or sampled by Material Testing House (India) Ltd. (MTH), unless mentioned otherwise. 6. This report is being issued on the specific understanding that MTH will not in any way be involved in any action following interpretation of the above results. 7. MTH is not responsible for the information furnished by the customer and the same not verified by MTH.

Test Results Reviewed by

K.S. Annamayya, M. Tech.
Quality Manager



For Material Testing House(India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



Form No. MTH / F/81: Rev: 00
MATERIAL TESTING HOUSE (INDIA) LTD

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50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013
Tel: 0891- 2791342, Email: mthindia@b@gmail.com

TEST REPORT

Unique Lab Report Number: ULR-TC802422000000058F

Test report number MTH/TR/21698	Date 07-04-2022	Page number 01 of 01		
Name of Customer: *The Executive Engineer, APMSIDC Division, Visakhapatnam. For NABARD-XXIV, XXV & XXVI strengthening / Upgradation of Ahs/CHCs at 1) Narsipatnam 2) Aganampudi 3) Chintapalli 30 bed 4) Chintapalli 30-100 bed 5) Kotauratla 6) Nakkapalli 7) Yelamanchilli 8) Madugula 9) K.Kotapadu 10) Pendurthi 11) Gopalapatnam in Visakhapatnam District (Package No. 3). Ref: Agreement No. 05/APMSIDC/2020-21, dated 26-10-2020.				
Customer reference: Letter No. DB/APMSIDC/EE-VSP/2021-22/761 dated 22-03-2022.				
Requisition No. RQ- 11416	Sample No. S-25787	Date of receipt 06-04-2022	Date of testing 06 to 07-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019

TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *10mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests :		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	0.607	0.617*(- 8 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	565	Minimum, 500
c)	Tensile strength, N/mm ²	631	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.12	≥1.10
e)	Elongation, percent	24	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
2. Tests witnessed by: Sri N.Kalyan, J.E. of Office of E.E. APMSIDC, Visakhapatnam and Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. ♦ Tolerance on the nominal mass given for individual sample.
7. Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M. Tech.
Quality Manager



For Material Testing House (India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



MATERIAL TESTING HOUSE (INDIA) LTD

मेटीरियल टेस्टिंग हाउस (इंडिया) लिमिटेड

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50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013

Tel: 0891- 2791342, Email: mthindialab@gmail.com

Form No. MTH / F/81: Rev: 06

TEST REPORT

Unique Lab Report Number: ULR-TC80242200000059F

Test report number MTH/TR/21699	Date 07-04-2022	Page number 01 of 01		
Name of Customer: *The Executive Engineer, APMSIDC Division, Visakhapatnam. For NABARD-XXIV, XXV & XXVI strengthening / Upgradation of Ahs/CHCs at 1) Narsipatnam 2) Aganampudi 3) Chintapalli 30 bed 4) Chintapalli 30-100 bed 5) Kotauratla 6) Nakkapalli 7) Yelamanchli 8) Madugula 9) K.Kotapadu 10) Pendurthi 11) Gopalapatnam in Visakhapatnam District (Package No. 3). Ref: Agreement No. 05/APMSIDC/2020-21, dated 26-10-2020.				
Customer reference: Letter No. DB/APMSIDC/EE-VSP/2021-22/761 dated 22-03-2022.				
Requisition No. RQ- 11416	Sample No. S-25788	Date of receipt 06-04-2022	Date of testing 06 to 07-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019

TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *1.2mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests :		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	0.862	0.888+(- 6% Tolerance)
b)	0.2 percent proof stress, N/mm ²	530	Minimum, 500
c)	Tensile strength, N/mm ²	613	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.16	≥1.10
e)	Elongation, percent	21	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
2. Tests witnessed by: Sri N.Kalyan, J.E. of Office of E.E. APMSIDC, Visakhapatnam and Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. ♦ Tolerance on the nominal mass given for individual sample.
7. Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House(India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



TC-8024

MATERIAL TESTING HOUSE (INDIA) LTD**मैटीरियल टेस्टिंग हाउस (इंडिया) लिमिटेड**

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50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013

Tel: 0891- 2791342, Email: mthindialab@gmail.com

TEST REPORT**Unique Lab Report Number: ULR-TC80242200000060F**

Test report number MTH/TR/21700	Date 07-04-2022	Page number 01 of 01
Name of Customer: *The Executive Engineer, APMSIDC Division, Visakhapatnam. For NABARD-XXIV, XXV & XXVI strengthening / Upgradation of Ahs/CHCs at 1) Narsipatnam 2) Aganampudi 3) Chintapalli 30 bed 4) Chintapalli 30-100 bed 5) Kotauratla 6) Nakkapalli 7) Yelamanchili 8) Madugula 9) K.Kotapadu 10) Pendurthi 11) Gopalapatnam in Visakhapatnam District (Package No. 3). Ref: Agreement No. 05/APMSIDC/2020-21, dated 26-10-2020.		
Customer reference: Letter No. DB/APMSIDC/EE-VSP/2021-22/761 dated 22-03-2022.		
Requisition No. RQ- 11416	Sample No. S-25789	Date of receipt 06-04-2022
		Date of testing 06 to 07-04-2022
		Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019

TEST RESULTS

S. No.	Description	Result	Requirements of
	MECHANICAL TESTING: Mechanical Properties of Metals		
01.	Sample : *16mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests :		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	1.587	1.58+(- 6% Tolerance)
b)	0.2 percent proof stress, N/mm ²	517	Minimum, 500
c)	Tensile strength, N/mm ²	612	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.18	≥1.10
e)	Elongation, percent	22	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

- Sample Submitted by: Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
- Tests witnessed by: Sri N.Kalyan, J.E. of Office of E.E. APMSIDC, Visakhapatnam and Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
- Details furnished by the customer denoted by *
- Details marked over specimen denoted by **
- Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
- * Tolerance on the nominal mass given for individual sample.
- Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality ManagerFor Material Testing House (India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



MATERIAL TESTING HOUSE (INDIA) LTD

मैटीरियल टेस्टिंग हाउस (इंडिया) लिमिटेड

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(NABL) vide Certificate number TC-8024

50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013

Tel: 0891- 2791342, Email: mthindialab@gmail.com

TEST REPORT

Unique Lab Report Number: ULR-TC802422000000061F

Test report number MTH/TR/21701	Date 07-04-2022	Page number 01 of 01
Name of Customer: *The Executive Engineer, APMSIDC Division, Visakhapatnam. For NABARD-XXIV, XXV & XXVI strengthening / Upgradation of Ahs/CHCs at 1) Narsipatnam 2) Aganampudi 3) Chintapalli 30 bed 4) Chintapalli 30-100 bed 5) Kotauratla 6) Nakkapalli 7) Yelamanchilli 8) Madugula 9) K.Kotapadu 10) Pendurthi 11) Gopalapatnam in Visakhapatnam District (Package No. 3). Ref: Agreement No. 05/APMSIDC/2020-21, dated 26-10-2020.		
Customer reference: Letter No. DB/APMSIDC/EE-VSP/2021-22/761 dated 22-03-2022.		
Requisition No. RQ- 11416	Sample No. 5-25790	Date of receipt 06-04-2022
	Date of testing 06 to 07-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019

TEST RESULTS

S. No.	Description	Result	Requirements of
	MECHANICAL TESTING: Mechanical Properties of Metals		
01.	Sample : *20mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests :		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	2.477	2.47+(-4% Tolerance)
b)	0.2 percent proof stress, N/mm ²	563	Minimum, 500
c)	Tensile strength, N/mm ²	656	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.17	≥1.10
e)	Elongation, percent	19	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

- Sample Submitted by: Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
- Tests witnessed by: Sri N.Kalyan, J.E. of Office of E.E. APMSIDC, Visakhapatnam and Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
- Details furnished by the customer denoted by *
- Details marked over specimen denoted by **
- Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
- ♦ Tolerance on the nominal mass given for individual sample.
- Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House (India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



MATERIAL TESTING HOUSE (INDIA) LTD

मैटीरियल टेस्टिंग हाउस (इंडिया) लिमिटेड

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50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013

Tel: 0891- 2791342, Email: mthindialab@gmail.com

TEST REPORT

Unique Lab Report Number: ULR-TC802422000000062F

Test report number MTH/TR/21702	Date 07-04-2022	Page number 01 of 01
Name of Customer: *The Executive Engineer, APMSIDC Division, Visakhapatnam. For NABARD-XXIV, XXV & XXVI strengthening / Upgradation of Ahs/CHCs at 1) Narsipatnam 2) Aganampudi 3) Chintapalli 30 bed 4) Chintapalli 30-100 bed 5) Kotauratia 6) Nakkapalli 7) Yelamanchili 8) Madugula 9) K.Kotapadu 10) Pendurthi 11) Gopalapatnam in Visakhapatnam District (Package No. 3). Ref: Agreement No. 05/APMSIDC/2020-21, dated 26-10-2020.		
Customer reference: Letter No. DB/APMSIDC/EE-VSP/2021-22/761 dated 22-03-2022.		
Requisition No. RQ- 11416	Sample No. S-25791	Date of receipt 06-04-2022
		Date of testing 06 to 07-04-2022
		Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019

TEST RESULTS

S. No.	Description	Result	Requirements of
	MECHANICAL TESTING: Mechanical Properties of Metals		
01.	Sample : *25mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests :		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	3.789	3.85* (- 4 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	545	Minimum, 500
c)	Tensile strength, N/mm ²	625	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.15	≥1.10
e)	Elongation, percent	19	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

- Sample Submitted by: Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
- Tests witnessed by: Sri N.Kalyan, J.E. of Office of E.E. APMSIDC, Visakhapatnam and Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
- Details furnished by the customer denoted by *
- Details marked over specimen denoted by **
- Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
- * Tolerance on the nominal mass given for individual sample.
- Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House (India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director

ANDHRA PRADESH MEDICAL SERVICES INFRASTRUCTURE DEVELOPMENT
CORPORATION DIVISION :: VIZIANAGARAM
1st Floor, Central Medicine Stores, Beside DM & HO's Office Building, District
Hospital Compound, Vizianagaram-535003 (Mail Id: eeapmsidcvzm@gmail.com)

From
M. Satya Prabhakar
Executive Engineer
APMSIDC Division
Vizianagaram

To
MATERIAL TESTING HOUSE (INDIA) LTD
50-96-4 North Extension,
Secchammadhara,
Visakhapatnam,
Andhra Pradesh 530013.

DI.26.3.2022

Sir,

Sub: APMSIDC, VIZIANAGARAM Division- 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Up Gradation of 50 to 100 bedded Community Health Centre at S-Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadraviri, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District. - Samples of 8mm dia 10mm, 12mm, 16mm, 20mm, 25mm, Fe-500D TMT of Mangal steel Submitted Testing Requested - Regd.

• • •

I am here with sending the steel Samples of 8mm dia 10mm, 12mm, 16mm, 20mm, 25mm, Fe-500D TMT of Mangal steel for the above Works. for conducting the following tests.

- | | |
|----|-------------------|
| 7 | Nominal diameter |
| 8 | Unit weight |
| 9 | Tensile strength |
| 10 | Elongation test |
| 11 | 0.2% proof stress |
| 12 | Bend test, Rebend |

The necessary testing charges will be paid by M/s NCC Limited, Madhapur Hyderabad.
The results may be communicated at the earliest. *with the presence of DEE APMSIDC, VZM.*

Encl:- each dia 3 nos
Samples

Yours faithfully
M. Satya Prabhakar
26/3/2022
Executive Engineer
APMSIDC Division
Vizianagaram



TC-8024

Form No. MTH / F/81: Rev: 00

MATERIAL TESTING HOUSE (INDIA) LTD**मैटीरियल टेस्टिंग हाउस (इंडिया) लिमिटेड**

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(NABL) vide Certificate number TC-8024

50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013

Tel: 0891- 2791342, Email: mthindialab@gmail.com

TEST REPORT**Unique Lab Report Number: ULR-TC802422000000051F**

Test report number MTH/TR/21687	Date 06-04-2022	Page number 01 of 01
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Name of Customer: *The Executive Engineer, APMSIDC Division, Vizianagaram. For 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Upgradation of 50 to 100 bedded Community Health Centre at S.Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadravari, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District.

Customer reference: Letter dated 26-03-2022.

Requisition No. RQ- 11414	Sample No. S-25779	Date of receipt 04-04-2022	Date of testing 04 to 06-04-2022	Test method IS:1608 Part-1: 2019; IS:1786-2008, IS:1599: 2019
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TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *Bmm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests:		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	0.390	0.395 + (- 8 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	571	Minimum, 500
c)	Tensile strength, N/mm ²	654	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.15	≥1.10
e)	Elongation, percent	25	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

- Sample Submitted by: Sri K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
- Tests witnessed by: Sri S.V.T.R. Kumar, DEE & S.Bhaskar Raju, TA of Office of E.E. APMSIDC Division, Vizianagaram and K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
- Details furnished by the customer denoted by *
- Details marked over specimen denoted by **
- Elongation is reported on gauge length $5.65\sqrt{A}$ where A is the cross sectional area of the test piece.
- ♦ Tolerance on the nominal mass given for individual sample.
- Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality ManagerFor Material Testing House (India) Ltd
Authorised SignatoryDr. K. Srinivasa Varma
Director



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Tel: 0891- 2791342, Email: mthindialab@gmail.com

TEST REPORT

Unique Lab Report Number: ULR-TC80242200000052F

Test report number MTH/TR/21688	Date 06-04-2022	Page number 01 of 01
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Name of Customer: *The Executive Engineer, APMSIDC Division, Vizianagaram. For 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Upgradation of 50 to 100 bedded Community Health Centre at S.Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadravari, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District.

Customer reference: Letter dated 26-03-2022.

Requisition No. RQ- 11414	Sample No. S-25780	Date of receipt 04-04-2022	Date of testing 04 to 06-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019
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TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *10mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make: *Maa Mahamaya Industries Limited Tests:		IS:1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	0.605	0.617 *(-.8% Tolerance)
b)	0.2 percent proof stress, N/mm ²	515	Minimum, 500
c)	Tensile strength, N/mm ²	590	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.15	≥1.10
e)	Elongation, percent	22	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

- Sample Submitted by: Sri K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
- Tests witnessed by: Sri S.V.T.R. Kumar, DEE & S.Bhaskar Raju, TA of Office of E.E. APMSIDC Division, Vizianagaram and K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
- Details furnished by the customer denoted by *
- Details marked over specimen denoted by **
- Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
- * Tolerance on the nominal mass given for individual sample.
- Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House (India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



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TEST REPORT

Unique Lab Report Number: ULR-TC80242200000053F

Test report number MTH/TR/21689	Date 06-04-2022	Page number 01 of 01
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Name of Customer: *The Executive Engineer, APMSIDC Division, Vizianagaram, For 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Upgradation of 50 to 100 bedded Community Health Centre at S.Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadravari, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District.

Customer reference: Letter dated 26-03-2022.

Requisition No. RQ- 11414	Sample No. S-25781	Date of receipt 04-04-2022	Date of testing 04 to 06-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019
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TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *12mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests :		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	0.909	0.888* (- 6 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	563	Minimum, 500
c)	Tensile strength, N/mm ²	635	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.13	≥1.10
e)	Elongation, percent	23	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
2. Tests witnessed by: Sri S.V.T.R. Kumar, DEE & S.Bhaskar Raju, TA of Office of E.E. APMSIDC Division, Vizianagaram and K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. * Tolerance on the nominal mass given for individual sample.
7. Standard specification given for reference. If customer requirement is different, do not consider it.

Conditions: 1. The results reported relate only to the items tested, endorsement of product is neither inferred nor implied. 2. Our total liability is limited to the billed amount. 3. The Balance quantity of the tested sample wherever possible shall be retained only for a period of three months from the date of test report unless otherwise specified. 4. This report shall not be reproduced except in full and cannot be used as an evidence in the court of Law and shall not be used in any advertising media without our written approval. 5. The test report relate to the sample submitted to us and not collected or sampled by Material Testing House (India) Ltd. (MTH), unless mentioned otherwise. 6. This report is being issued on the specific understanding that MTH will not in any way be involved in any action following interpretation of the above results. 7. MTH is not responsible for the information furnished by the customer and the same not verified by MTH.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House (India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



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TEST REPORT

Unique Lab Report Number: ULR-TC80242200000054F

Test report number MTH/TR/21690	Date 06-04-2022	Page number 01 of 01
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Name of Customer: *The Executive Engineer, APMSIDC Division, Vizianagaram. For 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Upgradation of 50 to 100 bedded Community Health Centre at S.Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadravari, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District.

Customer reference: Letter dated 26-03-2022.

Requisition No. RQ- 11414	Sample No. S-25782	Date of receipt 04-04-2022	Date of testing 04 to 06-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019
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TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *16mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited		IS 1786 : 2008 *Grade Fe 500D
Tests:			
a)	Mass per metre, Kg	1.576	1.58 ± (- 6 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	587	Minimum, 500
c)	Tensile strength, N/mm ²	667	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.14	≥1.10
e)	Elongation, percent	21	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
2. Tests witnessed by: Sri S.V.T.R. Kumar, DEE & S.Bhaskar Raju, TA of Office of E.E. APMSIDC Division, Vizianagaram and K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. ♦ Tolerance on the nominal mass given for individual sample
7. Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House (India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



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TEST REPORT

Unique Lab Report Number: ULR-TC80242200000055F

Test report number MTH/TR/21691	Date 06-04-2022	Page number 01 of 01
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Name of Customer: *The Executive Engineer, APMSIDC Division, Vizianagaram. For 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Upgradation of 50 to 100 bedded Community Health Centre at S.Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadravilli, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District.

Customer reference: Letter dated 26-03-2022.

Requisition No. RQ- 11414	Sample No. S-25783	Date of receipt 04-04-2022	Date of testing 04 to 06-04-2022	Test method IS:1608 Part-1: 2018; IS:1786-2008, IS:1599: 2019
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TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *20mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests :		IS:1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	2.419	2.47* (- 4 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	539	Minimum, 500
c)	Tensile strength, N/mm ²	633	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.17	≥1.10
e)	Elongation, percent	20	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
2. Tests witnessed by: Sri S.V.T.R. Kumar, DEE & S.Bhaskar Raju, TA of Office of E.E. APMSIDC Division, Vizianagaram and K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. * Tolerance on the nominal mass given for individual sample.
7. Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M. Tech.
Quality Manager



For Material Testing House(India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



MATERIAL TESTING HOUSE (INDIA) LTD

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TEST REPORT

Unique Lab Report Number: ULR-TC80242200000056F

Test report number MTH/TR/21692	Date 06-04-2022	Page number 01 of 01
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Name of Customer: *The Executive Engineer, APMSIDC Division, Vizianagaram. For 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Upgradation of 50 to 100 bedded Community Health Centre at S.Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadraviri, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District.

Customer reference: Letter dated 26-03-2022.

Requisition No. RQ- 11414	Sample No. S-25784	Date of receipt 04-04-2022	Date of testing 04 to 06-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019
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TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *25mm (Nominal dia) HSD Bar. Specimen Identification : **MANGAL TMT Fe 500D Make: *Maa Mahamaya Industries Limited		IS 1786 : 2008 *Grade Fe 500D
Tests:			
a)	Mass per metre, Kg	3.722	3.85+ (-4 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	546	Minimum, 500
c)	Tensile strength, N/mm ²	627	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.15	≥1.10
e)	Elongation, percent	17	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
2. Tests witnessed by: Sri S.V.T.R. Kumar, DEE & S.Bhaskar Raju, TA of Office of E.E. APMSIDC Division, Vizianagaram and K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. ♦ Tolerance on the nominal mass given for individual sample.
7. Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by


K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House(India) Ltd
Authorised Signatory


Dr. K. Srinivasa Varma
Director

From

Sri S.Simmanna ,
Dy. Executive Engineer,
APMSIDC Sub-Division,
Srikakulam District

To

The Head of the Department
Civil Engineering Department,
Andhra University,
Visakhapatnam

Lr. No. DEE/ APMSIDC- /2020-21, Dt. 25-03-2022

Sir,

Sub: APMSIDC Seethampeta Sub Division, Srikakulam District – Testing of steel bar samples test for physical and mechanical properties for the work “*Establishment of super Speciality Hospital at Seethampeta in Srikakulam District*” – Steel bars testing – furnishing test report – Requested – Regarding.

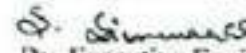
With reference to the above subject, it is to submit that steel bar samples each 3 specimen 1 meter length 3 sets of 8mm Dia, 10mm dia, 12mm dia, 16mm dia, 20mm dia, and 25mm dia of MANGAL TMT 500D now sending for physical and mechanical properties tests.

Test to be conducted:

- 1) Weight per meter length and dia of bars
- 2) 0.2% Proof Stress in N/Sq.mm
- 3) Tensile Strength in N/Sq.mm
- 4) Elongation in Percentage
- 5) Bend
- 6) Re-bend

The testing charges will be paid by agency M/s. NCC Limited, Hyderabad.
I request your good selves to furnish the test reports at an early date.

Yours faithfully,


Dy. Executive Engineer 25/3/22
APMSIDC Division,
Srikakulam.



ISO 9001:2008 Certified
Accredited with 'A' Grade by NAAC

**DEPARTMENT OF CIVIL ENGINEERING
COLLEGE OF ENGINEERING (Autonomous)
ANDHRA UNIVERSITY**

VISAKHAPATNAM-530 003.

Ph. : 0891-2844774(0)
email : auctvithod@gmail.com

F701/CE/SE/PT/T.No. 69/2022-23



Date : 21/04/2022

Test(s) conducted by : **STRUCTURAL ENGINEERING DIVISION**

Test(s) conducted for : The Dy, Executive Engineer, APMSIDC, Srikakulam.
Lr>No. DEE/APMSIDC/2020-21, Dated: 25.01.2022.

Reference Letter No. :

Description : Testing of steel bar samples test for Physical and Mechanical properties -- Construction of Establishment of Super specialty Hostel at APMSIDC Seethampeta Sub Division, Srikakulam District.

Note : steel bar samples Each 3 Specimens 1 meter length 6 sets of 8 mm, 10 mm, 12 mm, 16 mm, 20 mm & 25 mm.

Samples are sent by the party with description (identity mark) noted below and reference cited above.

TEST RESULTS

Date of Testing : 16.04.2022

Mangal TMT 500D

S.No.	Description	Sample /Result		
		8 mm	10 mm	12 mm
1	Dia of the rod as specified by the party (mm)			
2	Weight per meter length (kg)	0.394	0.620	0.882
3	Area (mm ²)	50.19	78.98	112.35
4	Actual Diameter (mm)	7.99	10.02	11.96
5	0.2% Proof Stress (MPa)	528.0	521.65	523.81
6	Ultimate Tensile Stress (MPa)	622.63	621.04	628.84
7	Elongation (%)	22.50	26.00	21.67
8	Bend Test & Re bend Test	Withstood		

S.No.	Description	Sample /Result		
		16 mm	20 mm	25 mm
1	Dia of the rod as specified by the party (mm)			
2	Weight per meter length (kg)	1.600	2.468	3.878
3	Area (mm ²)	203.82	314.39	494.01
4	Actual Diameter (mm)	16.11	20.00	25.08
5	0.2% Proof Stress (MPa)	538.95	542.8	532.17
6	Ultimate Tensile Stress (MPa)	625.55	624.06	631.46
7	Elongation (%)	22.50	20.00	21.60
8	Bend Test & Re bend Test	Withstood		

*** **

A. Sivaparkit
Dr. I. SIVA PARVATHI
M.E, Hydraulics, Coastal & Harbour Engg.,
M.E, (Structures), Ph.D.,
TESTING IN-CHARGE

Anu Reddy
Head of the Department
Department of Civil Engineering
College of Engineering (A)
Andhra University, Visakhapatnam

ANDHRA PRADESH

MEDICAL SERVICES AND INFRASTRUCTURE DEVELOPMENT CORPORATION
ELURU DIVISION

From:

(M. SRINIVASA REDDY)
Deputy Executive Engineer
APMSIDC Sub-Division
ELURU

To:

The Head of Civil Eng. Dept.
M/s. KDM ENGINEERS
Vskakhatnam

Ly. NO. NMBARD/DYCC/ELURU/DB/2020 - 21/115/DL:

Sir,

Sub:- Works - APMSIDC Division, ELURU - NMBARD - XXIV, XXV, XXVI (NAVARATNALU) - Strengthening of AHU / CHC at -
i. Upgradation of 50-100 bedded CHC at Bhimavaram (NMBARD XXV) - in W.G. District - Testing of FE-500 D Steel of Simhadri make (8, 10, 12, 16 mm dia) - Requested.

Ref:- LS Agt No. 05/APMSIDC/2020 21, Dated:

In the reference cited, the work is estimate to M/s NCC limited, Hyderabad and agency has supplied steel of 8mm, 10mm, 12mm, 16mm dia of Fe-500 D grade of Mangal TMT brand of above works.

I request that the following test may please be conducted for these samples.

(a) Elongation (b) Bend (c) Re-Bend (d) Ultimate tensile stress (e) C 27 proof stress (f) Char (g) wt for moisture length (h) Dia.

The results may please be communicated at an early date.

Yours Faithfully,
M. Srinivasa Reddy
(M. SRINIVASA REDDY)
Deputy Executive Engineer
APMSIDC Sub-Division
ELURU



KDM ENGINEERS (INDIA) PRIVATE LIMITED

Complete Civil Engg. Solutions



TC-4036

REF: KDMEL/VSKP/STEEL/04/2022/7624

M/s. Deputy Executive Engineer,
APMSIDC Sub-Division,
Eluru.

Report issue Date: 13th April, 2022

Report No: TC40362200000513F



TEST REPORT

Description of the sample	:	Reinforcement Steel
Source of the sample	:	Sample supplied by the customer
No. of specimens tested	:	12(Twelve only)
Test method	:	IS: 1608, IS: 1786 & IS: 1599
Customer Reference	:	Letter. No. NABARD/DYEE/ELURU/DB/2020-21/115/Dated: 11.04.2022
Work	:	APMSIDC Division, Eluru – NABARD-XXIV, XXV & XXVI (NAVARATNALU) Strengthening/ Upgradation of 50-100 beded CHC at Bhimavaram (NABARD XXV) in West Godavari District
Ref	:	LC Agreement No. 05/APMSIDC/2020-21, Dated:
Make Grade*	:	MANGAL FE 500D
Material received on	:	13.04.2022
Period of test	:	13.04.2022 to 13.04.2022
Condition of samples	:	Satisfactory when received
Deviation if any	:	Not Applicable

Sl. No.	Dia* (mm)	Weight/ Meter (Kg/m)	Yield Stress (YS) (N/mm ²)	Tensile Strength (TS) (N/mm ²)	TS/YS Ratio	Elongation (%)	Bend Test	Re bend Test
1	8	0.390	539	629	1.17	20.8	Satisfactory	Satisfactory
2	10	0.614	551	630	1.14	20.4	Satisfactory	Satisfactory
3	12	0.858	504	589	1.17	23.7	Satisfactory	Satisfactory
4	16	1.596	603	703	1.17	19.6	Satisfactory	Satisfactory

* Details as furnished by the customer

Requirements as per IS: 1786

Dia (mm)	Mass (kg/m)		Dia (mm)	Mass (kg/m)		Grade	TS/YS Ratio	0.2% Proof Stress / Yield stress (N/mm ²) (Min.)	U.T.S (N/mm ²) (Min.)	Elongation (%) (Min.)
	Min.	Nominal		Min.	Nominal					
8	0.363	0.395	20	2.371	2.470	Fe500D	≥ 1.10, but TS not less than 565.0 N/mm ²	500	565 or 10% more than actual 0.2% Proof Stress/Yield stress whichever is higher	16.0
10	0.567	0.617	25	3.697	3.850					
12	0.834	0.888	28	4.638	4.830					
16	1.483	1.580	32	6.058	6.310	Fe550	≥ 1.06, but TS not less than 585.0 N/mm ²	550	585 or 6% more than actual 0.2% Proof Stress/Yield stress whichever is higher	10.0

- Note:**
- The results relate to the samples supplied by the customer.
 - Report shall not be reproduced, except in full, without the written approval of the laboratory.
 - Any corrections invalidate this report.
 - Retention period of samples are 15 days from the date of issue of test report, then it will be dispose off

Remarks: The tested parameters are satisfying the requirements of FE 500D

-----End of Report-----

Reviewed by. *B. Satyanarayana*
BSATYANARAYANA

for KDM ENGINEERS (INDIA) PVT. LTD.



Page 1 of 1



Date: 09.04.2021.

Letter No. LION/IE-0418/2018/NHAI-APCO-NR /1537

To,
Mr. B. Eswara Rao,
M/s APCO Arasavalli Expressway Pvt. Ltd.
Km: 615, S.M. Puram Road,
Beside Kesava Reddy School, Etcherla,
Srikulam, Andhra Pradesh-532410, India.
Email: berao@apcoinfra.com, dc.nrmp@apcoinfra.com

Sub : Independent Engineer Services for Supervision of Six Laning of Narsannapeta-Ranastalam Section of NH-16 (Old NH-5) from design km 580.671 (Existing km 580.700) to design km 634.861 (Existing length 634.000) (Design Length=54.19 km) in the State of Andhra Pradesh under NHDP Phase-V on Hybrid Annuity Mode. **"Consent on Credential of M/s Maa Mahamaya Industries Ltd. brand of "Mangal TMT" Reinforcement Steel bars - R. G. Peta (V), L. kota (M), Vizianagaram District - 535161, A.P. - for Source Approval of Mangal TMT Reinforcement Steel bars."-Reg.**

Ref: 1. Concession Agreement dated 18th January 2018;
2. MORHT 5th Revision, Section 1000.
3. IS code: 1786.2008.
4. Your letter No: AAEP/ NR/-APCO/IE/2020-21/1558; dated on: 07.04.2021.

Dear Sir,

This has reference of above mentioned subject the Concessionaire submitted the credentials of M/s Maa Mahamaya Industries Ltd, brand of "Mangal TMT" Reinforcement Steel bars - R. G. Peta (V), L. kota (M), Vizianagaram District - 535161, A.P. - for Source Approval of Mangal TMT Reinforcement Steel bars to this office for review.

IE reviewed the submitted same and found that the submitted credential is meeting the MORTH 5th revision - 2013, section 1000 & IS code 1786-2008 and specification and requirement.

Please arrange for factory inspection to verify the Quality management system of the plant before procuring proposed material from this manufacturer.

This is for your information and necessary action.

Thanking You.

Yours sincerely,

For & On Behalf of M/s Lion Engineering Consultants Pvt Ltd,


(G. Elappan)
Team Leader

Copy for information: -

1. The Project Director, Project Implementation Unit (GQ)-National Highways Authority of India (NHAI) Enclave, KM. 2/8 NH-16 Hanumanthavaka, Visakhapatnam-530 040 (AP).
Email-vis@nhai.orgnhaipluvs@gmail.com.
2. Corporate office, Lion Engineering Consultants Pvt Ltd, Bhopal.



KDM ENGINEERS (INDIA) PRIVATE LIMITED

Complete Civil Engg. Solutions

Dated: 19th June, 2021

TCKDMV21000006869



REF: KDMEL/VSKP/STEEL/07/2021/6776
M/s. APCO INFRATECH PVT.LTD.
Universal Trade Tower, 4th Floor,
Sector 48-49, Sohna Road,
Gorugram -122101(Haryana).

TEST REPORT

Description of the sample
Source of the sample
No. of specimens tested
Test method
Customer's Reference
Work*

Reinforcement Steel
Sample supplied by the customer
09(Nine only)
IS: 1608; IS: 1599
Letter No. APCO/NR-APCO/LAB/2021-1706, Dated: 15.07.2021
Six Laning of Narasannapeta-Ranastalam Section of NH-16 (Old NH-5) from
Design Km 580.671 (Existing Km 580.700) to Design Km 632.861 (Existing Km
634.000) (Design Length- 54.19 Km) in the State of Andhra Pradesh Under
NHDP Phase-V on Hybrid Annuity Mode.
MANGAL TMT FE 500D
15.07.2021
19.07.2021 to 19.07.2021
Satisfactory

Make & Grade*
Material received on
Period of test
Condition of samples

15.07.2021
19.07.2021 to 19.07.2021
Satisfactory

Sl. No.	Dia* (m m)	Lot No.*	Weight/ Meter (Kg/m)	Yield Stress (YS) (N/mm ²)	Tensile Strength (TS) (N/mm ²)	TS/YS Ratio	Elongation (%)	Bend Test	Re bend Test
1	8	695	0.378	511	615	1.20	20.5	Satisfactory	Satisfactory
1	10	682	0.602	529	622	1.18	20.8	Satisfactory	Satisfactory
3	12	692	0.882	519	609	1.17	20.8	Satisfactory	Satisfactory

* Details as furnished by the customer
Requirements as per IS: 1786

Dia (mm)	Mass (kg/m)		Dia (mm)	Mass (kg/m)		Grade	TS/YS Ratio	0.2%ProofStress / Yield stress (N/mm ²) (Min.)	U.T.S (N/mm ²) (Min.)	Elongation (%) (Min.)
	Min.	Nominal		Min.	Nominal					
8	0.363	0.395	20	2.371	2.470	Fe500D	≥ 1.10, but TS not less than 565.0 N/mm ²	500	565 or 10% more than actual 0.2% Proof Stress/Yield stress whichever is higher	16.0
10	0.567	0.617	25	3.697	3.850					
12	0.834	0.888	28	4.638	4.830	Fe500D	≥ 1.08, but TS not less than 600.0 N/mm ²	550	600 or 08% more than actual 0.2% Proof Stress/Yield stress whichever is higher	14.5
16	1.403	1.580	32	6.058	6.310					

- Note:
- The tests are witnessed by Mr. P.Ramakrishna (AQME, LEC) & Mr. M.Apparao (APCO).
 - The results relate to the samples supplied by the customer.
 - Report shall not be reproduced, except in full, without the written approval of the laboratory.
 - Any corrections invalidate this report.

Remarks: The above tested parameters are satisfying the requirements of FE500D as per IS: 1786 table-3 for the given sample.
for KDM ENGINEERS (INDIA) PVT. LTD.,

AUTHORISED SIGNATORY
NIVEDITA-BARIK

Page 1 of 1

Plot No. 93, E-Block, Autonagar, Visakhapatnam - 530 012, A.P.

Cell: 09912944495, 08328498601, E-mail: lab.vizag@kdmengineers.com, Website: www.kdmengineers.com



KDM ENGINEERS (INDIA) PRIVATE LIMITED

Complete Civil Engg. Solutions



REF: KDMEI/GNT/07-025/Steel/2021/07-8220

Dated: 23rd July 2021

M/s. Apco Infratech Pvt Ltd.,
Universal Trade Tower,
4th Floor, Sector 48-49, Sohna Road,
Gurugram-122 101, Haryana.

TC5518 21000008257

TEST REPORT ON REINFORCING STEEL

Source of the sample	:	Sample supplied by the customer
No. of samples tested	:	03(Three Only)
Test method	:	IS: 8811 - 1998 (Reaffirmed 2012)
Customer's Reference	:	Lr.No. APCCO/NR-APCCO/LAB/2021-1706, Dt:15.07.2021
Subject*	:	Six Lining of Narasannapeta-Ranastalam Section of NH-16 (Old NH-5) from design Km.580.671 (Existing Km.580.700) to design Km.632.861 (Existing Km.634.000) Design Length-54.19 Km) in the State of Andhra Pradesh under NHDP Phase-V on Hybrid Annuity Mode.
Brand*	:	MANGAL TMT, Fe 500D
Material received on	:	19.07.2021
Date of test	:	23.07.2021
Condition of samples	:	Satisfactory

TESTED FOR Fe 500D GRADE

Sl. No	Sample Description*	Lot No*	Dia (mm)	C %	S %	P %	S+P %
1	Reinforcement Steel	695	8	0.101	0.024	0.019	0.043
2	Reinforcement Steel	682	10	0.118	0.024	0.024	0.048
3	Reinforcement Steel	692	12	0.126	0.022	0.021	0.043


* As furnished by the customer

Requirements as per IS: 1786 - 2008(RA2013)	C % (max.)	S % (max.)	P % (max.)	S+P % (max.)
Fe 500	0.30	0.055	0.055	0.105
Fe 500D	0.25	0.040	0.040	0.075

- Note: 1. The results relate to the samples supplied by the customer.
2. Report shall not be reproduced, except in full, without the written approval of the laboratory.
3. Any corrections invalidate this report.

Remarks: The tested samples conform to IS: 1786-2008 (RA 2013) requirements for the abovementioned tests For Fe500D Grade

For KDM ENGINEERS (INDIA) PVT. LTD.,


AUTHORISED SIGNATORY
P.VIJAY KUMAR
TECHNICAL MANAGER



Page 1 of 1



Lr. No: TL/NH-234/LOT-II/Chik/2016/200

Date: 29-07-2016

To

M/s Ashoka Buildcon Ltd,
S.No. 861, Ashoka House,
Ashoka Marg, Vadala
Nashik-422011,
Maharashtra.

Sub:- Rehabilitation and Upgrading to 2 lanes/ 2 lane with paved Shoulders Configuration and Strengthening of Madhugiri- Mulbagal section from km 343.800 to km 483.151 of NH-234 in the state of Karnataka for Lot-II (Km . 400.330 to km 483.151) under Phase-I of NHIP –Maa Mahamaya Industries Ltd - reg

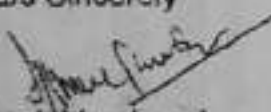
- Ref:**
- 1) Your letter no. ABL/MORTH/NH234/site/16-17/248 dated 04/07/2016
 - 2) Our letter no: TL/NH-234/LOT-II/Chik/2016/ 190 dated 13-07-2016
 - 3) Your letter no. ABUMORTH/NH234/site/16-17/248 dated 04/07/2016
 - 4) No.CNH/ TA2/ AE8/ MMIL/ vendor/ 2016-17/ 652 dated 28-05-2016

Dear Sir,

In continuation with the above letters and Chief Engineer's office letter, we have no objection to procure steel from above source. However, before Steel is delivery at site, you have to arrange our representative to conduct essential tests to be carried out at Manufacturers plant Laboratory.

Thanking you.

Yours Sincerely


(Jacob Varghese)

Team Leader

(EE-Theme JV)

- Copy to 1) SE, PPP Cell, Bangalore,
2) SE RO Bangalore
3) EE, PIU, Chikkaballapur for information
4) Eurostudios - S. L, Delhi for information
5) Theme Engineering Services Pvt. Ltd. Jaipur for information
6) PMC Roughton-Aarvee

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
EAP (ZONE)

1-Parliament Street
Transport Bhawan
New Delhi-110001
Dated: 30.01.2017

RW/NH-12013/33/6/2010/SP(A-2)/P-9/EAP

(Certificate No. NH-234/Excise/Ashoka Buildcon Limited/Lot-II-10) ³¹
TO WHOMSOEVER IT MAY CONCERN

This is certify that work of "Rehabilitation and upgrading to 2 line with/without paved shoulders configuration and strengthening of Madugiri-Mulbagal section (km 343.800 to km 483.151) of NH-234 in the State of Karnataka Lot-II (from km. 400.330 to km. 483.151) under Phase-I of National Highways Inter-Connectivity Improvement Projects (NHIIP)" (Package No. NHIIP-KA-234-10) has been awarded to M/s Ashoka Buildcon Limited, Ashoka House, Ashoka Marg, Ashoka Nagar, Nashik, Maharashtra-422011. The Contract Agreement was signed on 24.03.2015. The project is being implemented by the Government of India with Loan assistance from the World Bank under Loan Agreement No. 8301 IN.

Certified further that M/s Ashoka Buildcon Limited has proposed to procure the following materials and the same are required for execution of the project:


S. NO	Material	Manufacturer/Supplier	Quantity approved by Ministry	Type of Exemption
1.	Steel(HSD of grade Fe-500)	M/s MAA Mahamaya Industries Ltd. R.G. Peta Village, L. Kota Mandal, Vizianagaram Dist-535161, Andhra Pradesh		Excise
	8 mm		120 MT	
	10 mm		150 MT	
	12 mm		125 MT	
	16 mm	200 MT		
		Total	595	


It is further certified that the aforesaid material is required for the execution of the above said project has duly been approved by the Government of India. Construction work is scheduled to be completed by 17.01.2018.

It is requested that the necessary exemption from Excise Duty may be allowed against above referred material to M/s Ashoka Buildcon Limited as per Government of India (Ministry of Finance, Department of Revenue) Notification No. 108/95-C.E. dated 28.08.1995 as amended time to time. This certificate is being issued subject to condition that product should meet the minimum standard as fixed by BIS and confirming to specification of MORT&H/IRC.

This certificate shall remain valid for six months from the date of issue.

Countersigned by:


(Leena Nandan)
Joint Secretary (EAP)
MoRTH, New Delhi


(Khushal Chand)
Superintending Engineer (EAP)

CEMOSAARMENGE/IEAPA/NHAI/VSKP/2020/551

22.02.2020

TO
The General Manager,
M/s DILIP BUILDCON LIMITED,
Anandapuram - Anakapalli Road Project
Neelakundilu village, Sontyam,
Anandapuram, Visakhapatnam,

Sub : Consultancy Services for Independent Engineer for Supervision of Six laning of Anandapuram-Pendurthi-Anakapalli Section of NH-5 (new NH-16) from Km.681.000 (Existing Km.681.000) to Km.731.780 (Existing Km.742,400) (Design Length=50.78 Km) in the State of Andhra Pradesh under Bharatmala Pariyojana on Hybrid Annuity Mode - Source Approval Of Steel (MANGAL TMT) From Mahamaya Industries Ltd.-Reg.

Ref: 1) Circular No. 11041/218/2007-Admin.	Dated: 18.08.2010
2) DBL/NHAI/DBLAAHPL/19-20/384	Dated: 04.10.2019
3) CEMOSAARMENGE/IEAPA/NHAI/VSKP/2019/265	Dated: 16.10.2019
4) DBL/NHAI/DBLAAHPL/19-20/586	Dated: 17.02.2020

Dear Sir,

In reference to the above cited letter (4), the concessionaire had submitted the credentials of M/S Mahamaya Industries Ltd. (Mangal TMT) plant/Factory located at L kota mandal, Vijaynagaram District, (Andhra Pradesh) has been inspected by our under signed person along with our SQME on 28.12.2019 along with your Authorized Representative and found in order as per standards IS 1786 2008, For the procurement of TMT steel for construction of structural works of the project, we noticed the following observations during visiting of steel factory,

- Mahamaya Industries Ltd. (Mangal TMT) produces its own billet for making their TMT through own integrated process from Iron Ore.
- In house QC Laboratory is well equipped like spectrometer analysis and Universal Testing machine to conduct all Mechanical and Chemical test.
- Sample of different diameter bars were tested for physical and chemical composition and found satisfactory as per IS- 1786 2008.
- This approval has accorded as per guidelines of Ministry of Steel, Government of India Gazette notification as appended.

Therefore, we accord source approval for TMT reinforcement steel in the Structures of the project, from manufactured at M/S Mahamaya Industries Ltd. (Mangal TMT).

However, we inform to fulfill the following requirements before you incorporate these materials in the permanent works.

- Each consignment must be supported with manufacturing test certificate.
- Only new materials shall be supplied to the site and defective or non confirming material to be discarded.
- Each lot of supply should be tested in recognized independent NABL accredited laboratory and sampling must be done in presence of IE.

Site office:

G-1, Dinesh Homes, Penderthi, Andhra Pradesh, PIN - 530047

Mob: 9414184839 email: cemosarmenge.apa@gmail.com

Central Offices India:

502, 5th Floor, DDA-5 Building, District Centre, Janakpuri, New Delhi - 110058, India. Tel.: (+91) 011-47503189.

Letter no: SSI dated 22/2/20

- Material stock shall be maintained at site and shall be produced as and when required.
- Storage and protection needs to be assured as per MORT&I section 1603. Only fresh lot of material shall be delivered at site.
- If test on selected piece do not confirm with the specification, the entire lot is liable for rejection without any consideration for retesting.
- Quality control test should be done at the required frequency, as specified.
- Approval shall not relieve the contractor from any of his responsibilities under the contract.
- Procurement, storage and use of the material shall be in conformity with relevant IS/IRC codes and manuals issue from time to time.

Yours truly,

For Centro de Estudios de Materials y Control de Obra, SA in association with
ARMENGE Engineering and Management Consultants Pvt Ltd

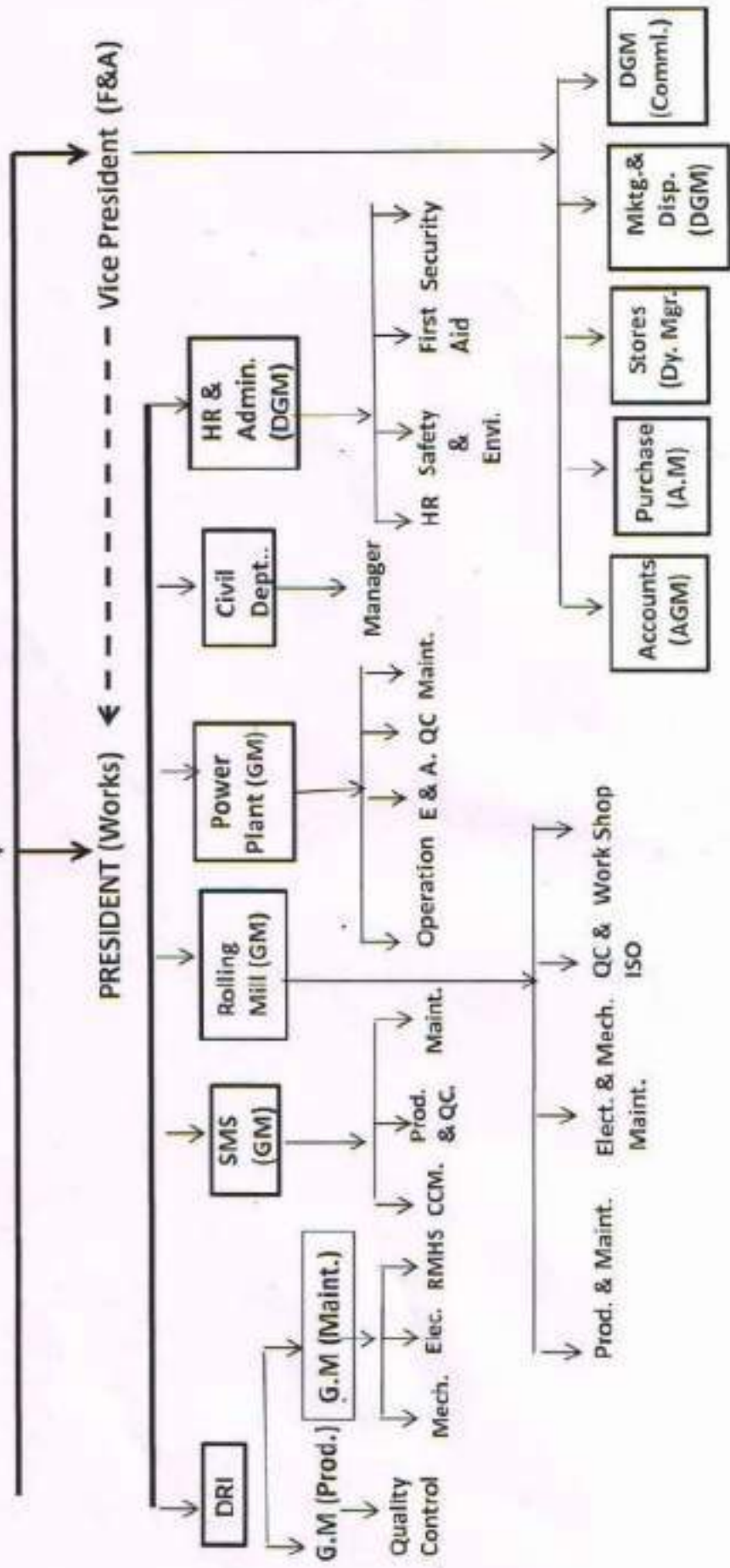

(P. Devidas)

Team Leader cum Senior Highway Engineer.

Copy To :- 1.PD-PIU, NHAI, Visakhapatnam.

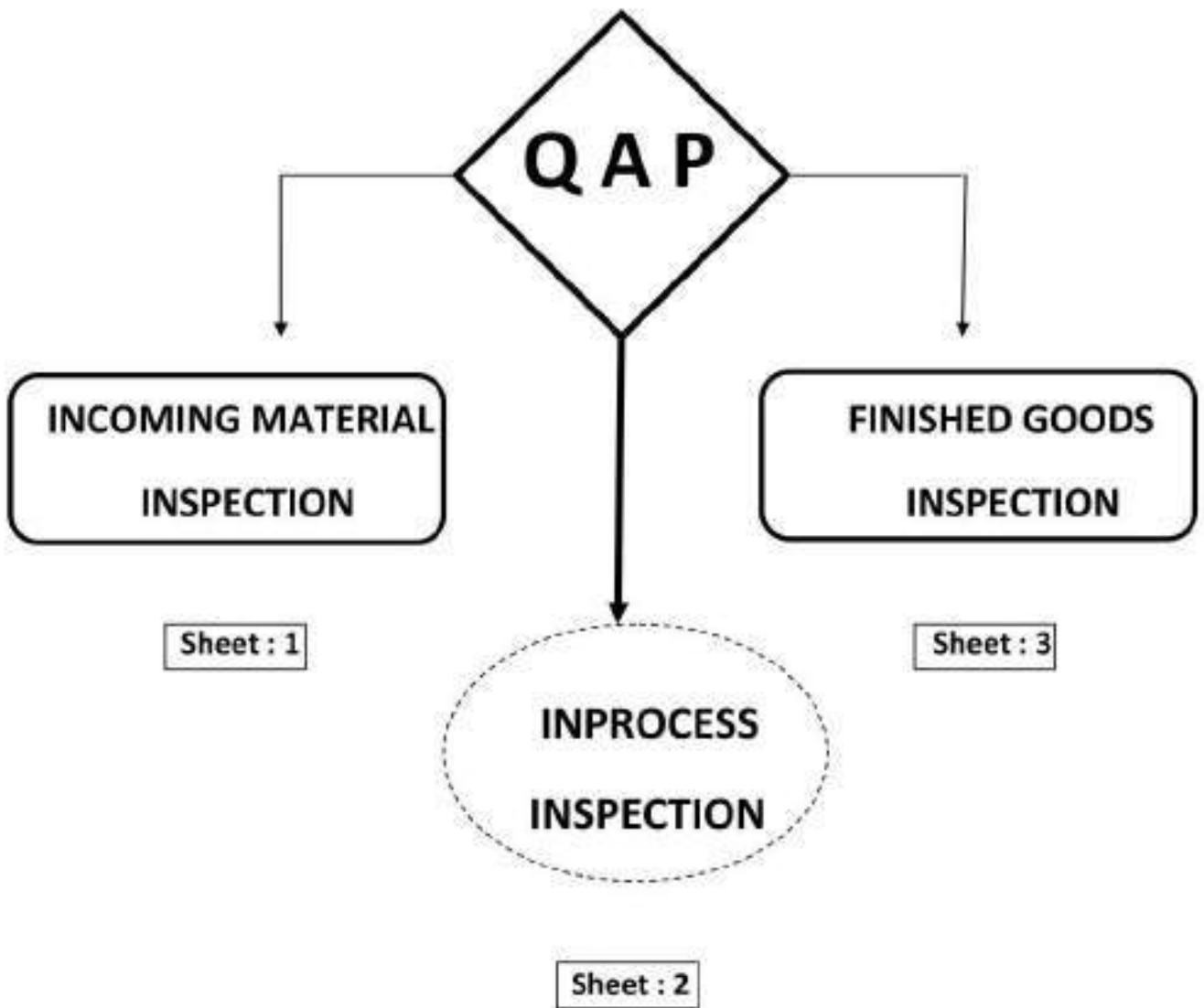
ORGANISATION CHART OF MAA MAHAMAYA INDUSTRIES LIMITED

Chairman & Managing Director



13. QUALITY ASSURANCE PLAN

MAA MAHAMAYA INDUSTRIES LIMITED



SHEET : 1

INCOMING MATERIAL INSPECTION

Material	Testing Frequency	Tested For		Specification
		Physical parameter	Chemical parameter	
Iron Ore	Once in a day for source wise receipt.	Moisture, Sieve analysis, TI, AI & Contamination	Fe(t), LOI, SiO ₂ , Al ₂ O ₃ & Phosphorus	TI=92.00min, AI=3.00max, Fe(t)=65.00min, SiO ₂ &Al ₂ O ₃ =5.00max, P=0.035max, IS:15774:2007
Coal	Once in a day for source wise receipt.	Moisture, Sieve analysis & Contamination	Proximate analysis(IM, VM, Ash & FC), GCV & Sulphur	MOI=9.00max, GCV=3500to6200, Sulp=0.80max. IS:1350(Part-1):1984
Dolomite	Once in a day for source wise receipt.	Sieve analysis & Contamination	LOI, CaO, MgO & SiO ₂	LOI=42.00min, CaO=29.00min, MgO=20.00min & SiO ₂ =3.00max, IS:1760(Part-3):1992
Pig Iron	Once in a day for source wise receipt.	Contamination	Carbon, Sulphur & Phosphorus	Carbon=3.50min, Sulphur=0.040max & Phosphorus=0.120max, IS:13502:1992
Billet	Cast number wise	Length, Section, Camber, Raising, Bend & Freedom from defects.	Carbon, Manganese, Sulphur, Phosphorus, Silicon & CE	Carbon=0.23max, Manganese=0.45to1.00, Sulphur=0.040max, Phosphorus=0.040max, S+P=0.075max, Silicon=0.10min & CE=0.42max, IS:1786:2008 Fe500 D

SHEET : 2

INPROCESS INSPECTION

Material	Testing Frequency	Tested For		Specification
		Physical parameter	Chemical parameter	
Sponge Iron	Every Two hours	Mag, N.Mag & Sieve Analysis	Fe(m), Fe(t), Mz ⁰ , Carbon, Sulphur, Phos	Fe(m)=76.0min, Fe(t)=88.0min, Mz=86.0min, Carbon=0.08to0.12, Sulphur=0.030max, Phos=0.035 , IS:15774:2007
Liquid Metal	Every Heat before Casting	-	Carbon, Mangnace, Sulphur, Phosphours, Silicon & CE	Carbon=0.23max, Mangnace=0.45to1.00, Sulphur=0.040max, Phosphours=0.040max, S+P=0.075max, Silicon=0.10min & CE=0.42max, IS:1786:2008, Fe500 D

SHEET : 3

FINISHED GOODS INSPECTION

Material	Testing Frequency	Tested For		Specification
		Physical parameter	Chemical parameter	
Sponge Iron	Every Four hours	Mag. N.Mag & Seve Analysis	Fe(m), Fe(t), Mz ² , Carbon,Sulphur, SiO ₂ +Al ₂ O ₃ & Phosphorus	Fe(m)=76.0min, Fe(t)=88.0min, Mz=86.0min, Carbon=0.08to0.12, Sulphur=0.030max, Phos=0.035 IS:15774:2007
Billet (Check Analysis)	Every Heat Casting wise	Length, Section, Camber, Raising, Bend & Freedom From defects	Carbon, Mangnace, Sulphur, Phosphours, Silicon & CE	Carbon=0.23max, Mangnace=0.45to1.00, Sulphur=0.040max, Phosphours=0.040max, S+P=0.075max, Silicon=0.10min & CE=0.42max, IS:14650:1999 IS:1786:2008, Fe500 D
HSD T M T BAR	Every Half an Hour	Surface defects, Nominal size, Wt/mtr,	-	IS:1786:2008, Fe500D, Saparate Sheet Enclosed
HSD T M T BAR	Every Hour	Yield Stress, Tensile Stress, Ratio(TS/YS),Elongation, Bend & Rebend	-	
HSD T M T BAR	Every Nominal size once in a day	Rib Area	-	
HSD T M T BAR	Every Nominal size lot wise	Surface defects, Nominal size, Wt/mtr, Yield Stress, Tensile Stress, Ratio(TS/YS),Elongation, Bend, Rebend & Rib Area	Carbon, Mangnace, Sulphur, Phosphours, Silicon & CE (Cast No wise Feeding)	Carbon=0.23max, Mangnace=0.45to1.00, Sulphur=0.040max, Phosphours=0.040max, S+P=0.075max, Silicon=0.10min & CE=0.42max, IS:1786:2008, Fe500 D

SHEET : 4
FINISHED GOODS T M T Specification

Nominal Size (mm)	8 mm	10 mm	12 mm	16 mm	20 mm	25 mm	28 mm	32 mm
Freedom from Defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects
Wt/mtr Kg	0.395	0.617	0.888	1.58	2.47	3.85	6.81	6.31
Yield Stress N/mm ² (min)	500	500	500	500	500	500	500	500
Tensile Stress N/mm ² (min)	565	565	565	565	565	565	565	565
Ratio (TS/YS)	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10
Elongation %	16	16	16	16	16	16	16	16
Bend	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks
Re-Bend	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks
Deformation & Surface Characteristics(Rib Area (Ar)) mm	0.12xDia min	0.12xDia min	0.15xDia min	0.15xDia min	0.17xDia min	0.17xDia min	0.17xDia min	0.17xDia min

MAA MAHAMAYA INDUSTRIES LTD
QUALITY ASSURANCE
LIST OF INSTRUMENTS SMS & Rolling Mill

Sl.No	Name of Instrument/Equipment	Least Count /Range/Cap	Use of Instrument/Equipment	Qty
1	Jaw Crusher	Input:40mm, Output:5mm	For Coal & Sponge Iron Crushing	1
2	Disc Grinder	Input:5mm, Output:212µm	Sponge Iron Powder	1
3	Tumbler	25 rpm	Iron Ore Tumbler & Aibration Index (Iron Ore Hardness test)	1
4	Magnetic Stirrer with Hot Plate	150 dig	Fe(m) test in Sponge Iron	1
5	Hot Air Oven	0 to 300, LC:1 dig	Moisture test & Fee in Raw materials	2
6	Muffel Furnace	0 to 1200 dig, LC:1dig	V.M, Ash & Silica Ignition	2
7	Carbon Appratus	0 to 1.5%, LC:0.01%	Carbon Test in Raw materials & STEEL	2
8	Combustion Furnace	0 to 1300 dig, LC:1 dig	Carbon Test in Raw materials & STEEL	1
9	Hot Plate	0 to 200 dig	During analysis Solutions Boiling purpose	2
10	Analytical Balance	0 to 200 grm, LC:1 mg	Weighing the test sample	1
11	Digital Analytical Balance	0 to 220 grm, LC:1 mg	Weighing the test sample	1
12	Weighing Balance	2gr to 25kg, LC:2 gr	Physical Analysis weighing	1
13	Barometer	433mm/Hg	To be know Atmosphere Pressure	1
14	Bomb Calorimeter	LC:0.01 dig	Grass Calorific Value test	1
15	Thermometer 50 ^o C	0 to 50 dig, LC:1 dig	To know temperature in water & Diesel ect...	1
16	Thermometer 100 ^o C	0 to 100 dig, LC:1 dig	To know temperature in water & Diesel ect...	1
17	Measuring Scale	0 to 1 mtr, LC:0.01mm	To be Mearure the length of Billet & T M T	1
18	Venire Calipers	0 to 300mm, LC:0.02mm	Section and dia measure in the Billet & T M T	1
19	U T M 60	60KN to 600KN, LC:0.1 KN	T M T Physical testing (Yield Stress, Tensile Stress, Ratio(TS/YS), Elongation, Bend & Rebend)	1
20	Extensometer	200 to 2000µm, LC:1µm	Maximum load Elongation	1
21	Mandrels	24,30,32,36,40,48,50,56,60,64,70,72,80,84,96,100,112,120,125,128,140,150,160,168,175,192,196,200,224,256	Bend & Rebend test	30
22	Water Tub	20 ltr	Bend & Rebend test	1
23	Heater	230 W	For water heating	2
24	BCS/SS-CRM NO.435/2 Plain Carbon Steel Standard sample	100 gr	For Solutions standardization	1
25	Spectrometer	32 elements	For Steel Chemical analysis	1

Technical Literature

TMT – Thermo mechanical process is a metallurgical process that combines mechanical deformation process like rolling with thermal process like heat treatment, water quenching, heating and cooling at various rates into single process.

This process produces a high strength bar from low carbon steel.

Steel billets are heated up to 1200 degree C temp approx in reheat furnace progressive rolled to final size shape of a reinforcing bar of grade Fe 500, Fe 500D, Fe 550.

The physical properties are in accordance to IS 1786:2008.

Advantages of the Product:

We at Mangal TMT, prejudice give top priority to quality.

The Raw materials are sourced from NMDC, Mines with a long term agreement signifies the values of company. We are also having a stringent QAP at all levels from Raw materials to finished products to ensure the compliance of IS code requirements.

Being centrally located at R.G.Peta, 50km away from Visakhapatnam city enables a easy transport to various cities directly from factory.

Further we would also like to bring your notice that we are the first mini integrated steel plant in Andhra Pradesh. We also have a technical team of qualified civil/mechanical Engineers for after sales and pre sales technical discussions with Engineer In charge for improving & maintaining the established standards.









MAHAMAYA
TOUGHER THAN THE HUMAN WILL
 Manufactured by



MAHAMAYA INDUSTRIES LIMITED
R.G. Peta, L. Kota Mandel, Vizianagaram District

TEST CERTIFICATE FOR HIGH STRENGTH DEFORMED STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT ACCORDING TO IS 1786: 2008
 TEST CERTIFICATE NO. - MMLQA/20/21 DATE: _____

TO M/S. _____

It is certified that the material described below fully conforms to IS : 1786 - 2008 Chemical composition and Mechanical Properties of the Product as tested according with the scheme of inspection and testing contained in the BIS Certification Marks Licence No. CML - 6635477 are as indicated below against each order No.

(PLEASE REFER TO IS : 1786 - 2008 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Order No. & Date	Nominal Size (mm)	Lot no.	Quantity (T)	Date of Testing	CHEMICAL ANALYSIS							MECHANICAL PROPERTIES					Remarks	
					C %	S %	P %	S+P %	CE %	0.2 % Proof Stress /	0.2 % Proof Stress /	Tensile Strength /	TS / YS ratio	Elongation %	Total elongation	Burd Test		Reburd Test
8	488			27.02.21	0.20	0.033	0.037	0.070	0.30	528	563	658	1.18	19	7.5	OK	OK	PASS
10	491			28.02.21	0.21	0.033	0.037	0.070	0.31	634	567	661	1.17	19	7.5	OK	OK	PASS
12	492			28.02.21	0.20	0.034	0.036	0.070	0.30	634	565	671	1.18	19	8	OK	OK	PASS
16	478			22.02.21	0.19	0.034	0.036	0.070	0.28	527	568	670	1.19	19	8.5	OK	OK	PASS
20	479			22.02.21	0.19	0.034	0.037	0.071	0.28	529	564	670	1.19	18	8.4	OK	OK	PASS
26	485			26.02.21	0.20	0.033	0.039	0.072	0.29	535	545	658	1.21	20	7.8	OK	OK	PASS
32	187			11.10.20	0.22	0.032	0.038	0.078	0.28	520	552	666	1.25	19	8.3	OK	OK	PASS

The Material supplied conforms to the standard rolling mass tolerance

Surface Defects: Absent / Present
 Internal Piping: Absent / Present
 Inclusions: Absent / Present

REMARKS :-

SHIPPING ADVISE NO. _____
 WAGON NOS. _____

FOR: Maa Mahamaya Industries Limited

SIGNATURE:



RW/NH-34066/09/2017-S&R (B)
GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
S&R -(Bridges)
Transport Bhawan, 1, Parliament Street, New Delhi-110001

Dated: 28.10.2020

To

1. The Chief Secretaries of all the State Governments / UTs.
2. The Principal Secretaries / Secretaries of all States / UTs Public Works Department dealing with National Highways, other Centrally sponsored schemes.
3. The Engineers-in-Chief and Chief Engineers of Public Works Department of States/UTs dealing with National Highways, other Centrally sponsored schemes.
4. The Director General (Border Roads), Seema Sadak Bhavan, Ring Road, Delhi 110010.
5. The Chairman, National Highways Authority of India, Plot G-5 & 6, Sector-10, Dwarka, New Delhi 110075.
6. The Managing Director, NHIDCL, PTI Building, Parliament Street, New Delhi 110001.

Sub: Reinforcing Bars: Clause 1009.3.1 of Ministry's Specifications for Road and Bridge Works-regarding.

Sir,

The grade and other parameters of the reinforcing bars to be used for plain, reinforced or pre stressed concrete works on National Highways has been specified in Clause 1009.3.1 of Ministry's Specifications for Road and Bridge Works. This Clause also prescribe that the steel shall be procured from original producers. In case, the original producers are unable to supply the steel within the required time period or they are not producing the reinforcing bar of required size /diameter, the supply from other producers are also allowed, provided the reinforcement is manufactured from billets procured from Original producers.

2. Ministry has received various representations from the manufacturers / associations that secondary producer /other producers, who produce steel reinforcement from billets with technical parameters conforming to IS: 1786, unable to supply the steel for National Highways works due to aforesaid Clause 1009.3.1 of Ministry's Specifications for Road and Bridge Works. Moreover, Ministry of Steel vide their Order No.4 (13)/2016-SD (I) dated 9th August, 2016 has also excluded the distinction between Primary (Original) & Secondary (Other) steel producers.

3. The matter has been considered in the Ministry and it has been decided that steel reinforcement manufactured by the Secondary (Other) producers are also permitted for National Highway works provided the reinforcement bars are manufactured from the billets.

4. As such, the 2nd and 4th para of Clause 1009.3.1 of Ministry's Specifications for Road and Bridge Works shall be amended as per following:-

2nd Para

"All steel shall be procured from producers who manufacture billets directly from iron ores and roll the billets to produce steel conforming to IS: 1786. No re-rolled steel shall be incorporated in the works. The steel shall also be procured from other producers provided it is manufactured from the billets made directly from iron ores and not from shredded scrap and sponge iron as basic feedstock. In such cases, the other producers will have to submit the proof of purchase such as GST, Invoice etc from the billet producers to establish that billets are made directly from iron ores and have been procured from them. The steel shall be got tested by the Engineer in the NABL affiliated laboratories only as a third party check. It shall be ensured that all the test results conform to IS: 1786."

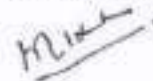
P.T.O

4th Para

"For the steel procured from producers who manufacture billets directly from iron ores also, the Engineer/Employer may carry out checks on materials through third party as mentioned above, for conforming to the test results shown in the certificates so as to ensure the quality of steel supplied."

5. The contents of this Circular may please be brought to the notice of all the Concerned in your Organization for strict implementation. This circular will be implemented from the date of its issuance.
6. This issues with the approval of the Competent Authority.

Yours faithfully,



(Jitendra Kumar)
Superintending Engineer-S&R(Bridges)
For Director General (Road Development) & SS.

Copy to:

1. All Technical Officers in the Ministry of Road Transport & Highways.
2. All Joint Secretaries in the Ministry of Road Transport & Highways.
3. All ROs & ELOs of the Ministry of Road Transport & Highways.
4. The Secretary General, Indian Roads Congress with a request to incorporate the contents of this circular in the revised Ministry's Specifications for Road and Bridge Works.
5. The Director, IAHE.
6. Technical circular file of S. R&T (B) Section.
7. NIC for uploading on Ministry's website under "what's new".

Copy for kind information to:

1. PS to Hon'ble Minister (RT&H, MS&ME) / PS to Hon'ble MOS (RT&H).
2. Sr. PPS to Secretary (RT&H).
3. PPS to DG (RD) & SS.
4. PPS to AS & FA/ADG-I.

***** End *****

E-4289575

8/11/2

**GOVERNMENT OF ANDHRA PRADESH
WATER RESOURCES (REFORMS) DEPARTMENT**

Memo No. ICDO1-COOROMISC/7/Reforms/2021, Dt. 08/02/2021

Sub: W.R. (Reforms)- Steel brands in Estimates/ Tenders - Certain instructions-Issued.

- Ref: 1. Govt. Memo No. 15021/ 8/ 2018-RDS dt. 04-04-2019 of TR&B Dept. of GoAP.
2. From the ENC(AW/IW) , WRD & Chairman, BoCEs, Lr. No. ENC/IW/P&M/ EE.1/DEE.2/AEE(S)/6th BoCEs-2021/Vol. I, dated: 08.01.2021.

S-15/2021

The Engineer-in-Chief (AW / IW), WRD and Chairman, BoCEs in the reference 2nd cited have stated that in the 6th BoCEs meeting held on 15.12.2020, a power point presentation was given by "SURYADEV TMT & RADHA TMT FE550", requesting for empanelling their brands as manufacturers of TMT bars for ongoing & upcoming projects in Andhra Pradesh. Further, stated that similar proposals were also received from other Steel Manufacturing agencies.

2. The issue was discussed in detail in the 6th BoCEs meeting held on 15-12-2020 and made certain observations.

3. Government after careful examination of the proposal and based on the observations/ recommendations of the BoCEs, hereby issue the following instructions to all the Engineer-in-Chiefs, Water Resources Department / Commissioner of Tenders, A.P./ Chief Engineers, Water Resources Department and all the concerned Engineering works Departments:

DEE-2
8/11/2

As far as Steel products are considered, Ministry of Steel, Govt. of India withdrawn various definitions of steel producers such as 'Integrated Steel Producers', 'Primary Steel Producers', 'Secondary Steel Producers' etc. and hence no Steel manufacturing company can be empanelled based on the manufacturing process.

AEE(L)
15/2

Currently, both in SoR as well as monthly minutes of Sub-Committee, the average rates of Steel rates are displayed without recommending any brand names which is appropriate in the light of Ministry of Steel, Government of India's Quality Control Order.

In view of the above observations, and also based on the earlier recommendation of Sub-Committee to the TR&B Dept., and as recommended by the BoCEs, all the Engineer-in-Chiefs, Water Resources Department / Commissioner of Tenders, A.P./ Chief Engineers, Water

(P.T.O)

//2//

Resources Department and all the concerned Engineering works Departments are directed to continue the current procedure of taking average steel rates of ISI specifications complied Steel Manufacturing companies and to instruct the field staff not to mention any particular brands in the Estimates/Tender Documents/Agreements but to insist on companies which comply to ISI specifications including Physical and Chemical properties, while inviting Tenders / Estimates/ Agreements for the works in their jurisdiction in future, duly following the recommendations made by the Sub-Committee as above.

4. All the Engineer-in-Chiefs, Water Resources Department / Commissioner of Tenders, A.P./ Chief Engineers, Water Resources Department and all the concerned Engineering Works Departments are directed to follow the above instructions scrupulously.

SYAMALA RAO JAMJAM
SECRETARY TO GOVERNMENT

To

The Engineer-in- Chief (Irrigation) & Chairman, SLTC,WRD,Vijayawada.

✓The Engineer-in- Chief (Admn), WRD& Chairman, BoCEs,Vijayawada.

The Commissioner of Tenders, AP., Vijayawada.

All Chief Engineers, Water Resources Department.

The MA & UD Department, A.P Secretariat.

The PR & RD Department, A.P Secretariat.

The Housing Department, A.P Secretariat.

The HM & FW Department, A.P Secretariat.

The Industries & Commerce Department, A.P Secretariat.

The TR & B Department, A.P Secretariat.

The Hon'ble Judge, Judicial Preview, A.P.

Copy to:

The P.S to the Secretary to Govt., WRD.

SC/SF

//FORWARDED:BY ORDER//

P.K. Bhannalata
SECTION OFFICER

J

C/C

Ref: PMC/GVSCCL/ISA/2019/18

4 Sept. 2019

To
M/s. RKEC Projects Limited
#10-12-L, 3rd floor, Rednam Alcazar,
Rednam Gardens, Opp SBI Main Branch,
Visakhapatnam – 530 002.

Subject: Submission of Updated Vendor details of M/s MAA MAHAMAYA INDUSTRIES LIMITED (MANGAL TMT), for Fe 500D, for structural steel.

Ref: i) Ref. Material Approval Request (MAR) No: RKEC/GVMC/MAR_26.
ii) Your letter No: RKEC/2018 -19/GVSCCL/AECOM/096
iii) PMC Letter: PMC/GVSCCL/ISA/2019/17, dated 20 Aug 2019.

Dear Sir,

The Material Approval Request (MAR) for Fe 500D, for structural steel of Vendor details of M/s MAA MAHAMAYA INDUSTRIES LIMITED (MANGAL TMT) has been reviewed for the following

- 1) The Validity for Certificate of Registration for ISO 9001: 2015, is up to 22/08/2022.
- 2) The Validity for Certificate of Registration for ISO 14001: 2015, is up to 22/08/2022.
- 3) The Validity for Certificate of Registration for ISO 45001: 2018, is up to 22/08/2022.

And Renewal of Certification from Bureau of Indian standards have been attached. Hence, Material Approval Request (MAR) is approved for Procurement.

Yours Sincerely,

For AECOM Asia Company Limited



Prabhu Sheelavantha
Programme Director

CC: Managing Director,

GVSCCL, Visakhapatnam.

V. Akhila Kumar
05/09/2019



Reference: URS SW/APRSP-B/TL/ECI-SEPL JV/PNV-08-B/2017/287

Date: 07th August 2017

The Authorized Representative,
M/s ECI - SEPL JV,
Plot No. A12, A13, Panchavati Township,
Manikonda - Village, Rajendra Nagar - Mandal,
Rangareddy, Hyderabad -500 089

Sub: Construction Package PNV-08-B: Widening and Strengthening of Pedana - Nuzvid - Vissannapet Road from Km. 22+100 to Km. 40+000 in Krishna District, A.P (Balance Work).
MANGAL TMT STEEL (Maa Mahamaya Industries Ltd) Provisional Source approval - Reg

Ref: (i) ECI-SEPL (JV)/PNV-08(B)/RE/2017/038 dated 03.07.2017

Gentlemen,

In the lime light of the above cited subject and reference, profile and credentials of M/s Maa Mahamaya Industries Ltd. Brand Name Mangal Steel have been reviewed by this office and found in order.

M/s Maa Mahamaya (Mangal TMT) Industries Ltd Plant/Factory located at RG peta, L kota Mandal, Vizainagaram District, AP has been inspected by our Senior Quality Materials Engineer on 08.07.2017 along with your Authorized Representative and found in order as per standards laid down in IS1786:2008.

In house QC Laboratory is well equipped like Spectrometer analysis and Universal Testing machine to conduct all Mechanical and Chemical tests.

The Plant has instituted a Quality Management System (QMS) and had a defined Quality assurance plan in place.

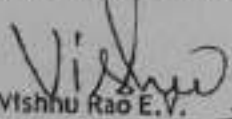
Hence considering the above merits M/S Maa Mahamaya Industries Ltd, Mangal Steel herewith provisionally approved as source to procure steel as and when required. Final Source approval Shall be accorded on submission of TPA Test report to this office.

Further Sampling, inspection and Testing shall be in accordance with IS:1786-2008 .

This approval has accorded as per guidelines of Ministry of Steel, Government of India Gazette notification as appended.

Thanking You,

For AECOM Infrastructure & Environment UK Limited.,
JV with URS Scott Wilson India Pvt Ltd.


Vishnu Rao E.V.

Project Manager/Engineer



Enclosure: As appended

Copy to:

- Srl. G. Jagannadha Rao, Engineer in-Chief (R&B) Admn, SH, EAP, CP & Managing Director, APRDC - for information please.
- Resident Engineer, PNV-08-B, AECOM-URS Scott Wilson, - for info & necessary action.

AECOM Infrastructure & Environment UK Limited.,
JV with URS Scott Wilson India Pvt Ltd.
1st and 2nd Floor, Door No: 54-14-3/7-2, H. No. 409
7th Right Road, Sdnivas Nagar, Bank Colony,
Vijayawada (Urban) - 520 008 India
Tel: +91 866 2544971
www.aecom.com



ಬೆಂಗಳೂರು ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಮಂಡಳಿ

BANGALORE WATER SUPPLY AND SEWERAGE BOARD.

Office of Chief Engineer (Project)

Cauvery Bhavan, III Floor, Bangalore 560009

No. BWSSB /CE(P)/ACE (P-2)/

/2018-19

Date: /11/2018

To,

EE CMC-12, EE CMC -13,

EE CMC -14, EE CMC-15

EE Stores

Sub: Work of Providing Water Supply to 110 Villages of BBMP and UFW reduction in Core Area and Construction and Rehabilitation of GLR in Malleshwaram, Bangalore - regarding approval of makes/manufacturers for TMT Steel for civil works.

Ref:- 1) No. SSC IPL/SO/21a/BWSSB/110OHT & GLR/20/2017-18 dt:16.11.2018

2) No:TCE/JT/WS-110/P816/2018 Date:20.11.2018

With reference to the above subject, approval is hereby accorded to Mangal TMT by vendor M/s Maa Mahamaya Industries Ltd for procurement of TMT steel for the above said work.

Further, it is herewith informed to submit vendor QAP for TMT Steel incorporating project details and obtain approval for the same before procurement.

Chief Engineer (Projects)

BWSSB

Copy to M/s Sri Srinivasa Constructions India Private Limited, Siva Shankar Nilayam, Opp. Shakthi Nursing Home, Talur Road, Bellary - 583 103 for information and needful.

Also note that the validity of the licence of Maa Mahamaya Industries Limited is valid upto 31.12.2019.

Hope this clarifies the matter.

Regards / सादर

Pankaj Bhattacharjee
for,

Regards / सादर

S R Sahu / एस आर साहू

Resident Construction Manager / आवासीय निर्माण प्रबंधक

Engineers India Limited. / इंजीनियर्स इंडिया लिमिटेड

VRMP Project, HPCL Refinery/ वी.आर.एम.पी परियोजना, एचपीसीएल रिफाइनरी

Visakhapatnam / विशाखपट्टणम

(0891-2513053) Mb: 70777 00162

**EASTERN POWER DISTRIBUTION COMPANY OF A.P. LIMITED
CORPORATE OFFICE :: VISAKHAPATNAM**

Phone: 0891-2582300

Phone : 9703216883

From
The Chief General Manager,
Purchase & Material Management,
A.P.E.P.D.C.L., Corporate Office,
T.P.T. Colony, Near Gurudwara,
Seethammadhara,
Visakhapatnam-530 013.

To
M/s Maa Mahamaya Industries Ltd.
R.G.Peta Village,
L.Kota Mandal,
Vizianagaram Dist,
535 161

Lt.No.CGM/P&MM/EPDCL/VSP/VR/P2/E/CI/D.No. 5262 /15, Dt. 29/09/2015.

Sirs,

Sub: EPDCL, VSP - Registration of your firm as approved vendor for supply of "TMT Bars" -
Regarding

Ref: 1) Vendor Application No.EVR2147/2015

2) Inspection Report of AEE / Civil / Vizianagaram on 09.09.2015

o-o-o

Referring to the above, you are registered as an approved vendor for supply of "TMT Bars"
with registration No **CGM/P&MM/VR/CI/ No. 1393 / 2015-2016.**

The registration is subject to the following conditions:

- 1) APEPDCL reserves the right to cancel your registration at any time without assigning any reason.
- 2) It is noted that you are a Manufacturer for the above materials.
- 3) This registration, however, would not hold good for the global tenders to be floated under IDA/IBRD/USAID loan.
- 4) This registration will be valid upto 30-09-2017.
- 5) For considering renewal of vendor registration, you have to remit renewal fee of Rs.500/- in the shape of DD drawn in favour of Pay Officer, APEPDCL, Visakhapatnam from any Nationalized bank along with your application before 6 months of the expiry of validity period i.e. on or before 31-03-2017 along with the details of orders executed in APEPDCL. You have to enclose a copy of reference of this letter to the tenders to be submitted to APEPDCL.

Copy to the Chief General Manager/P&MM/SPDCL, NPDCL, CPDCL.

Copy to the Chief General Manager/Expenditure/EPDCL/Visakhapatnam

Copy to the Chief General Manager/Projects/EPDCL/Visakhapatnam

Copy to the Superintending Engineer/Operation/Srikakulam, Vizianagaram,

Visakhapatnam,Rajmundry,Eluru

Yours faithfully,

CHIEF GENERAL MANAGER(P&MM)
VISAKHAPATNAM.

Signature valid

Digitally signed by
KANCHUMURTHY PRASAD
Date: 2015.09.28 12:20:38 IST
Reason: Approved

Greater Visakhapatnam Smart City Corporation Limited

Registered Office C/o. GVMC, Room No. 308, Tenneti Bhavan, Asilmetta Junction,
Visakhapatnam- 530002, Andhra Pradesh, India. CIN No. U74900AP2016PLC098495

VISAKHAPATNAM

Dt: 25-03-2021

To

M/s. MAA MAHAMAYA Industries Limited
R.G.Peta Viloge, L.Kota Mandal
Vizianagaram District-535161.
Andhra Pradesh

- Ref:** (1) Your letter ref MIP/S&T/GVMC/01 dated 22-03-2021
(2) AECOM Lr no : PMC/GVSCCL/ISA/2019/18 DATED 04 SEPT 2019

With reference to request in 1st reference cited, M/s. MAA MAHAMAYA Industries Limited is approved for usage as TMT MANGAL Fe500D as per above cited letter no 2 subject to the following conditions:

- 1) M/s. MAA MAHAMAYA Industries Limited MANGAL TMT branded bars should be supplied conforming to 15 1786-2008 and valid BIS license (8mm to 32mm dia bars). No rerolled material/secondary steel producer conversion agent material will be accepted or allowed for any structural works.
- 2) Company should provide all necessary reports and certificates that ensures traceability between billets and supplied furnished products every time of the supply
- 3) M/s. MAA MAHAMAYA Industries Limited Shall ensure maintenance of quality of supplies intact.
- 4) GVSCCL reserves the right to conduct mandatory quality control checks in approved laboratories when ever steel is procured from the company by contractors who are entrusted with the projects.
- 5) Any feedback on deterioration in the quality as also abnormal delays in Supply if noticed would render suspension cancellation of this approval.
- 6) GVSCCL is not bound in any way to purchase your products for its projects.

Note: The letter is issued upon the request of the company.

Yours faithfully

V. Sreenivasulu Reddy
25/3/2021
SUPERINTENDING ENGINEER
(PROJECTS - I)
GVMC
SUPERINTENDING ENGINEER
Projects
Greater Visakhapatnam Smart City Corporation Limited



भारतीय प्रौद्योगिकी संस्थान भुवनेश्वर
INDIAN INSTITUTE OF TECHNOLOGY BHUBANESWAR

9th May, 2016

TO WHOMSOEVER IT MAY CONCERN

On request of M/S Maa Mahamaya Industries Limited, we visited their works located at R G Peta Village, L Kota Mandal, Vizianagaram District, A P State-535161, for assessment of their Quality Control Laboratory and Quality Assessment Plan.

The following are our observations:

- 1.0 Maa Mahamaya Industries Limited is a Steel Plant which produces TMT Steel bars starting from Iron ore through Sponge Iron-Steel Melting-Rolling Mill route. They also have a captive power plant.
- 2.0 Their in house Laboratory is well equipped for the testing of Raw Materials and Finished Products, the list of equipments annexed. The calibration certificates were also found to be in order.
- 3.0 The Plant has a defined Quality Assurance Plan in place.
- 4.0 The Plant is producing TMT bars as per IS 1786:2008 in sizes 8mm to 32mm, in Grades Fe 415, Fe 500, Fe 550, and Fe 500D. The BIS Licenses found to be valid Also Test Certificates examined and found to be in order.

AB
9/5/16
Dr. Akhilesh Barve

V. Pandu Ranga
9/5/16
Dr. V. Pandu Ranga

डॉ. अखिलेश बरवे / Dr. Akhilesh Barve
सहायक प्राध्यापक / Assistant Professor
शैक्षणिक विभाग / School of Mechanical Sciences
Indian Institute of Technology Bhubaneswar
Bhubaneswar-751013, Odisha, India

डॉ. वि. पाण्डुरंगा / Dr. V. Pandu Ranga
सहायक प्राध्यापक / Assistant Professor
शैक्षणिक विभाग / School of Mechanical Sciences
Indian Institute of Technology Bhubaneswar
Bhubaneswar-751013, Odisha, India



KARNATAKA ROAD DEVELOPMENT CORPORATION LTD.

No. KRDC/CE/EE-1/MMIL./2016-17/799

Dated: 23.06.2016

24

To,

✓ M/s. MAA MAHAMAYA Industries Limited
R.G.Peta Village, L.Kota Mandal,
Vizianagaram District-535161,
Andhra Pradesh.

Sub: Enlistment of M/s. MAA MAHAMAYA Industries Limited as a "Primary Producer of Steel" for supply or reinforcement steel for ongoing and upcoming projects in KRDC.

Ref: Additional General Manager Marketing letter dated:13.05.2016.

===

With reference to above, and your request for enlistment of your company as a prime Producer of reinforcement steel to be used in the ongoing and upcoming projects of KRDC is examined.

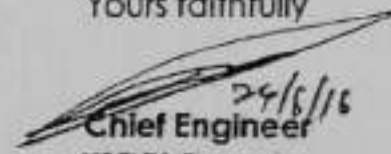
It is stated that M/s. MAA MAHAMAYA Industries Limited is an IMS (ISO 9001-2015/ISO 14001:2015/OHSAS 18001-2007) certified company. The company produces the MANGAL TMT branded HYSD Steel bars of Fe 415, Fe500, Fe500D and Fe550 grade of sizes 8mm to 32mm bars conforming to IS 1786:2008, which confirmed after inspection of the factory site on 10.06.2016 and 11.06.2016 by the officers of KRDC.

In view of above, M/s. MAA MAHAMAYA Industries Limited is enlisted for TMT MANGAL brand as a primary producer of HYSD steel bars and approved to be used in the ongoing & upcoming projects of KRDC subject to the following conditions:

- 1) M/s. MAA MAHAMAYA Industries Limited MANGAL TMT branded bars should be supplied conforming to IS 1786-2008 (8mm to 32mm dia bars).
- 2) No re-rolled material/secondary steel producer conversion agent material will be accepted or allowed for any structural works of KRDC.
- 3) Company should provide all necessary reports and certificates that ensures traceability between billets and supplied furnished products.
- 4) M/s. MAA MAHAMAYA Industries Limited, Shall ensure maintenance of quality of supplies intact.

- 5) KRDCCL reserves the right to conduct mandatory quality control checks in approved laboratories when ever steel is procured from the company by contractors who are entrusted with the projects in KRDCCL.
- 6) Any feedback on deterioration in the quality as also abnormal delays in supply if noticed would render suspension/cancellation of this approval.
- 7) The KRDCCL wholly reserves the right to suspend/cancel this approval.
- 8) The KRDCCL is not bound in any way to purchase your products for KRDCCL projects.
- 9) Any changes in the name of company/Plant etc. shall be informed to KRDCCL immediately.

Yours faithfully


24/8/16
Chief Engineer
KRDCCL, Bengaluru

OP

MSV**MSV INTERNATIONAL INC.**

In Association with

**JSV ASSOCIATES ENGINEERS &
CONSULTANTS PVT. Ltd**Sub Office
Vedakkur
Punalayam
Alappuzha
Email: msv
CIN: EQ42

ENGINEERING SERVICES FOR ALAPPUZHA CITY ROADS IMPROVEMENT PROJECT (ACRIP) PHASE I THROUGH DBFOMT HYBRID- ANNUITY

Ref. No: MSV-JSV/RRAPL/IE/ACRIP-1/2019/35

Date: 06-

To,
The Project Manager,
Rohan Rajdeep Alappuzha Projects Ltd,
Shalom House,
Behind DTDC Courier Service,
Opp. LIC Office, Vellakkinar Junction,
Alappuzha-688001, Kerala,
Alappuzha.

Kind Attn: Mr. Vijay Kumar Pillai (Project Manager)

Sub: - Development of Alappuzha City Roads Improvement Project in the state of Kerala to be under Public Private Partnership (Design, Building, Finance, Operate, Maintain and Transfer) DBFOMT) Hybrid Annuity Basis: Source Approval for TMT Steel-Reg

Ref: - 1) Concession Agreement for between KRFB and Rohan Rajdeep Alppuzha Projects Ltd Alappuzha city Roads Improvement Project Phase -I, through DBFOMT Hybrid-Annuity dated:03-08-2018.

2) Your Letter No. RRAPL/Site/17/2019-20 dt 19.06.2019

3) MSV-JSV/RRAPL/IE/ACRIP-1/2019/28 dt 26.06.2019

Dear Sir,

With reference to the above mentioned letter and plant visit by our Material Eng and the test reports, the documents submitted by you for source approval of Mangal TN verified and our observations are as under.

- a) *M/S Maa Mahamaya Industries Ltd* is an integrated Steel plant which produces making TMT bars.
- b) They produce billets from Sponge iron from the iron ore of NMDC.
- c) After verification of the profile it is noted that there is an agreement between *Mahamaya Industries Ltd* to extract Iron Ore.
- d) During the plant visit Mechanical properties of the TMT bars had been tested and found satisfactory as per IS 1786-1985.
- e) *M/S Maa Mahamaya Industries Ltd* is making their TMT bars in the brand name

MSV INTERNATIONAL INC.

In Association with

JSV ASSOCIATES ENGINEERS & CONSULTANTS PVT. Ltd

MSV In
House N
Sundara
Vadacke
Punnapp
Alappu:
Email
CIN. F

ES FOR ALAPPUZHA CITY ROADS IMPROVEMENT PROJECT (ACRIP)-PHASE 1 THROUGH DBFOT HYBRID- A'

of the above, we are hereby accorded our approval of Mangal TMT for the procure
our project works (ACRIP) subject to

Every consignment of steel brought to site should be supported with MTC.

Only new steel lots shall be delivered to the site.

Each consignment of steel shall be tested third party laboratory as per specification.

You,

Sincerely,

MSV International INC., In association with JSV Associates Engineers & Consult:

Handwritten signature
arghese
ader



CEO, KRFB, Thiruvananthapuram.

The Project Manager, KRFB, Alappuzha.

MSV International Inc., Delhi- For Information.

JSV AECPL, Hyderabad-For information

Received
Handwritten signature
06/7/2019



Ltr: No 34/C/13923/KSR/2016/205

Dt: 31st December, 2016

To,

BSCPL Infrastructure Limited,
#8-2-502/1/A, JVI Towers,
Road No.7, Banjara Hills,
Hyderabad - 500034

Attn: Mr. B Mallikarjunaiah, Project Manager

Subj: Design and Construction of multilevel /Grade Separators at Four junctions at LB Nagar and Surroundings in Hyderabad under engineering procurement and construction (EPC) – Turnkey (Package – II) – Source approval for “Mangal TMT” – reg.

Ref: Your letter no. GHMC/FO/PKG-IVF.No-1/ BM/16/26, Dated: 29/12/16

Sir,

With reference to your letter mentioned above and plant visit by our Construction Engineer on 26.12.16, the proposals/documents submitted by you for source approval of “Mangal TMT” Steel of M/s Maa Mahamaya Industries Ltd. which have been examined and following observations made:

- a. **M/s Maa Mahamaya Industries Ltd** is an integrated steel plant which produces their billets for making their TMT bars through their own integrated process.
- b. They produce billets from sponge iron directly extracted from Iron ore from NMDC.
- c. From verification of documents which have been submitted by them, they have an agreement with NMDC for the period of 3 years for extracting the Iron ore from NMDC.
- d. During the plant visit, tests were conducted for mechanical properties of TMT bars in their in house laboratory and results found satisfactory
- e. **M/s Maa Mahamaya Industries Ltd** is making their TMT bars in the brand name of “Mangal TMT”

In view of the above, we confirm our approval of Mangal TMT for procurement of TMT bars for the subject project works. Subject to:

1. Every consignment of steel brought to site should be supported with MTC.



//2//

- ii. Only new steel lots shall be delivered to the site.
- iii. Each consignment of steel shall be tested in outside laboratory as per specification.

Thanking you,

Yours faithfully,
For STUP Consultants P. Ltd.

K. Srinivasa Rao
Project Manager

CC: Executive Engineer – PD-NZ-1, GHMC



TAMIL NADU HOUSING BOARD: QUALITY CONTROL WING

CERTIFICATE OF PRODUCT APPROVAL File No. SF/QC/12140/2016 dated 24.06.2016

The Quality Control Wing of Tamil Nadu Housing Board examined various aspects of your following product with reference to your letter dated:09.06.2016 to The Chief Engineer TNHB and have accorded approval on 24.06.2016 to use "Mangal TMT" from "MAA MAHAMAYA INDUSTRIE LIMITED" following items on works carried out by TNHB:

1) Name of the Products/Product Range	Mangal TMT High Strength deformed steel bars and wires for concrete reinforcement Steel Fe 415, Fe 500 & Fe 550 from MAA MAHAMAYA INDUSTRIE LIMITED.
2) Brand Name	MANGAL TMT Fe 415, Fe 500 & Fe 550.
3) Trade Mark Reg No.	Not Furnished.
4) Testing / Certifying Agencies and Test Certificates / Certifications References;	1. ISO 9001:2015, Certificate No. 160505019101 dt: 05.05.2016. 2. ISO 14001:2015, Certificate No. 160505029101 dt: 05.05.2016. 3. OHSAS 18001:2007, Certificate No. 160505039101 dt: 05.05.2016.
5) Address of Manufacturer/Factory	M/s. Maa Mahamaya Industries Ltd. R.G. Peta village, L. Kota Mandal, Dist: Vizianagaram Andhra Pradesh-535161.
6) BIS License Number/Reference	IS 1786:2008, Licence No: CM/L-6635477.
7) Standards/Specifications No.	IS 1786:2008.

Limitations ::

1. This Approval is to use the materials on works carried out by TNHB.
2. Approval is subject to validity of BIS License for the product.
3. Test results copy of the lot should be produced along with all supplies to TNHB site (adhering to the test result produced at the time of this approval).
4. You should inform any change of your address of office, factory, contact telephone numbers, partnership deed, or any other articles of association of your organizations, materials, manufacturing process, quality control routines that may affect the validity of this approval, to the undersigned (or) The Chief Engineer, Tamil Nadu Housing Board who is empowered to cancel the use of the products in TNHB works and hence its approval also.
5. This approval is subject to satisfactory field performance, continuing surveillance Audits, and strict conformity to the constructions of TNHB. This approval shall not bind TNHB to give any preference in placement of purchase orders.



To
M/s. Maa Mahamaya Industries Ltd,
R.G. Peta village,
L. Kota Mandal,
Dist: Vizianagaram
Andhra Pradesh-535161

M. Thayumanasamy
24/6/16

Er. M. THAYUMANASAMY, B.E.
Superintending Engineer (Quality Control),
Tamil Nadu Housing Board,
493, Anna salai, Nandanam, Chennai-55.

Subb
24/6/16

Submitted to: The CEs of TNHB ✓

All the SEs and the EEs of TNHB (By this approval, Mangal TMT can be used in all TNHB Works and incorporated in the list of approved brand and appended to the Tender Schedule/Agreement. EEs may send feedback about this product in satisfactory field performance to the undersigned and its authority in the TNHB constructions)

VISAKHAPATNAM METROPOLITAN REGION DEVELOPMENT AUTHORITY

VISAKHAPATNAM
Dt.31-03-2021.

To
Ms. MAA MAHAMAYA Industries Limited
R.G.Peta Viloge, L.Kota Mandal,
Vizianagaram District-535161,
Andhra Pradesh

Ret: (1) Your letter ref MIPI/S&T/VMRDA/01 dated 22-03-2021

With reference to your letter, it is to inform that usage of TMT Mangal Fe-500/Fe-500D Manufactured by M/s. MAA MAHAMAYA Industries Limited can be allowed for usage in our projects subject to the following conditions:

- 1) MAA MAHAMAYA Industries Limited MANGAL TMT branded bars should be supplied conforming to IS 1786-2008 and valid BIS license (8mm to 32mm dia bars).NO rerolled material/secondary steel producer conversion agent material will be accepted or allowed for any structural works.
- 2) Company should provide all necessary reports and manufacturer test certificates that ensures traceability between billets and supplied furnished products every time of the supply
- 3) The Manufacturer shall ensure maintenance of quality of supplies intact.
- 4) VMRDA Engineers reserve the right to conduct mandatory quality control checks in approved laboratories when ever steel is procured from the company by contractors who are entrusted with the projects.
- 5) VMRDA is not bound in any way to insist the contractor to purchase your products for its projects.


31/3/21
Chief Engineer
VMRDA
Chief Engineer
VMRDA, Visakhapatnam



KDM ENGINEERS (INDIA) PRIVATE LIMITED

Complete Civil Engg. Solutions

Dated: 19th June, 2021

TCKDMV21000006869



REF: KDMEI/VSKP/STEEL/07/2021/6776
M/s. APCO INFRATECH PVT.LTD.
Universal Trade Tower, 4th Floor,
Sector 48-49, Sohna Road,
Gorugram -122101(Haryana).

TEST REPORT

Description of the sample
Source of the sample
No. of specimens tested
Test method
Customer's Reference
Work*

Reinforcement Steel
Sample supplied by the customer
09(Nine only)
IS: 1608; IS: 1599
Letter No. APCO/NR-APCO/LAB/2021-1706, Dated: 15.07.2021
Six Laning of Narasannapeta-Ranastalam Section of NH-16 (Old NH-5) from
Design Km 580.671 (Existing Km 580.700) to Design Km 632.861 (Existing Km
634.000) (Design Length- 54.19 Km) in the State of Andhra Pradesh Under
NHDP Phase-V on Hybrid Annuity Mode.
MANGAL TMT FE 500D
15.07.2021
19.07.2021 to 19.07.2021
Satisfactory

Make & Grade*
Material received on
Period of test
Condition of samples

MANGAL TMT FE 500D
15.07.2021
19.07.2021 to 19.07.2021
Satisfactory

Sl. No.	Dia* (m m)	Lot No.*	Weight/ Meter (Kg/m)	Yield Stress (YS) (N/mm ²)	Tensile Strength (TS) (N/mm ²)	TS/YS Ratio	Elongation (%)	Bend Test	Re bend Test
1	8	695	0.378	511	615	1.20	20.5	Satisfactory	Satisfactory
1	10	682	0.602	529	622	1.18	20.8	Satisfactory	Satisfactory
3	12	692	0.882	519	609	1.17	20.8	Satisfactory	Satisfactory

* Details as furnished by the customer
Requirements as per IS: 1786

Dia (mm)	Mass (kg/m)		Dia (mm)	Mass (kg/m)		Grade	TS/YS Ratio	0.2%ProofStress / Yield stress (N/mm ²) (Min.)	U.T.S (N/mm ²) (Min.)	Elongation (%) (Min.)
	Min.	Nominal		Min.	Nominal					
8	0.363	0.395	20	2.371	2.470	Fe500D	≥ 1.10, but TS not less than 565.0 N/mm ²	500	565 or 10% more than actual 0.2% Proof Stress/Yield stress whichever is higher	16.0
10	0.567	0.617	25	3.697	3.850					
12	0.834	0.888	28	4.638	4.830	Fe500D	≥ 1.08, but TS not less than 600.0 N/mm ²	550	600 or 08% more than actual 0.2% Proof Stress/Yield stress whichever is higher	14.5
16	1.403	1.580	32	6.058	6.310					

- Note:
- The tests are witnessed by Mr. P.Ramakrishna (AQME, LEC) & Mr. M.Apparao (APCO).
 - The results relate to the samples supplied by the customer.
 - Report shall not be reproduced, except in full, without the written approval of the laboratory.
 - Any corrections invalidate this report.

Remarks: The above tested parameters are satisfying the requirements of FE500D as per IS: 1786 table-3 for the given sample.
for KDM ENGINEERS (INDIA) PVT. LTD.,

AUTHORISED SIGNATORY
NIVEDITA-BARIK

Page 1 of 1

Plot No. 93, E-Block, Autonagar, Visakhapatnam - 530 012, A.P.

Cell: 09912944495, 08328498601, E-mail: lab.vizag@kdmengineers.com, Website: www.kdmengineers.com



KDM ENGINEERS (INDIA) PRIVATE LIMITED

Complete Civil Engg. Solutions



REF: KDMEI/GNT/07-025/Steel/2021/07-8220

Dated: 23rd July 2021

M/s. Apco Infratech Pvt Ltd.,
Universal Trade Tower,
4th Floor, Sector 48-49, Sohna Road,
Gurugram-122 101, Haryana.

TC5518 21000008257

TEST REPORT ON REINFORCING STEEL

Source of the sample	:	Sample supplied by the customer
No. of samples tested	:	03(Three Only)
Test method	:	IS: 8811 - 1998 (Reaffirmed 2012)
Customer's Reference	:	Lr.No. APCCO/NR-APCCO/LAB/2021-1706, Dt:15.07.2021
Subject*	:	Six Lining of Narasannapeta-Ranastalam Section of NH-16 (Old NH-5) from design Km.580.671 (Existing Km.580.700) to design Km.632.861 (Existing Km.634.000) Design Length-54.19 Km in the State of Andhra Pradesh under NHDP Phase-V on Hybrid Annuity Mode.
Brand*	:	MANGAL TMT, Fe 500D
Material received on	:	19.07.2021
Date of test	:	23.07.2021
Condition of samples	:	Satisfactory

TESTED FOR Fe 500D GRADE

Sl. No	Sample Description*	Lot No*	Dia (mm)	C %	S %	P %	S+P %
1	Reinforcement Steel	695	8	0.101	0.024	0.019	0.043
2	Reinforcement Steel	682	10	0.118	0.024	0.024	0.048
3	Reinforcement Steel	692	12	0.126	0.022	0.021	0.043


* As furnished by the customer

Requirements as per IS: 1786 - 2008(RA2013)	C % (max.)	S % (max.)	P % (max.)	S+P % (max.)
Fe 500	0.30	0.055	0.055	0.105
Fe 500D	0.25	0.040	0.040	0.075

- Note: 1. The results relate to the samples supplied by the customer.
2. Report shall not be reproduced, except in full, without the written approval of the laboratory.
3. Any corrections invalidate this report.

Remarks: The tested samples conform to IS: 1786-2008 (RA 2013) requirements for the abovementioned tests For Fe500D Grade

For KDM ENGINEERS (INDIA) PVT. LTD.,


AUTHORISED SIGNATORY
P.VIJAY KUMAR
TECHNICAL MANAGER



Page 1 of 1



Lr. No: TL/NH-234/LOT-II/Chik/2016/200

Date: 29-07-2016

To

M/s Ashoka Buildcon Ltd,
S.No. 861, Ashoka House,
Ashoka Marg, Vadala
Nashik-422011,
Maharashtra.

Sub:- Rehabilitation and Upgrading to 2 lanes/ 2 lane with paved Shoulders Configuration and Strengthening of Madhugiri- Mulbagal section from km 343.800 to km 483.151 of NH-234 in the state of Karnataka for Lot-II (Km . 400.330 to km 483.151) under Phase-I of NHIP –Maa Mahamaya Industries Ltd - reg

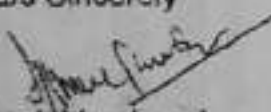
- Ref:**
- 1) Your letter no: ABL/MORTH/NH234/site/16-17/248 dated 04/07/2016
 - 2) Our letter no: TL/NH-234/LOT-II/Chik/2016/ 190 dated 13-07-2016
 - 3) Your letter no. ABUMORTH/NH234/site/16-17/248 dated 04/07/2016
 - 4) No.CNH/ TA2/ AE8/ MMIL/ vendor/ 2016-17/ 652 dated 28-05-2016

Dear Sir,

In continuation with the above letters and Chief Engineer's office letter, we have no objection to procure steel from above source. However, before Steel is delivery at site, you have to arrange our representative to conduct essential tests to be carried out at Manufacturers plant Laboratory.

Thanking you.

Yours Sincerely


(Jacob Varghese)

Team Leader

(EE-Theme JV)

- Copy to 1) SE, PPP Cell, Bangalore,
2) SE RO Bangalore
3) EE, PIU, Chikkaballapur for information
4) Eurostudios - S. L, Delhi for information
5) Theme Engineering Services Pvt. Ltd. Jaipur for information
6) PMC Roughton-Aarvee

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
EAP (ZONE)

1-Parliament Street
 Transport Bhawan
 New Delhi-110001
 Dated: 30.01.2017

RW/NH-12013/33/6/2010/SP(A-2)/P-9/EAP

(Certificate No. NH-234/Excise/Ashoka Buildcon Limited/Lot-II-10)
TO WHOMSOEVER IT MAY CONCERN

31

This is certify that work of "Rehabilitation and upgrading to 2 line with/without paved shoulders configuration and strengthening of Madugiri-Mulbagal section (km 343.800 to km 483.151) of NH-234 in the State of Karnataka Lot-II (from km. 400.330 to km. 483.151) under Phase-I of National Highways Inter-Connectivity Improvement Projects (NHIIP)" (Package No. NHIIP-KA-234-10) has been awarded to M/s Ashoka Buildcon Limited, Ashoka House, Ashoka Marg, Ashoka Nagar, Nashik, Maharashtra-422011. The Contract Agreement was signed on 24.03.2015. The project is being implemented by the Government of India with Loan assistance from the World Bank under Loan Agreement No. 8301 IN.

Certified further that M/s Ashoka Buildcon Limited has proposed to procure the following materials and the same are required for execution of the project:


S. NO	Material	Manufacturer/Supplier	Quantity approved by Ministry	Type of Exemption
1.	Steel(HSD of grade Fe-500)	M/s MAA Mahamaya Industries Ltd. R.G. Peta Village, L. Kota Mandal, Vizianagaram Dist-535161, Andhra Pradesh		Excise
	8 mm		120 MT	
	10 mm		150 MT	
	12 mm		125 MT	
	16 mm		200 MT	
	Total		595	


It is further certified that the aforesaid material is required for the execution of the above said project has duly been approved by the Government of India. Construction work is scheduled to be completed by 17.01.2018.

It is requested that the necessary exemption from Excise Duty may be allowed against above referred material to M/s Ashoka Buildcon Limited as per Government of India (Ministry of Finance, Department of Revenue) Notification No. 108/95-C.E. dated 28.08.1995 as amended time to time. This certificate is being issued subject to condition that product should meet the minimum standard as fixed by BIS and confirming to specification of MORT&H/IRC.

This certificate shall remain valid for six months from the date of issue.

Countersigned by:


(Leena Nandan)
 Joint Secretary (EAP)
 MoRTH, New Delhi


(Khushal Chand)
 Superintending Engineer (EAP)

CEMOSAARMENG E/IEAPA/NHAI/VSKP/2020/551

22.02.2020

TO
The General Manager,
M/s DILIP BUILDCON LIMITED,
Anandapuram - Anakapalli Road Project
Neelakundilu village, Sontyam,
Anandapuram, Visakhapatnam,

Sub : Consultancy Services for Independent Engineer for Supervision of Six laning of Anandapuram-Pendurthi-Anakapalli Section of NH-5 (new NH-16) from Km.681.000 (Existing Km.681.000) to Km.731.780 (Existing Km.742,400) (Design Length=50.78 Km) in the State of Andhra Pradesh under Bharatmala Pariyojana on Hybrid Annuity Mode - Source Approval Of Steel (MANGAL TMT) From Mahamaya Industries Ltd.-Reg.

Ref: 1) Circular No. 11041/218/2007-Admin.	Dated: 18.08.2010
2) DBL/NHAI/DBLAAHPL/19-20/384	Dated: 04.10.2019
3) CEMOSAARMENG E/IEAPA/NHAI/VSKP/2019/265	Dated: 16.10.2019
4) DBL/NHAI/DBLAAHPL/19-20/586	Dated: 17.02.2020

Dear Sir,

In reference to the above cited letter (4), the concessionaire had submitted the credentials of M/S Mahamaya Industries Ltd. (Mangal TMT) plant/Factory located at L kota mandal, Vijaynagaram District, (Andhra Pradesh) has been inspected by our under signed person along with our SQME on 28.12.2019 along with your Authorized Representative and found in order as per standards IS 1786 2008, For the procurement of TMT steel for construction of structural works of the project, we noticed the following observations during visiting of steel factory,

- Mahamaya Industries Ltd. (Mangal TMT) produces its own billet for making their TMT through own integrated process from Iron Ore.
- In house QC Laboratory is well equipped like spectrometer analysis and Universal Testing machine to conduct all Mechanical and Chemical test.
- Sample of different diameter bars were tested for physical and chemical composition and found satisfactory as per IS- 1786 2008.
- This approval has accorded as per guidelines of Ministry of Steel, Government of India Gazette notification as appended.

Therefore, we accord source approval for TMT reinforcement steel in the Structures of the project, from manufactured at M/S Mahamaya Industries Ltd. (Mangal TMT).

However, we inform to fulfill the following requirements before you incorporate these materials in the permanent works.

- Each consignment must be supported with manufacturing test certificate.
- Only new materials shall be supplied to the site and defective or non confirming material to be discarded.
- Each lot of supply should be tested in recognized independent NABL accredited laboratory and sampling must be done in presence of IE.

Site office:

G-1, Dinesh Homes, Penderthi, Andhra Pradesh, PIN - 530047

Mob: 9414184839 email: cemosarmenge.apa@gmail.com

Central Offices India:

502, 5th Floor, DDA-5 Building, District Centre, Janakpuri, New Delhi - 110058, India. Tel.: (+91) 011-47503189.

Letter no: SSI dated 22/2/20

- Material stock shall be maintained at site and shall be produced as and when required.
- Storage and protection needs to be assured as per MORT&I section 1603. Only fresh lot of material shall be delivered at site.
- If test on selected piece do not confirm with the specification, the entire lot is liable for rejection without any consideration for retesting.
- Quality control test should be done at the required frequency, as specified.
- Approval shall not relieve the contractor from any of his responsibilities under the contract.
- Procurement, storage and use of the material shall be in conformity with relevant IS/IRC codes and manuals issue from time to time.

Yours truly,

For Centro de Estudios de Materials y Control de Obra, SA in association with
ARMENGE Engineering and Management Consultants Pvt Ltd

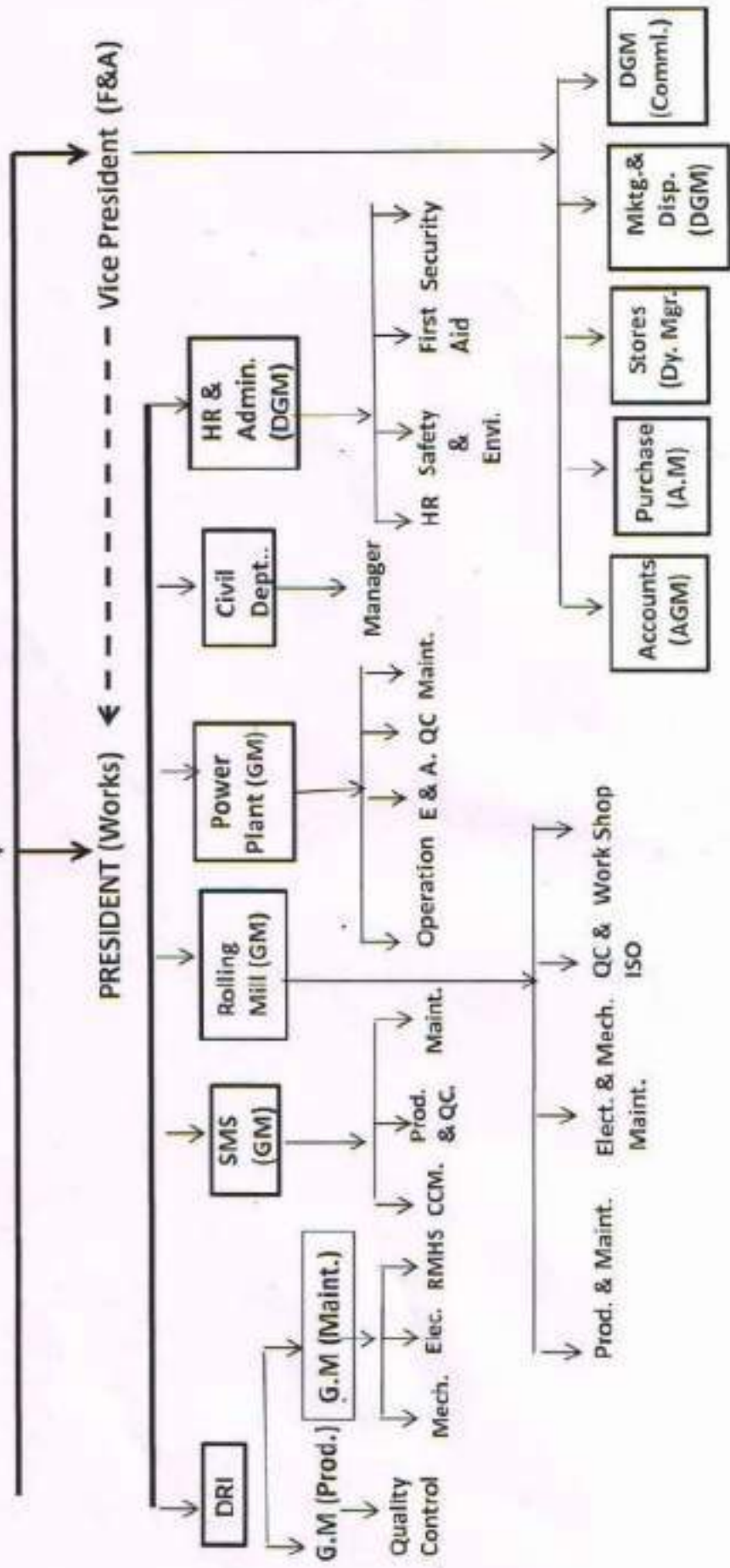

(P. Devidas)

Team Leader cum Senior Highway Engineer.

Copy To :- 1.PD-PIU, NHAI, Visakhapatnam.

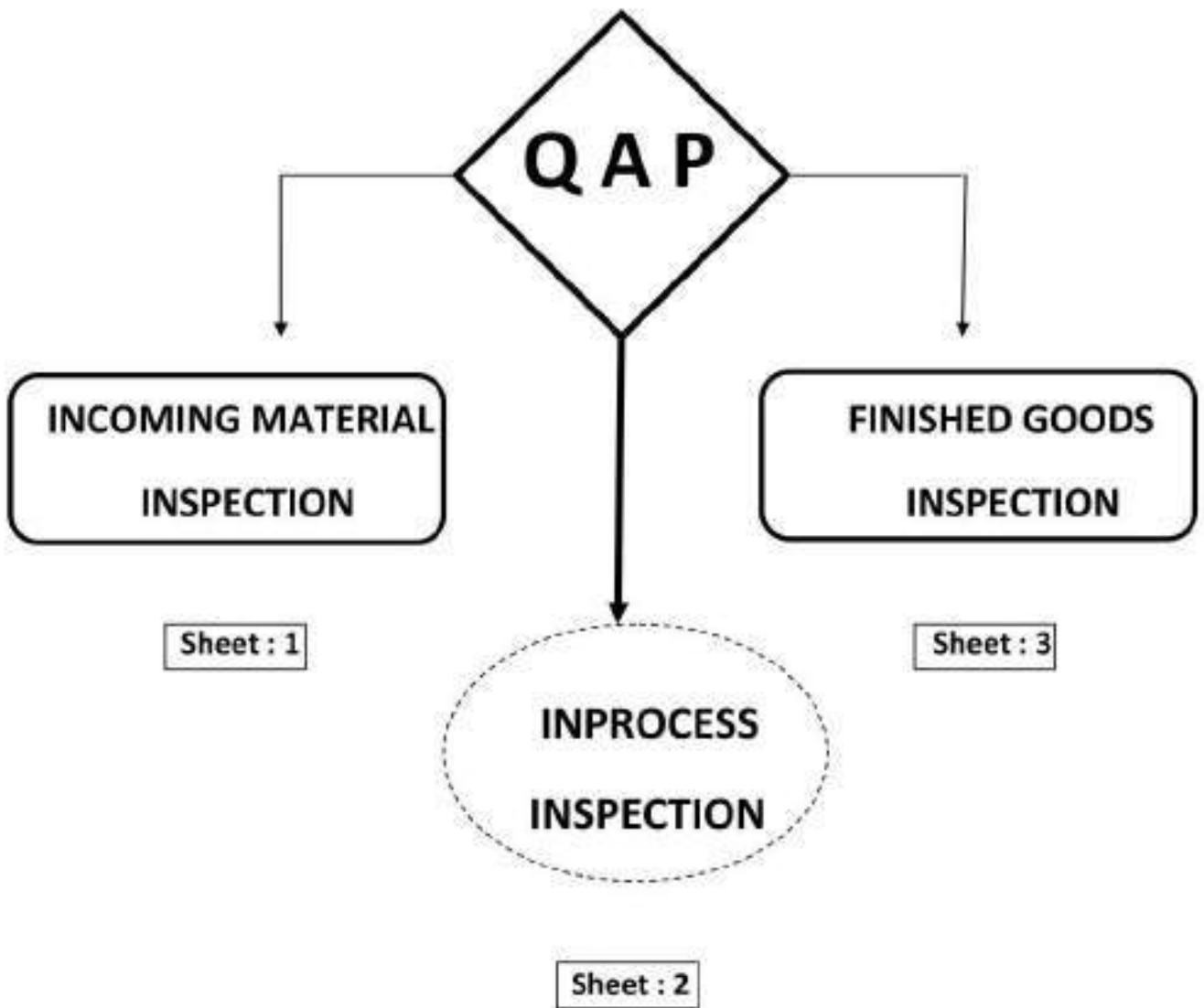
ORGANISATION CHART OF MAA MAHAMAYA INDUSTRIES LIMITED

Chairman & Managing Director



13. QUALITY ASSURANCE PLAN

MAA MAHAMAYA INDUSTRIES LIMITED



SHEET : 1

INCOMING MATERIAL INSPECTION

Material	Testing Frequency	Tested For		Specification
		Physical parameter	Chemical parameter	
Iron Ore	Once in a day for source wise receipt.	Moisture, Sieve analysis, Tl, Al & Contamination	Fe(t), LOI, SiO ₂ , Al ₂ O ₃ & Phosphorus	Tl=92.00min, Al=3.00max, Fe(t)=65.00min, SiO ₂ &Al ₂ O ₃ =5.00max, P=0.035max, IS:15774:2007
Coal	Once in a day for source wise receipt.	Moisture, Sieve analysis & Contamination	Proximate analysis(IM, VM, Ash & FC), GCV & Sulphur	MOI=9.00max, GCV=3500to6200, Sulp=0.80max. IS:1350(Part-1):1984
Dolomite	Once in a day for source wise receipt.	Sieve analysis & Contamination	LOI, CaO, MgO & SiO ₂	LOI=42.00min, CaO=29.00min, MgO=20.00min & SiO ₂ =3.00max, IS:1760(Part-3):1992
Pig Iron	Once in a day for source wise receipt.	Contamination	Carbon, Sulphur & Phosphorus	Carbon=3.50min, Sulphur=0.040max & Phosphorus=0.120max, IS:13502:1992
Billet	Cast number wise	Length, Section, Camber, Raising, Bend & Freedom from defects.	Carbon, Manganese, Sulphur, Phosphorus, Silicon & CE	Carbon=0.23max, Manganese=0.45to1.00, Sulphur=0.040max, Phosphorus=0.040max, S+P=0.075max, Silicon=0.10min & CE=0.42max, IS:1786:2008 Fe500 D

SHEET : 2

INPROCESS INSPECTION

Material	Testing Frequency	Tested For		Specification
		Physical parameter	Chemical parameter	
Sponge Iron	Every Two hours	Mag, N.Mag & Sieve Analysis	Fe(m), Fe(t), Mz ⁰ , Carbon, Sulphur, Phos	Fe(m)=76.0min, Fe(t)=88.0min, Mz=86.0min, Carbon=0.08to0.12, Sulphur=0.030max, Phos=0.035 , IS:15774:2007
Liquid Metal	Every Heat before Casting	-	Carbon, Mangnace, Sulphur, Phosphours, Silicon & CE	Carbon=0.23max, Mangnace=0.45to1.00, Sulphur=0.040max, Phosphours=0.040max, S+P=0.075max, Silicon=0.10min & CE=0.42max, IS:1786:2008, Fe500 D

SHEET : 3

FINISHED GOODS INSPECTION

Material	Testing Frequency	Tested For		Specification
		Physical parameter	Chemical parameter	
Sponge Iron	Every Four hours	Mag. N.Mag & Seve Analysis	Fe(m), Fe(t), Mz ² , Carbon,Sulphur, SiO ₂ +Al ₂ O ₃ & Phosphorus	Fe(m)=76.0min, Fe(t)=88.0min, Mz=86.0min, Carbon=0.08to0.12, Sulphur=0.030max, Phos=0.035 IS:15774:2007
Billet (Check Analysis)	Every Heat Casting wise	Length, Section, Camber, Raising, Bend & Freedom From defects	Carbon, Mangnace, Sulphur, Phosphours, Silicon & CE	Carbon=0.23max, Mangnace=0.45to1.00, Sulphur=0.040max, Phosphours=0.040max, S+P=0.075max, Silicon=0.10min & CE=0.42max, IS:14650:1999 IS:1786:2008, Fe500 D
HSD T M T BAR	Every Half an Hour	Surface defects, Nominal size, Wt/mtr,	-	IS:1786:2008, Fe500D, Saparate Sheet Enclosed
HSD T M T BAR	Every Hour	Yield Stress, Tensile Stress, Ratio(TS/YS),Elongation, Bend & Rebend	-	
HSD T M T BAR	Every Nominal size once in a day	Rib Area	-	
HSD T M T BAR	Every Nominal size lot wise	Surface defects, Nominal size, Wt/mtr, Yield Stress, Tensile Stress, Ratio(TS/YS),Elongation, Bend, Rebend & Rib Area	Carbon, Mangnace, Sulphur, Phosphours, Silicon & CE (Cast No wise Feeding)	Carbon=0.23max, Mangnace=0.45to1.00, Sulphur=0.040max, Phosphours=0.040max, S+P=0.075max, Silicon=0.10min & CE=0.42max, IS:1786:2008, Fe500 D

SHEET : 4
FINISHED GOODS T M T Specification

Nominal Size (mm)	8 mm	10 mm	12 mm	16 mm	20 mm	25 mm	28 mm	32 mm
Freedom from Defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects
Wt/mtr Kg	0.395	0.617	0.888	1.58	2.47	3.85	6.81	6.31
Yield Stress N/mm2 (min)	500	500	500	500	500	500	500	500
Tensile Stress N/mm2 (min)	565	565	565	565	565	565	565	565
Ratio (TS/YS)	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10
Elongation %	16	16	16	16	16	16	16	16
Bend	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks
Re-Bend	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks
Deformation & Surface Characteristics(Rib Area (Ar)) mm	0.12xDia min	0.12xDia min	0.15xDia min	0.15xDia min	0.17xDia min	0.17xDia min	0.17xDia min	0.17xDia min

MAA MAHAMAYA INDUSTRIES LTD
QUALITY ASSURANCE
LIST OF INSTRUMENTS SMS & Rolling Mill

Sl.No	Name of Instrument/Equipment	Least Count /Range/Cap	Use of Instrument/Equipment	Qty
1	Jaw Crusher	Input:40mm, Output:5mm	For Coal & Sponge Iron Crushing	1
2	Disc Grinder	Input:5mm, Output:212µm	Sponge Iron Powder	1
3	Tumbler	25 rpm	Iron Ore Tumbler & Aibration Index (Iron Ore Hardness test)	1
4	Magnetic Stirrer with Hot Plate	150 dig	Fe(m) test in Sponge Iron	1
5	Hot Air Oven	0 to 300, LC:1 dig	Moisture test & Fee in Raw materials	2
6	Muffel Furnace	0 to 1200 dig, LC:1dig	V.M, Ash & Silica Ignition	2
7	Carbon Appratus	0 to 1.5%, LC:0.01%	Carbon Test in Raw materials & STEEL	2
8	Combustion Furnace	0 to 1300 dig, LC:1 dig	Carbon Test in Raw materials & STEEL	1
9	Hot Plate	0 to 200 dig	During analysis Solutions Boiling purpose	2
10	Analytical Balance	0 to 200 grm, LC:1 mg	Weighing the test sample	1
11	Digital Analytical Balance	0 to 220 grm, LC:1 mg	Weighing the test sample	1
12	Weighing Balance	2gr to 25kg, LC:2 gr	Physical Analysis weighing	1
13	Barometer	433mm/Hg	To be know Atmosphere Pressure	1
14	Bomb Calorimeter	LC:0.01 dig	Grass Calorific Value test	1
15	Thermometer 50 ^o C	0 to 50 dig, LC:1 dig	To know temperature in water & Diesel ect...	1
16	Thermometer 100 ^o C	0 to 100 dig, LC:1 dig	To know temperature in water & Diesel ect...	1
17	Measuring Scale	0 to 1 mtr, LC:0.01mm	To be Mearure the length of Billet & T M T	1
18	Venire Calipers	0 to 300mm, LC:0.02mm	Section and dia measure in the Billet & T M T	1
19	U T M 60	60KN to 600KN, LC:0.1 KN	T M T Physical testing (Yield Stress, Tensile Stress, Ratio(TS/YS), Elongation, Bend & Rebend)	1
20	Extensometer	200 to 2000µm, LC:1µm	Maximum load Elongation	1
21	Mandrels	24,30,32,36,40,48,50,56,60,64,70,72,80,84,96,100,112,120,125,128,140,150,160,168,175,192,196,200,224,256	Bend & Rebend test	30
22	Water Tub	20 ltr	Bend & Rebend test	1
23	Heater	230 W	For water heating	2
24	BCS/SS-CRM NO.435/2 Plain Carbon Steel Standard sample	100 gr	For Solutions standardization	1
25	Spectrometer	32 elements	For Steel Chemical analysis	1

Technical Literature

TMT – Thermo mechanical process is a metallurgical process that combines mechanical deformation process like rolling with thermal process like heat treatment, water quenching, heating and cooling at various rates into single process.

This process produces a high strength bar from low carbon steel.

Steel billets are heated up to 1200 degree C temp approx in reheat furnace progressive rolled to final size shape of a reinforcing bar of grade Fe 500, Fe 500D, Fe 550.

The physical properties are in accordance to IS 1786:2008.

Advantages of the Product:

We at Mangal TMT, prejudice give top priority to quality.

The Raw materials are sourced from NMDC, Mines with a long term agreement signifies the values of company. We are also having a stringent QAP at all levels from Raw materials to finished products to ensure the compliance of IS code requirements.

Being centrally located at R.G.Peta, 50km away from Visakhapatnam city enables a easy transport to various cities directly from factory.

Further we would also like to bring your notice that we are the first mini integrated steel plant in Andhra Pradesh. We also have a technical team of qualified civil/mechanical Engineers for after sales and pre sales technical discussions with Engineer In charge for improving & maintaining the established standards.









MAHAMAYA
TOUGHER THAN THE HUMAN WILL

Manufactured by

MAHAMAYA INDUSTRIES LIMITED
R.G. Peta, L. Kota Mandel, Vizianagaram District



IS : 1786
ENR-DIST

TEST CERTIFICATE FOR HIGH STRENGTH DEFORMED STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT ACCORDING TO IS 1786: 2008
TEST CERTIFICATE NO. - MMLQA/20/21

TO M/S-

It is certified that the material described below fully conforms to IS : 1786 - 2008 Chemical composition and Mechanical Properties of the Product as tested according with the scheme of inspection and testing contained in the BIS Certification Marks Licence No. CML - 6635477 are as indicated below against each order No.

(PLEASE REFER TO IS : 1786 - 2008 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Order No. & Date	Nominal Size (mm)	Lot no.	Quantity (T)	Date of Testing	CHEMICAL ANALYSIS							MECHANICAL PROPERTIES					Remarks	
					C %	S %	P %	S+P %	CE %	0.2 % Proof Stress /	0.2 % Proof Stress /	Tensile Strength / h	TS / YS ratio	Elongation %	Total elongation %	Burd Test		Reburd Test
8	488			27.02.21	0.20	0.033	0.037	0.070	0.30	528	563	658	1.18	19	7.5	OK	OK	PASS
10	491			28.02.21	0.21	0.033	0.037	0.070	0.31	634	567	661	1.17	19	7.5	OK	OK	PASS
12	492			28.02.21	0.20	0.034	0.036	0.070	0.30	634	565	671	1.18	19	8	OK	OK	PASS
16	478			22.02.21	0.19	0.034	0.036	0.070	0.28	527	568	670	1.19	19	8.5	OK	OK	PASS
20	479			22.02.21	0.19	0.034	0.037	0.071	0.28	529	564	670	1.19	18	8.4	OK	OK	PASS
26	485			26.02.21	0.20	0.033	0.039	0.072	0.29	535	545	658	1.21	20	7.8	OK	OK	PASS
32	187			11.10.20	0.22	0.032	0.038	0.078	0.28	520	552	666	1.25	19	8.3	OK	OK	PASS

The Material supplied conforms to the standard rolling mass tolerance

Surface Defects:
Internal Piping
Welding Defects

Absent/ Present
Absent/ Present

SIGNATURE:

REMARKS :-
SHIPPING ADVISE NO.
WAGON NOS.

FOR: Maa Mahamaya Industries Limited



RW/NH-34066/09/2017-S&R (B)
GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
S&R -(Bridges)
Transport Bhawan, 1, Parliament Street, New Delhi-110001

Dated: 28.10.2020

To

1. The Chief Secretaries of all the State Governments / UTs.
2. The Principal Secretaries / Secretaries of all States / UTs Public Works Department dealing with National Highways, other Centrally sponsored schemes.
3. The Engineers-in-Chief and Chief Engineers of Public Works Department of States/UTs dealing with National Highways, other Centrally sponsored schemes.
4. The Director General (Border Roads), Seema Sadak Bhavan, Ring Road, Delhi 110010.
5. The Chairman, National Highways Authority of India, Plot G-5 & 6, Sector-10, Dwarka, New Delhi 110075.
6. The Managing Director, NHIDCL, PTI Building, Parliament Street, New Delhi 110001.

Sub: Reinforcing Bars: Clause 1009.3.1 of Ministry's Specifications for Road and Bridge Works-regarding.

Sir,

The grade and other parameters of the reinforcing bars to be used for plain, reinforced or pre stressed concrete works on National Highways has been specified in Clause 1009.3.1 of Ministry's Specifications for Road and Bridge Works. This Clause also prescribe that the steel shall be procured from original producers. In case, the original producers are unable to supply the steel within the required time period or they are not producing the reinforcing bar of required size /diameter, the supply from other producers are also allowed, provided the reinforcement is manufactured from billets procured from Original producers.

2. Ministry has received various representations from the manufacturers / associations that secondary producer /other producers, who produce steel reinforcement from billets with technical parameters conforming to IS: 1786, unable to supply the steel for National Highways works due to aforesaid Clause 1009.3.1 of Ministry's Specifications for Road and Bridge Works. Moreover, Ministry of Steel vide their Order No.4 (13)/2016-SD (I) dated 9th August, 2016 has also excluded the distinction between Primary (Original) & Secondary (Other) steel producers.

3. The matter has been considered in the Ministry and it has been decided that steel reinforcement manufactured by the Secondary (Other) producers are also permitted for National Highway works provided the reinforcement bars are manufactured from the billets.

4. As such, the 2nd and 4th para of Clause 1009.3.1 of Ministry's Specifications for Road and Bridge Works shall be amended as per following:-

2nd Para

"All steel shall be procured from producers who manufacture billets directly from iron ores and roll the billets to produce steel conforming to IS: 1786. No re-rolled steel shall be incorporated in the works. The steel shall also be procured from other producers provided it is manufactured from the billets made directly from iron ores and not from shredded scrap and sponge iron as basic feedstock. In such cases, the other producers will have to submit the proof of purchase such as GST, Invoice etc from the billet producers to establish that billets are made directly from iron ores and have been procured from them. The steel shall be got tested by the Engineer in the NABL affiliated laboratories only as a third party check. It shall be ensured that all the test results conform to IS: 1786."

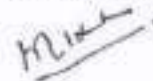
P.T.O

4th Para

"For the steel procured from producers who manufacture billets directly from iron ores also, the Engineer/Employer may carry out checks on materials through third party as mentioned above, for conforming to the test results shown in the certificates so as to ensure the quality of steel supplied."

5. The contents of this Circular may please be brought to the notice of all the Concerned in your Organization for strict implementation. This circular will be implemented from the date of its issuance.
6. This issues with the approval of the Competent Authority.

Yours faithfully,



(Jitendra Kumar)
Superintending Engineer-S&R(Bridges)
For Director General (Road Development) & SS.

Copy to:

1. All Technical Officers in the Ministry of Road Transport & Highways.
2. All Joint Secretaries in the Ministry of Road Transport & Highways.
3. All ROs & ELOs of the Ministry of Road Transport & Highways.
4. The Secretary General, Indian Roads Congress with a request to incorporate the contents of this circular in the revised Ministry's Specifications for Road and Bridge Works.
5. The Director, IAHE.
6. Technical circular file of S. R&T (B) Section.
7. NIC for uploading on Ministry's website under "what's new".

Copy for kind information to:

1. PS to Hon'ble Minister (RT&H, MS&ME) / PS to Hon'ble MOS (RT&H).
2. Sr. PPS to Secretary (RT&H).
3. PPS to DG (RD) & SS.
4. PPS to AS & FA/ADG-I.

***** End *****

E-4289575

8/11/2

GOVERNMENT OF ANDHRA PRADESH
WATER RESOURCES (REFORMS) DEPARTMENT

Memo No. ICDO1-COOROMISC/7/Reforms/2021, Dt. 08/02/2021

Sub: W.R. (Reforms)- Steel brands in Estimates/ Tenders - Certain instructions-Issued.

- Ref: 1. Govt. Memo No. 15021/ 8/ 2018-RDS dt. 04-04-2019 of TR&B Dept. of GoAP.
- 2. From the ENC(AW/IW) , WRD & Chairman, BoCEs, Lr. No. ENC/IW/P&M/ EE.1/DEE.2/AEE(S)/6th BoCEs-2021/Vol. I, dated: 08.01.2021.

The Engineer-in-Chief (AW / IW), WRD and Chairman, BoCEs in the reference 2nd cited have stated that in the 6th BoCEs meeting held on 15.12.2020, a power point presentation was given by "SURYADEV TMT & RADHA TMT FE550", requesting for empanelling their brands as manufacturers of TMT bars for ongoing & upcoming projects in Andhra Pradesh. Further, stated that similar proposals were also received from other Steel Manufacturing agencies.

2. The issue was discussed in detail in the 6th BoCEs meeting held on 15-12-2020 and made certain observations.

3. Government after careful examination of the proposal and based on the observations/ recommendations of the BoCEs, hereby issue the following instructions to all the Engineer-in-Chiefs, Water Resources Department / Commissioner of Tenders, A.P./ Chief Engineers, Water Resources Department and all the concerned Engineering works Departments:

As far as Steel products are considered, Ministry of Steel, Govt. of India withdrawn various definitions of steel producers such as 'Integrated Steel Producers', 'Primary Steel Producers', 'Secondary Steel Producers' etc. and hence no Steel manufacturing company can be empanelled based on the manufacturing process.

Currently, both in SoR as well as monthly minutes of Sub-Committee, the average rates of Steel rates are displayed without recommending any brand names which is appropriate in the light of Ministry of Steel, Government of India's Quality Control Order.

In view of the above observations, and also based on the earlier recommendation of Sub-Committee to the TR&B Dept., and as recommended by the BoCEs, all the Engineer-in-Chiefs, Water Resources Department / Commissioner of Tenders, A.P./ Chief Engineers, Water

(P.T.O)

S-15/2021

DEE-2
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//2//

Resources Department and all the concerned Engineering works Departments are directed to continue the current procedure of taking average steel rates of ISI specifications complied Steel Manufacturing companies and to instruct the field staff not to mention any particular brands in the Estimates/Tender Documents/Agreements but to insist on companies which comply to ISI specifications including Physical and Chemical properties, while inviting Tenders / Estimates/ Agreements for the works in their jurisdiction in future, duly following the recommendations made by the Sub-Committee as above.

4. All the Engineer-in-Chiefs, Water Resources Department / Commissioner of Tenders, A.P./ Chief Engineers, Water Resources Department and all the concerned Engineering Works Departments are directed to follow the above instructions scrupulously.

SYAMALA RAO JAMJAM
SECRETARY TO GOVERNMENT

To

The Engineer-in- Chief (Irrigation) & Chairman, SLTC,WRD,Vijayawada.

✓ The Engineer-in- Chief (Admn), WRD& Chairman, BoCEs,Vijayawada.

The Commissioner of Tenders, AP., Vijayawada.

All Chief Engineers, Water Resources Department.

The MA & UD Department, A.P Secretariat.

The PR & RD Department, A.P Secretariat.

The Housing Department, A.P Secretariat.

The HM & FW Department, A.P Secretariat.

The Industries & Commerce Department, A.P Secretariat.

The TR & B Department, A.P Secretariat.

The Hon'ble Judge, Judicial Preview, A.P.

Copy to:

The P.S to the Secretary to Govt., WRD.

SC/SF

//FORWARDED:BY ORDER//

P.K. Bhannalata
SECTION OFFICER

J

C/C

Ref: PMC/GVSCCL/ISA/2019/18

4 Sept. 2019

To
M/s. RKEC Projects Limited
#10-12-L, 3rd floor, Rednam Alcazar,
Rednam Gardens, Opp SBI Main Branch,
Visakhapatnam – 530 002.

Subject: Submission of Updated Vendor details of M/s MAA MAHAMAYA INDUSTRIES LIMITED
(MANGAL TMT), for Fe 500D, for structural steel.

Ref: i) Ref. Material Approval Request (MAR) No: RKEC/GVMC/MAR_26.
ii) Your letter No: RKEC/2018 -19/GVSCCL/AECOM/096
iii) PMC Letter: PMC/GVSCCL/ISA/2019/17, dated 20 Aug 2019.

Dear Sir,

The Material Approval Request (MAR) for Fe 500D, for structural steel of Vendor details of M/s MAA MAHAMAYA INDUSTRIES LIMITED (MANGAL TMT) has been reviewed for the following

- 1) The Validity for Certificate of Registration for ISO 9001: 2015, is up to 22/08/2022.
- 2) The Validity for Certificate of Registration for ISO 14001: 2015, is up to 22/08/2022.
- 3) The Validity for Certificate of Registration for ISO 45001: 2018, is up to 22/08/2022.

And Renewal of Certification from Bureau of Indian standards have been attached. Hence, Material Approval Request (MAR) is approved for Procurement.

Yours Sincerely,

For AECOM Asia Company Limited



Prabhu Sheelavantha
Programme Director

CC: Managing Director,
GVSCCL, Visakhapatnam.

V. Akhila Kumar
05/09/2019



Reference: URS SW/APRSP-B/TL/ECI-SEPL JV/PNV-08-B/2017/287

Date: 07th August 2017

The Authorized Representative,
M/s ECI - SEPL JV,
Plot No. A12, A13, Panchavati Township,
Manikonda - Village, Rajendra Nagar - Mandal,
Rangareddy, Hyderabad -500 089

Sub: Construction Package PNV-08-B: Widening and Strengthening of Pedana - Nuzvid - Vissannapet Road from Km. 22+100 to Km. 40+000 in Krishna District, A.P (Balance Work).
MANGAL TMT STEEL (Maa Mahamaya Industries Ltd) Provisional Source approval - Reg

Ref: (i) ECI-SEPL (JV)/PNV-08(B)/RE/2017/038 dated 03.07.2017

Gentlemen,

In the lime light of the above cited subject and reference, profile and credentials of M/s Maa Mahamaya Industries Ltd. Brand Name Mangal Steel have been reviewed by this office and found in order.

M/s Maa Mahamaya (Mangal TMT) Industries Ltd Plant/Factory located at RG peta, L kota Mandal, Vizainagaram District, AP has been inspected by our Senior Quality Materials Engineer on 08.07.2017 along with your Authorized Representative and found in order as per standards laid down in IS1786:2008.

In house QC Laboratory is well equipped like Spectrometer analysis and Universal Testing machine to conduct all Mechanical and Chemical tests.

The Plant has instituted a Quality Management System (QMS) and had a defined Quality assurance plan in place.

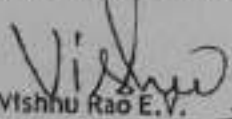
Hence considering the above merits M/S Maa Mahamaya Industries Ltd, Mangal Steel herewith provisionally approved as source to procure steel as and when required. Final Source approval Shall be accorded on submission of TPA Test report to this office.

Further Sampling, inspection and Testing shall be in accordance with IS:1786-2008 .

This approval has accorded as per guidelines of Ministry of Steel, Government of India Gazette notification as appended.

Thanking You,

For AECOM Infrastructure & Environment UK Limited.,
JV with URS Scott Wilson India Pvt. Ltd.


Vishnu Rao E.V.

Project Manager/Engineer



Enclosure: As appended

Copy to:

- Srl. G. Jagannadha Rao, Engineer in-Chief (R&B) Admn, SH, EAP, CP & Managing Director, APRDC - for information please.
- Resident Engineer, PNV-08-B, AECOM-URS Scott Wilson, - for info & necessary action.

AECOM Infrastructure & Environment UK Limited.,
JV with URS Scott Wilson India Pvt. Ltd.
1st and 2nd Floor, Door No: 54-14-3/7-2, H. No. 409
7th Right Road, Sdnivas Nagar, Bank Colony,
Vijayawada (Urban) - 520 008 India
Tel: +91 866 2544971
www.aecom.com



ಬೆಂಗಳೂರು ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಮಂಡಳಿ

BANGALORE WATER SUPPLY AND SEWERAGE BOARD.

Office of Chief Engineer (Project)

Cauvery Bhavan, III Floor, Bangalore 560009

No. BWSSB /CE(P)/ACE (P-2)/

/2018-19

Date: /11/2018

To,

EE CMC-12, EE CMC -13,

EE CMC -14, EE CMC-15

EE Stores

Sub: Work of Providing Water Supply to 110 Villages of BBMP and UFW reduction in Core Area and Construction and Rehabilitation of GLR in Malleshwaram, Bangalore - regarding approval of makes/manufacturers for TMT Steel for civil works.

Ref:- 1) No. SSC IPL/SO/21a/BWSSB/110OHT & GLR/20/2017-18 dt:16.11.2018

2) No:TCE/JT/WS-110/P816/2018 Date:20.11.2018

With reference to the above subject, approval is hereby accorded to Mangal TMT by vendor M/s Maa Mahamaya Industries Ltd for procurement of TMT steel for the above said work.

Further, it is herewith informed to submit vendor QAP for TMT Steel incorporating project details and obtain approval for the same before procurement.

Chief Engineer (Projects)

BWSSB

Copy to M/s Sri Srinivasa Constructions India Private Limited, Siva Shankar Nilayam, Opp. Shakthi Nursing Home, Talur Road, Bellary - 583 103 for information and needful.

Also note that the validity of the licence of Maa Mahamaya Industries Limited is valid upto 31.12.2019.

Hope this clarifies the matter.

Regards / सादर

Pankaj Bhattacharjee

for,

Regards / सादर

S R Sahu / एस आर साहू

Resident Construction Manager / आवासीय निर्माण प्रबंधक

Engineers India Limited. / इंजीनियर्स इंडिया लिमिटेड

VRMP Project, HPCL Refinery/ वी.आर.एम.पी परियोजना, एचपीसीएल रिफाइनरी

Visakhapatnam / विशाखपट्टणम

(0891-2513053) Mb: 70777 00162

**EASTERN POWER DISTRIBUTION COMPANY OF A.P. LIMITED
CORPORATE OFFICE :: VISAKHAPATNAM**

Phone: 0891-2582300

Phone : 9703216883

From
The Chief General Manager,
Purchase & Material Management,
A.P.E.P.D.C.L., Corporate Office,
T.P.T. Colony, Near Gurudwara,
Seethammadhara,
Visakhapatnam-530 013.

To
M/s Maa Mahamaya Industries Ltd.
R.G.Peta Village,
L.Kota Mandal,
Vizianagaram Dist,
535 161

Lt.No.CGM/P&MM/EPDCL/VSP/VR/P2/E/CI/D.No. 5262 /15, Dt. 29/09/2015.

Sirs,

Sub: EPDCL, VSP - Registration of your firm as approved vendor for supply of "TMT Bars" -
Regarding

Ref: 1) Vendor Application No.EVR2147/2015

2) Inspection Report of AEE / Civil / Vizianagaram on 09.09.2015

0-0-0

Referring to the above, you are registered as an approved vendor for supply of "TMT Bars"
with registration No **CGM/P&MM/VR/CI/ No. 1393 / 2015-2016.**

The registration is subject to the following conditions:

- 1) APEPDCL reserves the right to cancel your registration at any time without assigning any reason.
- 2) It is noted that you are a Manufacturer for the above materials.
- 3) This registration, however, would not hold good for the global tenders to be floated under IDA/IBRD/USAID loan.
- 4) This registration will be valid upto 30-09-2017.
- 5) For considering renewal of vendor registration, you have to remit renewal fee of Rs.500/- in the shape of DD drawn in favour of Pay Officer, APEPDCL, Visakhapatnam from any Nationalized bank along with your application before 6 months of the expiry of validity period i.e. on or before 31-03-2017 along with the details of orders executed in APEPDCL. You have to enclose a copy of reference of this letter to the tenders to be submitted to APEPDCL.

Copy to the Chief General Manager/P&MM/SPDCL, NPDCL, CPDCL.

Copy to the Chief General Manager/Expenditure/EPDCL/Visakhapatnam

Copy to the Chief General Manager/Projects/EPDCL/Visakhapatnam

Copy to the Superintending Engineer/Operation/Srikakulam, Vizianagaram,

Visakhapatnam,Rajmundry,Eluru

Yours faithfully,

CHIEF GENERAL MANAGER(P&MM)
VISAKHAPATNAM.

Signature valid

Digitally signed by
KANCHUMURTHY PRASAD
Date: 2015.09.28 12:20:38 IST
Reason: Approved

Greater Visakhapatnam Smart City Corporation Limited

Registered Office C/o. GVMC, Room No. 308, Tenneti Bhavan, Asilmetta Junction,
Visakhapatnam- 530002, Andhra Pradesh, India. CIN No. U74900AP2016PLC098495

VISAKHAPATNAM

Dt: 25-03-2021

To

M/s. MAA MAHAMAYA Industries Limited
R.G.Peta Viloge, L.Kota Mandal
Vizianagaram District-535161.
Andhra Pradesh

Ref: (1) Your letter ref MIP/S&T/GVMC/01 dated 22-03-2021
(2) AECOM Lr no : PMC/GVSCCL/ISA/2019/18 DATED 04 SEPT 2019

With reference to request in 1st reference cited, M/s. MAA MAHAMAYA Industries Limited is approved for usage as TMT MANGAL Fe500D as per above cited letter no 2 subject to the following conditions:

- 1) M/s. MAA MAHAMAYA Industries Limited MANGAL TMT branded bars should be supplied conforming to 15 1786-2008 and valid BIS license (8mm to 32mm dia bars). No rerolled material/secondary steel producer conversion agent material will be accepted or allowed for any structural works.
- 2) Company should provide all necessary reports and certificates that ensures traceability between billets and supplied furnished products every time of the supply
- 3) M/s. MAA MAHAMAYA Industries Limited Shall ensure maintenance of quality of supplies intact.
- 4) GVSCCL reserves the right to conduct mandatory quality control checks in approved laboratories when ever steel is procured from the company by contractors who are entrusted with the projects.
- 5) Any feedback on deterioration in the quality as also abnormal delays in Supply if noticed would render suspension cancellation of this approval.
- 6) GVSCCL is not bound in any way to purchase your products for its projects.

Note: The letter is issued upon the request of the company.

Yours faithfully

V. Sreenivasulu Reddy
25/3/2021
SUPERINTENDING ENGINEER
(PROJECTS - I)
GVMC
SUPERINTENDING ENGINEER
Projects
Greater Visakhapatnam Smart City Corporation Limited



भारतीय प्रौद्योगिकी संस्थान भुवनेश्वर
INDIAN INSTITUTE OF TECHNOLOGY BHUBANESWAR

9th May, 2016

TO WHOMSOEVER IT MAY CONCERN

On request of M/S Maa Mahamaya Industries Limited, we visited their works located at R G Peta Village, L Kota Mandal, Vizianagaram District, A P State-535161, for assessment of their Quality Control Laboratory and Quality Assessment Plan.

The following are our observations:

- 1.0 Maa Mahamaya Industries Limited is a Steel Plant which produces TMT Steel bars starting from Iron ore through Sponge Iron-Steel Melting-Rolling Mill route. They also have a captive power plant.
- 2.0 Their in house Laboratory is well equipped for the testing of Raw Materials and Finished Products, the list of equipments annexed. The calibration certificates were also found to be in order.
- 3.0 The Plant has a defined Quality Assurance Plan in place.
- 4.0 The Plant is producing TMT bars as per IS 1786:2008 in sizes 8mm to 32mm, in Grades Fe 415, Fe 500, Fe 550, and Fe 500D. The BIS Licenses found to be valid Also Test Certificates examined and found to be in order.

AB
9/5/16
Dr. Akhilesh Barve

V. Pandu Ranga
9/5/16
Dr. V. Pandu Ranga

डॉ. अखिलेश बर्वे / Dr. Akhilesh Barve
सहायक प्राध्यापक / Assistant Professor
संरचनात्मक विज्ञान विभाग / School of Mechanical Sciences
Indian Institute of Technology Bhubaneswar
Bhubaneswar-751013, Odisha, India

डॉ. वि. पांडुरंगा / Dr. V. Pandu Ranga
सहायक प्राध्यापक / Assistant Professor
संरचनात्मक विज्ञान विभाग / School of Mechanical Sciences
Indian Institute of Technology Bhubaneswar
Bhubaneswar-751013, Odisha, India



KARNATAKA ROAD DEVELOPMENT CORPORATION LTD.

No. KRDC/CE/EE-1/MMIL./2016-17/799

Dated: 23.06.2016

24

To,

✓ M/s. MAA MAHAMAYA Industries Limited
R.G.Peta Village, L.Kota Mandal,
Vizianagaram District-535161,
Andhra Pradesh.

Sub: Enlistment of M/s. MAA MAHAMAYA Industries Limited as a "Primary Producer of Steel" for supply or reinforcement steel for ongoing and upcoming projects in KRDC.

Ref: Additional General Manager Marketing letter dated: 13.05.2016.

===

With reference to above, and your request for enlistment of your company as a prime Producer of reinforcement steel to be used in the ongoing and upcoming projects of KRDC is examined.

It is stated that M/s. MAA MAHAMAYA Industries Limited is an IMS (ISO 9001-2015/ISO 14001:2015/OHSAS 18001-2007) certified company. The company produces the MANGAL TMT branded HYSD Steel bars of Fe 415, Fe500, Fe500D and Fe550 grade of sizes 8mm to 32mm bars conforming to IS 1786:2008, which confirmed after inspection of the factory site on 10.06.2016 and 11.06.2016 by the officers of KRDC.

In view of above, M/s. MAA MAHAMAYA Industries Limited is enlisted for TMT MANGAL brand as a primary producer of HYSD steel bars and approved to be used in the ongoing & upcoming projects of KRDC subject to the following conditions:

- 1) M/s. MAA MAHAMAYA Industries Limited MANGAL TMT branded bars should be supplied conforming to IS 1786-2008 (8mm to 32mm dia bars).
- 2) No re-rolled material/secondary steel producer conversion agent material will be accepted or allowed for any structural works of KRDC.
- 3) Company should provide all necessary reports and certificates that ensures traceability between billets and supplied furnished products.
- 4) M/s. MAA MAHAMAYA Industries Limited, Shall ensure maintenance of quality of supplies intact.

- 5) KRDCCL reserves the right to conduct mandatory quality control checks in approved laboratories when ever steel is procured from the company by contractors who are entrusted with the projects in KRDCCL.
- 6) Any feedback on deterioration in the quality as also abnormal delays in supply if noticed would render suspension/cancellation of this approval.
- 7) The KRDCCL wholly reserves the right to suspend/cancel this approval.
- 8) The KRDCCL is not bound in any way to purchase your products for KRDCCL projects.
- 9) Any changes in the name of company/Plant etc. shall be informed to KRDCCL immediately.

Yours faithfully

24/8/16
Chief Engineer
KRDCCL, Bengaluru

OP

MSV**MSV INTERNATIONAL INC.**

In Association with

**JSV ASSOCIATES ENGINEERS &
CONSULTANTS PVT. Ltd**Sub Office
Vedakkal
Punalayam
Alappuzha
Email: msv
CIN: EQ42

ENGINEERING SERVICES FOR ALAPPUZHA CITY ROADS IMPROVEMENT PROJECT (ACRIP) PHASE I THROUGH DBFOMT HYBRID- ANNUITY

Ref. No: MSV-JSV/RRAPL/IE/ACRIP-1/2019/35

Date: 06-

To,

The Project Manager,
Rohan Rajdeep Alappuzha Projects Ltd,
Shalom House,
Behind DTDC Courier Service,
Opp. LIC Office, Vellakkinar Junction,
Alappuzha-688001, Kerala,
Alappuzha.

Kind Attn: Mr. Vijay Kumar Pillai (Project Manager)

Sub: - Development of Alappuzha City Roads Improvement Project in the state of Kerala to be under Public Private Partnership (Design, Building, Finance, Operate, Maintain and Transfer) DBFOMT) Hybrid Annuity Basis: Source Approval for TMT Steel-Reg

Ref: - 1) Concession Agreement for between KRFB and Rohan Rajdeep Alappuzha Projects Ltd Alappuzha city Roads Improvement Project Phase -I, through DBFOMT Hybrid-Annuity dated:03-08-2018.

2) Your Letter No. RRAPL/Site/17/2019-20 dt 19.06.2019

3) MSV-JSV/RRAPL/IE/ACRIP-1/2019/28 dt 26.06.2019

Dear Sir,

With reference to the above mentioned letter and plant visit by our Material Eng and the test reports, the documents submitted by you for source approval of Mangal TN verified and our observations are as under.

- a) M/S Maa Mahamaya Industries Ltd is an integrated Steel plant which produces making TMT bars.
- b) They produce billets from Sponge iron from the iron ore of NMDC.
- c) After verification of the profile it is noted that there is an agreement between Mahamaya Industries Ltd to extract Iron Ore.
- d) During the plant visit Mechanical properties of the TMT bars had been tested and found satisfactory as per IS 1786-1985.
- e) M/S Maa Mahamaya Industries Ltd is making their TMT bars in the brand name

MSV INTERNATIONAL INC.

In Association with

JSV ASSOCIATES ENGINEERS & CONSULTANTS PVT. Ltd

MSV In
House N
Sundara
Vadacke
Punnapp
Alappu:
Email
CIN. F

ES FOR ALAPPUZHA CITY ROADS IMPROVEMENT PROJECT (ACRIP)-PHASE 1 THROUGH DBFOT HYBRID- A'

of the above, we are hereby accorded our approval of Mangal TMT for the procure
our project works (ACRIP) subject to

Every consignment of steel brought to site should be supported with MTC.

Only new steel lots shall be delivered to the site.

Each consignment of steel shall be tested third party laboratory as per specification.

You,

Sincerely,

MSV International INC., In association with JSV Associates Engineers & Consult:

Handwritten signature
arghese
ader



CEO, KRFB, Thiruvananthapuram.

The Project Manager, KRFB, Alappuzha.

MSV International Inc., Delhi- For Information.

JSV AECPL, Hyderabad-For information

Received
Handwritten signature
06/7/2019



Ltr: No 34/C/13923/KSR/2016/205

Dt: 31st December, 2016

To,

BSCPL Infrastructure Limited,
#8-2-502/1/A, JVI Towers,
Road No.7, Banjara Hills,
Hyderabad - 500034

Attn: Mr. B Mallikarjunaiah, Project Manager

Subj: Design and Construction of multilevel /Grade Separators at Four junctions at LB Nagar and Surroundings in Hyderabad under engineering procurement and construction (EPC) – Turnkey (Package – II) – **Source approval for "Mangal TMT"** – reg.

Ref: Your letter no. GHMC/FO/PKG-IVF.No-1/ BM/16/26, Dated: 29/12/16

Sir,

With reference to your letter mentioned above and plant visit by our Construction Engineer on 26.12.16, the proposals/documents submitted by you for source approval of "Mangal TMT" Steel of M/s Maa Mahamaya Industries Ltd. which have been examined and following observations made:

- a. **M/s Maa Mahamaya Industries Ltd** is an integrated steel plant which produces their billets for making their TMT bars through their own integrated process.
- b. They produce billets from sponge iron directly extracted from Iron ore from NMDC.
- c. From verification of documents which have been submitted by them, they have an agreement with NMDC for the period of 3 years for extracting the Iron ore from NMDC.
- d. During the plant visit, tests were conducted for mechanical properties of TMT bars in their in house laboratory and results found satisfactory
- e. **M/s Maa Mahamaya Industries Ltd** is making their TMT bars in the brand name of "Mangal TMT"

In view of the above, we confirm our approval of Mangal TMT for procurement of TMT bars for the subject project works. Subject to:

1. Every consignment of steel brought to site should be supported with MTC.



//2//

- ii. Only new steel lots shall be delivered to the site.
- iii. Each consignment of steel shall be tested in outside laboratory as per specification.

Thanking you,

Yours faithfully,
For STUP Consultants P. Ltd.

K. Srinivasa Rao
Project Manager

CC: Executive Engineer – PD-NZ-1, GHMC



TAMIL NADU HOUSING BOARD: QUALITY CONTROL WING

CERTIFICATE OF PRODUCT APPROVAL File No. SF/QC/12140/2016 dated 24.06.2016

The Quality Control Wing of Tamil Nadu Housing Board examined various aspects of your following product with reference to your letter dated:09.06.2016 to The Chief Engineer TNHB and have accorded approval on 24.06.2016 to use "Mangal TMT" from "MAA MAHAMAYA INDUSTRIE LIMITED" following items on works carried out by TNHB:

1) Name of the Products/Product Range	Mangal TMT High Strength deformed steel bars and wires for concrete reinforcement Steel Fe 415, Fe 500 & Fe 550 from MAA MAHAMAYA INDUSTRIE LIMITED.
2) Brand Name	MANGAL TMT Fe 415, Fe 500 & Fe 550.
3) Trade Mark Reg No.	Not Furnished.
4) Testing / Certifying Agencies and Test Certificates / Certifications References;	1. ISO 9001:2015, Certificate No. 160505019101 dt: 05.05.2016. 2. ISO 14001:2015, Certificate No. 160505029101 dt: 05.05.2016. 3. OHSAS 18001:2007, Certificate No. 160505039101 dt: 05.05.2016.
5) Address of Manufacturer/Factory	M/s. Maa Mahamaya Industries Ltd. R.G. Peta village, L. Kota Mandal, Dist: Vizianagaram Andhra Pradesh-535161.
6) BIS License Number/Reference	IS 1786:2008, Licence No: CM/L-6635477.
7) Standards/Specifications No.	IS 1786:2008.

Limitations ::

1. This Approval is to use the materials on works carried out by TNHB.
2. Approval is subject to validity of BIS License for the product.
3. Test results copy of the lot should be produced along with all supplies to TNHB site (adhering to the test result produced at the time of this approval).
4. You should inform any change of your address of office, factory, contact telephone numbers, partnership deed, or any other articles of association of your organizations, materials, manufacturing process, quality control routines that may affect the validity of this approval, to the undersigned (or) The Chief Engineer, Tamil Nadu Housing Board who is empowered to cancel the use of the products in TNHB works and hence its approval also.
5. This approval is subject to satisfactory field performance, continuing surveillance Audits, and strict conformity to the constructions of TNHB, This approval shall not bind TNHB to give any preference in placement of purchase orders.



To
 M/s. Maa Mahamaya Industries Ltd,
 R.G. Peta village,
 L. Kota Mandal,
 Dist: Vizianagaram
 Andhra Pradesh-535161

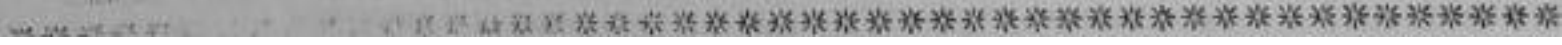
M. Thayumanasamy
 24/6/16

Er. M. THAYUMANASAMY, B.E.
 Superintending Engineer (Quality Control),
 Tamil Nadu Housing Board,
 493, Anna salai, Nandanam, Chennai-55.

Subb
 24/6/16

Submitted to: The CEs of TNHB ✓

All the SEs and the EEs of TNHB (By this approval, Mangal TMT can be used in all TNHB Works and incorporated in the list of approved brand and appended to the Tender Schedule/Agreement. EEs may send feedback about this product in satisfactory field performance to the undersigned and authority in the TNHB constructions)



**VISAKHAPATNAM METROPOLITAN REGION DEVELOPMENT
AUTHORITY**

VISAKHAPATNAM
Dt.31-03-2021.

To
Ms. MAA MAHAMAYA Industries Limited
R.G.Peta Viloge, L.Kota Mandal,
Vizianagaram District-535161,
Andhra Pradesh

Ret: (1) Your letter ref MIPI/S&T/VMRDA/01 dated 22-03-2021

With reference to your letter, it is to inform that usage of TMT Mangal Fe-500/Fe-500D Manufactured by M/s. MAA MAHAMAYA Industries Limited can be allowed for usage in our projects subject to the following conditions:

- 1) MAA MAHAMAYA Industries Limited MANGAL TMT branded bars should be supplied conforming to IS 1786-2008 and valid BIS license (8mm to 32mm dia bars).NO rerolled material/secondary steel producer conversion agent material will be accepted or allowed for any structural works.
- 2) Company should provide all necessary reports and manufacturer test certificates that ensures traceability between billets and supplied furnished products every time of the supply
- 3) The Manufacturer shall ensure maintenance of quality of supplies intact.
- 4) VMRDA Engineers reserve the right to conduct mandatory quality control checks in approved laboratories when ever steel is procured from the company by contractors who are entrusted with the projects.
- 5) VMRDA is not bound in any way to insist the contractor to purchase your products for its projects.


31/3/21
Chief Engineer
VMRDA
Chief Engineer
VMRDA, Visakhapatnam



KDM ENGINEERS (INDIA) PRIVATE LIMITED

Complete Civil Engrg. Solutions



REF: KDMEL/VSKP/STEEL/03/2022/75-47(1)
M/s. MAA MAHAMAYA INDUSTRIES LIMITED
R.G Peta-Village, L.kota-Mandal,
Vizianagaram-535161

Report issue Date: 18th March, 2022
Report No: TC403622000000381F

TEST REPORT

Description of the sample : Reinforcement Steel
 Source of the sample : Sample supplied by the customer
 No. of specimens tested : 21 (Twenty One only)
 Test method : IS: 1608; IS: 1599; IS: 1786
 Customer's Reference : Lr.No.NIII, Dated: 16.03.2022
 Ref : Joint Inspection & Sampling was done by
 1. Sri Kamal Gandhi (DGM-QA/QC), HG INFRA & ENGG LTD
 2. Sri Pradeep Pathak (Manager QC), NKC PROJECTS PVT LTD
 3. Sri Sekhar (Manager QC), KORLAM KANTAKAPALLE
 EXPRESS WAYS PVT LTD
 4. Sri K.Ramudu (SQME), DHRUV CONSULTANCY
 5. Sri Madhu (G-TL), CHAITANYA PROJECTS CONSULTANCY
 Brand & Grade * : M/s Mangal TMT FES00D, HSD
 Material received on : 18.03.2022
 Period of test : 18.03.2022 to 18.03.2022
 Condition of samples : Satisfactory when received
 Deviation if any : Not Applicable

Sl. No.	Dia (mm)	Weight/Meter Kg/m	Yield Stress (YS) (N/mm ²)	Tensile Strength (TS) (N/mm ²)	TS/YS Ratio	Elongation (%)	Bend Test	Re bend Test
1	8	0.381	603	692	1.15	19.8	Satisfactory	Satisfactory
2	10	0.622	552	667	1.17	20.2	Satisfactory	Satisfactory
3	12	0.900	532	612	1.15	19.3	Satisfactory	Satisfactory
4	16	1.596	586	680	1.16	20.4	Satisfactory	Satisfactory
5	20	2.420	585	710	1.21	18.3	Satisfactory	Satisfactory
6	25	3.859	512	636	1.24	21.7	Satisfactory	Satisfactory
7	32	6.306	538	692	1.29	18.4	Satisfactory	Satisfactory

* Details as furnished by the customer

Page 1 of 2



Plot No. 93, E-Block, Autonagar, Visakhapatnam - 530 012, A.P.

Cell: 09912944495, 08328498601, E-mail: lab.vzsg@kdmengineers.com, Website: www.kdmengineers.com



KDM ENGINEERS (INDIA) PRIVATE LIMITED

Complete Civil Engrg. Solutions



REF: KDMEI/VSKP/STEEL/03/2022/7547

Report issue Date: 18th March, 2022

Report No: TC403622000000381F



Requirements as per IS: 1786


Dia (mm)	Mass (kg/m)		Dia (mm)	Mass (kg/m)		Grade	TS/Y.S Ratio	0.2% Proof Stress / Yield stress (N/mm ²) (Min.)	U.T.S (N/mm ²) (Min.)	Elongation (%) (Min.)
	Min.	Nominal		Min.	Nominal					
8	0.363	0.395	20	2.371	2.470	Fe500D	≥ 1.10, but TS not less than 545.0 N/mm ²	500	565 or 10% more than actual 0.2% Proof Stress/Yield stress whichever is higher	16.0
10	0.567	0.617	25	3.697	3.850					
12	0.834	0.888	28	4.638	4.800	Fe-500	≥ 1.08, but TS not less than 545.0 N/mm ²	500	545 or 8% more than actual 0.2% Proof Stress/Yield stress whichever is higher	12.0
16	1.483	1.580	32	6.058	6.310					

- Note:
1. The tests are witnessed by Mr. M.Yugesh
 2. The results relate to the samples supplied by the customer.
 3. Report shall not be reproduced, except in full, without the written approval of the laboratory.
 4. Any corrections invalidate this report.
 5. Retention period of samples are 15 days from the date of issue of test report, then it will be dispose off

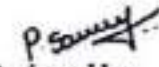
Remarks: The tested parameters are satisfying the requirements of FE500D

-End of Report-

For KDM ENGINEERS (INDIA) PVT. LTD.,


 AUTHORIZED BY:
 NIVEDITA BASKI
 TECHNICAL MANAGER




 Reviewed by:
 P.SANYASIRAO

Page: 2 of 2



KDM ENGINEERS (INDIA) PRIVATE LIMITED

Complete Civil Engg. Solutions



REF: KDMEI/GNT/03-069/Steel/2022/03-9444

Dated: 19th March 2022 TC-5518

M/s. Maa Mahamaya Industries Limited.,

TCS518 22000000647F

R.G. Peta-Village, L. Kota -Mandal,

Vizianagaram -535161.

TEST REPORT

Source of the sample	:	Sample supplied by the customer
No. of samples tested	:	07(Seven Only)
Test method	:	IS: 8811 - 1998 (Reaffirmed 2018).
Discipline	:	Chemical Properties of Reinforcement Steel
Customer's Reference	:	Lr. No. Nil, Dated: 16.03.2022
Ref*	:	Joint Sampling was done by
		1. Sri Kamal Gandhi DGM-QA/QC,H G INFRA & ENGG LTD
		2. Sri Pradeep Pathak-Manager QC,NKC PROJECTS PVT LTD
		3. Sri Sekher-Manager QC, KORLLAM KANTAKAPALLE EXPRESS WAYS PVT LTD
		4. Sri K.Ramudu-SQME, DHRUV CONSULTANCY
		5. Sri Gonedla Pedda Maddulety-TL,CHAITANYA PROJECTS CONSULTANCY
Brand & Grade*	:	Mangal TMT Fe 500D, HSD
Material received on	:	19.03.2022
Date of test	:	19.03.2022
Condition of samples	:	Satisfactory

TESTED FOR Fe500D GRADE Temperature: 24.2°C RH: 56%

Sl. No.	Sample Description*	Dia (mm)	C %	S %	P %
1	Reinforcement Steel	8	0.130	0.023	0.030
2	Reinforcement Steel	10	0.102	0.022	0.030
3	Reinforcement Steel	12	0.083	0.024	0.028
4	Reinforcement Steel	16	0.158	0.022	0.026
5	Reinforcement Steel	20	0.137	0.024	0.029
6	Reinforcement Steel	25	0.183	0.026	0.035
7	Reinforcement Steel	32	0.237	0.024	0.029

* As furnished by the customer

Requirements as per IS: 1786 - 2008(RA2017)	C % (max.)	S % (max.)	P % (max.)
Fe 500	0.30	0.055	0.055
Fe 500D	0.25	0.040	0.040

- Note:
1. The results relate to the samples supplied by the customer
 2. Report shall not be reproduced, except in full, without the written approval of the laboratory.
 3. Any corrections invalidate this report.

Remarks: The tested samples conform to IS: 1786-2008 (RA 2017) requirements for the above mentioned tests For Fe 500D Grade

For KDM ENGINEERS (INDIA) PRIVATE LIMITED

M. Butchi Babu

AUTHORISED SIGNATORY

M.BUTCHI BABU



Page 1 of 1

ANDHRA PRADESH MEDICAL SERVICES & INFRASTRUCTURE DEV.
CORPN. DIVISION, VISAKHAPATNAM
1st Floor of Central Medicine Store, Opp. ENT Hospital,
Govt Mental Care Hospital Compound, Visakhapatnam - 17.

From
D.A.Naidu, B.Tech,
Executive Engineer,
APMSIDC Division,
Visakhapatnam.

To
The Material Testing House(India) Ltd,
Seethammadhara,
Visakhapatnam.

LT.No.DB/APMSIDC/EE-VSP/2021-22/761 Dated 22-03-2022

Sir,

Sub: APMSIDC Division, Visakhapatnam - NABARD-XXIV,XXV & XXVI
Strengthening/ Upgradation of AHs/CHCs at (1) Narsipatnam
(2) Aganampudi (3) Chintapalli 30 bed (4) Chintapalli 30-100
bed (5) Kotauratla (6) Nakkapalli (7) Yelamanchili (8) Madugula
(9) K.Kotapadu (10) Pendurthi (11) Gopalpatnam in
Visakhapatnam District (Package No.3) - Testing of Fe-500D steel
of Mangal TMT make - Requested-Reg.

Ref: Agreement No.05/APMSIDC/2020-21, dated 26.10.2020.


With reference above subject, it is requested to conduct the tests for Steel
and arrange for test reports. The material samples are here with submitted.
Steel to be used Mangal TMT (Fe-500D)

Tests for 8mm, 10mm, 12mm, 16mm, 20mm, 25mm

- Tests required -
- Weight per meter length
 - 0.2% proof stress
 - Ultimate tensile strength
 - Elongation(Percentage)
 - bend test & rebend test
 - Nominal Diameter

Necessary charges will be paid accordingly.

Yours faithfully,


Executive Engineer,
APMSIDC Division,
Visakhapatnam.



Form No. MTH / F/81: Rev: 00
MATERIAL TESTING HOUSE (INDIA) LTD

मेटीरियल टेस्टिंग हाउस (इंडिया) लिमिटेड
Accredited by National Accreditation Board for Testing and Calibration Laboratories
(NABL) vide Certificate number TC-8024

50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013

Tel: 0891- 2791342, Email: mthindialab@gmail.com

TEST REPORT

Unique Lab Report Number: ULR-TC802422000000057F

Test report number MTH/TR/21697	Date 07-04-2022	Page number 01 of 01
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Name of Customer: *The Executive Engineer, APMSIDC Division, Visakhapatnam. For NABARD-XXIV, XXV & XXVI strengthening / Upgradation of Ahs/CHCs at 1) Narsipatnam 2) Aganampudi 3) Chintapalli 30 bed 4) Chintapalli 30-100 bed 5) Kotauratla 6) Nakkapalli 7) Yelamanchili 8) Madugula 9) K.Kotapadu 10) Pendurthi 11) Gopalapatnam in Visakhapatnam District (Package No. 3).
Ref: Agreement No. 05/APMSIDC/2020-21, dated 26-10-2020.

Customer reference: Letter No. DB/APMSIDC/EE-VSP/2021-22/761 dated 22-03-2022.

Requisition No. RQ- 11416	Sample No. S-25786	Date of receipt 06-04-2022	Date of testing 06 to 07-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019
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TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *8mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests:		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	0.383	0.395+(- 8 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	572	Minimum, 500
c)	Tensile strength, N/mm ²	639	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.12	≥1.10
e)	Elongation, percent	19	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. **Sample Submitted by:** Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
2. **Tests witnessed by:** Sri N.Kalyan, J.E. of Office of E.E. APMSIDC, Visakhapatnam and Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. ♦ Tolerance on the nominal mass given for individual sample.
7. Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M. Tech.
Quality Manager



For Material Testing House(India) Ltd
Authorised Signatory

Dr. K.Srinivasa Varma
Director



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50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013
Tel: 0891- 2791342, Email: mthindia@nabl.com

TEST REPORT

Unique Lab Report Number: ULR-TC802422000000058F

Test report number MTH/TR/21698	Date 07-04-2022	Page number 01 of 01		
Name of Customer: *The Executive Engineer, APMSIDC Division, Visakhapatnam. For NABARD-XXIV, XXV & XXVI strengthening / Upgradation of Ahs/CHCs at 1) Narsipatnam 2) Aganampudi 3) Chintapalli 30 bed 4) Chintapalli 30-100 bed 5) Kotauratla 6) Nakkapalli 7) Yelamanchilli 8) Madugula 9) K.Kotapadu 10) Pendurthi 11) Gopalapatnam in Visakhapatnam District (Package No. 3). Ref: Agreement No. 05/APMSIDC/2020-21, dated 26-10-2020.				
Customer reference: Letter No. DB/APMSIDC/EE-VSP/2021-22/761 dated 22-03-2022.				
Requisition No. RQ- 11416	Sample No. S-25787	Date of receipt 06-04-2022	Date of testing 06 to 07-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019

TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *10mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests :		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	0.607	0.617*(- 8 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	565	Minimum, 500
c)	Tensile strength, N/mm ²	631	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.12	≥1.10
e)	Elongation, percent	24	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
2. Tests witnessed by: Sri N.Kalyan, J.E. of Office of E.E. APMSIDC, Visakhapatnam and Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. ♦ Tolerance on the nominal mass given for individual sample.
7. Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M. Tech.
Quality Manager



For Material Testing House (India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



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50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013

Tel: 0891- 2791342, Email: mthindialab@gmail.com

TEST REPORT

Unique Lab Report Number: ULR-TC80242200000059F

Test report number MTH/TR/21699	Date 07-04-2022	Page number 01 of 01		
Name of Customer: *The Executive Engineer, APMSIDC Division, Visakhapatnam. For NABARD-XXIV, XXV & XXVI strengthening / Upgradation of Ahs/CHCs at 1) Narsipatnam 2) Aganampudi 3) Chintapalli 30 bed 4) Chintapalli 30-100 bed 5) Kotauratla 6) Nakkapalli 7) Yelamanchli 8) Madugula 9) K.Kotapadu 10) Pendurthi 11) Gopalapatnam in Visakhapatnam District (Package No. 3). Ref: Agreement No. 05/APMSIDC/2020-21, dated 26-10-2020.				
Customer reference: Letter No. DB/APMSIDC/EE-VSP/2021-22/761 dated 22-03-2022.				
Requisition No. RQ- 11416	Sample No. S-25788	Date of receipt 06-04-2022	Date of testing 06 to 07-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019

TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *1.2mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests :		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	0.862	0.888+(- 6% Tolerance)
b)	0.2 percent proof stress, N/mm ²	530	Minimum, 500
c)	Tensile strength, N/mm ²	613	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.16	≥1.10
e)	Elongation, percent	21	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
2. Tests witnessed by: Sri N.Kalyan, J.E. of Office of E.E. APMSIDC, Visakhapatnam and Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. ♦ Tolerance on the nominal mass given for individual sample.
7. Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House(India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



TC-8024

MATERIAL TESTING HOUSE (INDIA) LTD**मैटीरियल टेस्टिंग हाउस (इंडिया) लिमिटेड**

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50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013

Tel: 0891- 2791342, Email: mthindialab@gmail.com

Form No. MTH / F/81: Rev: 00

TEST REPORT**Unique Lab Report Number: ULR-TC80242200000060F**

Test report number MTH/TR/21700	Date 07-04-2022	Page number 01 of 01
Name of Customer: *The Executive Engineer, APMSIDC Division, Visakhapatnam. For NABARD-XXIV, XXV & XXVI strengthening / Upgradation of Ahs/CHCs at 1) Narsipatnam 2) Aganampudi 3) Chintapalli 30 bed 4) Chintapalli 30-100 bed 5) Kotauratla 6) Nakkapalli 7) Yelamanchili 8) Madugula 9) K.Kotapadu 10) Pendurthi 11) Gopalapatnam in Visakhapatnam District (Package No. 3). Ref: Agreement No. 05/APMSIDC/2020-21, dated 26-10-2020.		
Customer reference: Letter No. DB/APMSIDC/EE-VSP/2021-22/761 dated 22-03-2022.		
Requisition No. RQ- 11416	Sample No. S-25789	Date of receipt 06-04-2022
		Date of testing 06 to 07-04-2022
		Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019

TEST RESULTS

S. No.	Description	Result	Requirements of
	MECHANICAL TESTING: Mechanical Properties of Metals		
01.	Sample : *16mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests:		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	1.587	1.58+(- 6% Tolerance)
b)	0.2 percent proof stress, N/mm ²	517	Minimum, 500
c)	Tensile strength, N/mm ²	612	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.18	≥1.10
e)	Elongation, percent	22	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

- Sample Submitted by: Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
- Tests witnessed by: Sri N.Kalyan, J.E. of Office of E.E. APMSIDC, Visakhapatnam and Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
- Details furnished by the customer denoted by *
- Details marked over specimen denoted by **
- Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
- * Tolerance on the nominal mass given for individual sample.
- Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality ManagerFor Material Testing House(India) Ltd
Authorised SignatoryDr. K. Srinivasa Varma
Director



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50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013

Tel: 0891- 2791342, Email: mthindialab@gmail.com

TEST REPORT

Unique Lab Report Number: ULR-TC802422000000061F

Test report number MTH/TR/21701	Date 07-04-2022	Page number 01 of 01
Name of Customer: *The Executive Engineer, APMSIDC Division, Visakhapatnam. For NABARD-XXIV, XXV & XXVI strengthening / Upgradation of Ahs/CHCs at 1) Narsipatnam 2) Aganampudi 3) Chintapalli 30 bed 4) Chintapalli 30-100 bed 5) Kotauratla 6) Nakkapalli 7) Yelamanchilli 8) Madugula 9) K.Kotapadu 10) Pendurthi 11) Gopalapatnam in Visakhapatnam District (Package No. 3). Ref: Agreement No. 05/APMSIDC/2020-21, dated 26-10-2020.		
Customer reference: Letter No. DB/APMSIDC/EE-VSP/2021-22/761 dated 22-03-2022.		
Requisition No. RQ- 11416	Sample No. 5-25790	Date of receipt 06-04-2022
	Date of testing 06 to 07-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019

TEST RESULTS

S. No.	Description	Result	Requirements of
	MECHANICAL TESTING: Mechanical Properties of Metals		
01.	Sample : *20mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests :		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	2.477	2.47+(-4% Tolerance)
b)	0.2 percent proof stress, N/mm ²	563	Minimum, 500
c)	Tensile strength, N/mm ²	656	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.17	≥1.10
e)	Elongation, percent	19	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
2. Tests witnessed by: Sri N.Kalyan, J.E. of Office of E.E. APMSIDC, Visakhapatnam and Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. ♦ Tolerance on the nominal mass given for individual sample.
7. Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House (India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



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Tel: 0891- 2791342, Email: mthindialab@gmail.com

TEST REPORT

Unique Lab Report Number: ULR-TC802422000000062F

Test report number MTH/TR/21702	Date 07-04-2022	Page number 01 of 01
Name of Customer: *The Executive Engineer, APMSIDC Division, Visakhapatnam. For NABARD-XXIV, XXV & XXVI strengthening / Upgradation of Ahs/CHCs at 1) Narsipatnam 2) Aganampudi 3) Chintapalli 30 bed 4) Chintapalli 30-100 bed 5) Kotauratia 6) Nakkapalli 7) Yelamanchili 8) Madugula 9) K.Kotapadu 10) Pendurthi 11) Gopalapatnam in Visakhapatnam District (Package No. 3). Ref: Agreement No. 05/APMSIDC/2020-21, dated 26-10-2020.		
Customer reference: Letter No. DB/APMSIDC/EE-VSP/2021-22/761 dated 22-03-2022.		
Requisition No. RQ- 11416	Sample No. S-25791	Date of receipt 06-04-2022
		Date of testing 06 to 07-04-2022
		Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019

TEST RESULTS

S. No.	Description	Result	Requirements of
	MECHANICAL TESTING: Mechanical Properties of Metals		
01.	Sample : *25mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests :		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	3.789	3.85* (- 4 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	545	Minimum, 500
c)	Tensile strength, N/mm ²	625	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.15	≥1.10
e)	Elongation, percent	19	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

- Sample Submitted by: Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
- Tests witnessed by: Sri N.Kalyan, J.E. of Office of E.E. APMSIDC, Visakhapatnam and Sri S.Udaya Kumar, QCE of M/s. NCC Limited.
- Details furnished by the customer denoted by *
- Details marked over specimen denoted by **
- Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
- * Tolerance on the nominal mass given for individual sample.
- Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House(India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director

ANDHRA PRADESH MEDICAL SERVICES INFRASTRUCTURE DEVELOPMENT
CORPORATION DIVISION :: VIZIANAGARAM
1st Floor, Central Medicine Stores, Beside DM & HO's Office Building, District
Hospital Compound, Vizianagaram-535003 (Mail Id: eapmsidcvzm@gmail.com)

From
M. Satya Prabhakar
Executive Engineer
APMSIDC Division
Vizianagaram

To
MATERIAL TESTING HOUSE (INDIA) LTD
50-96-4 North Extension,
Secchammadhara,
Visakhapatnam,
Andhra Pradesh 530013.

DI.26.3.2022

Sir,

Sub: APMSIDC, VIZIANAGARAM Division- 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Up Gradation of 50 to 100 bedded Community Health Centre at S-Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadraviri, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District. - Samples of 8mm dia 10mm, 12mm, 16mm, 20mm, 25mm, Fe-500D TMT of Mangal steel Submitted Testing Requested - Regd.

• • •

I am here with sending the steel Samples of 8mm dia 10mm, 12mm, 16mm, 20mm, 25mm, Fe-500D TMT of Mangal steel for the above Works. for conducting the following tests.

- | | |
|----|-------------------|
| 7 | Nominal diameter |
| 8 | Unit weight |
| 9 | Tensile strength |
| 10 | Elongation test |
| 11 | 0.2% proof stress |
| 12 | Bend test, Rebend |

The necessary testing charges will be paid by M/s NCC Limited, Madhapur Hyderabad.
The results may be communicated at the earliest. *with the presence of DEE APMSIDC, VZM.*

Encl:- each dia 3 nos
Samples

Yours faithfully
M. Satya Prabhakar
26/3/2022
Executive Engineer
APMSIDC Division
Vizianagaram



TC-8024

Form No. MTH / F/81: Rev: 00

MATERIAL TESTING HOUSE (INDIA) LTD**मैटीरियल टेस्टिंग हाउस (इंडिया) लिमिटेड**

Accredited by National Accreditation Board for Testing and Calibration Laboratories

(NABL) vide Certificate number TC-8024

50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013

Tel: 0891- 2791342, Email: mthindialab@gmail.com

TEST REPORT**Unique Lab Report Number: ULR-TC802422000000051F**

Test report number MTH/TR/21687	Date 06-04-2022	Page number 01 of 01
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Name of Customer: *The Executive Engineer, APMSIDC Division, Vizianagaram. For 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Upgradation of 50 to 100 bedded Community Health Centre at S.Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadravari, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District.

Customer reference: Letter dated 26-03-2022.

Requisition No. RQ- 11414	Sample No. S-25779	Date of receipt 04-04-2022	Date of testing 04 to 06-04-2022	Test method IS:1608 Part-1: 2019; IS:1786-2008, IS:1599: 2019
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TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *Bmm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 5000 Make : *Maa Mahamaya Industries Limited Tests:		IS 1786 : 2008 *Grade Fe 5000
a)	Mass per metre, Kg	0.390	0.395 + (- 8 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	571	Minimum, 500
c)	Tensile strength, N/mm ²	654	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.15	≥1.10
e)	Elongation, percent	25	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

- Sample Submitted by: Sri K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
- Tests witnessed by: Sri S.V.T.R. Kumar, DEE & S.Bhaskar Raju, TA of Office of E.E. APMSIDC Division, Vizianagaram and K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
- Details furnished by the customer denoted by *
- Details marked over specimen denoted by **
- Elongation is reported on gauge length $5.65\sqrt{A}$ where A is the cross sectional area of the test piece.
- ♦ Tolerance on the nominal mass given for individual sample.
- Standard specification given for reference. If customer requirement is different, do not consider it.



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Conditions: 1. The results reported relate only to the items tested, endorsement of product is neither inferred nor implied. 2. Our total liability is limited to the billed amount. 3. The Balance quantity of the tested sample wherever possible shall be retained only for a period of three months from the date of test report unless otherwise specified. 4. This report shall not be reproduced except in full and cannot be used as an evidence in the court of Law and shall not be used in any advertising media without our written approval. 5. The test report relate to the sample submitted to us and not collected or sampled by Material Testing House (India) Ltd. (MTH), unless mentioned otherwise. 6. This report is being issued on the specific understanding that MTH will not in any way be involved in any action following interpretation of the above results. 7. MTH is not responsible for the information furnished by the customer and the same not verified by MTH.

Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality ManagerFor Material Testing House (India) Ltd
Authorised SignatoryDr. K. Srinivasa Varma
Director



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50-96-4, North Extension, Seethammadhara, Visakhapatnam-530013

Tel: 0891- 2791342, Email: mthindialab@gmail.com

TEST REPORT

Unique Lab Report Number: ULR-TC80242200000052F

Test report number MTH/TR/21688	Date 06-04-2022	Page number 01 of 01		
Name of Customer: *The Executive Engineer, APMSIDC Division, Vizianagaram. For 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Upgradation of 50 to 100 bedded Community Health Centre at S.Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadravari, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District.				
Customer reference: Letter dated 26-03-2022.				
Requisition No. RQ- 11414	Sample No. S-25780	Date of receipt 04-04-2022	Date of testing 04 to 06-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019

TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *10mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make: *Maa Mahamaya Industries Limited Tests:		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	0.605	0.617 *(-.8% Tolerance)
b)	0.2 percent proof stress, N/mm ²	515	Minimum, 500
c)	Tensile strength, N/mm ²	590	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.15	≥1.10
e)	Elongation, percent	22	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

- Sample Submitted by: Sri K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
- Tests witnessed by: Sri S.V.T.R. Kumar, DEE & S.Bhaskar Raju, TA of Office of E.E. APMSIDC Division, Vizianagaram and K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
- Details furnished by the customer denoted by *
- Details marked over specimen denoted by **
- Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
- * Tolerance on the nominal mass given for individual sample.
- Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House (India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



Form No. MTH / F/81: Rev: 00
MATERIAL TESTING HOUSE (INDIA) LTD

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TEST REPORT

Unique Lab Report Number: ULR-TC80242200000053F

Test report number MTH/TR/21689	Date 06-04-2022	Page number 01 of 01
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Name of Customer: *The Executive Engineer, APMSIDC Division, Vizianagaram, For 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Upgradation of 50 to 100 bedded Community Health Centre at S.Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadravari, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District.

Customer reference: Letter dated 26-03-2022.

Requisition No. RQ- 11414	Sample No. S-25781	Date of receipt 04-04-2022	Date of testing 04 to 06-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019
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TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *12mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests :		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	0.909	0.888* (- 6 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	563	Minimum, 500
c)	Tensile strength, N/mm ²	635	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.13	≥1.10
e)	Elongation, percent	23	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
2. Tests witnessed by: Sri S.V.T.R. Kumar, DEE & S.Bhaskar Raju, TA of Office of E.E. APMSIDC Division, Vizianagaram and K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. * Tolerance on the nominal mass given for individual sample.
7. Standard specification given for reference. If customer requirement is different, do not consider it.

Conditions: 1. The results reported relate only to the items tested, endorsement of product is neither inferred nor implied. 2. Our total liability is limited to the billed amount. 3. The Balance quantity of the tested sample wherever possible shall be retained only for a period of three months from the date of test report unless otherwise specified. 4. This report shall not be reproduced except in full and cannot be used as an evidence in the court of Law and shall not be used in any advertising media without our written approval. 5. The test report relate to the sample submitted to us and not collected or sampled by Material Testing House (India) Ltd. (MTH), unless mentioned otherwise. 6. This report is being issued on the specific understanding that MTH will not in any way be involved in any action following interpretation of the above results. 7. MTH is not responsible for the information furnished by the customer and the same not verified by MTH.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House (India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



MATERIAL TESTING HOUSE (INDIA) LTD

Form No. MTH / F/81: Rev: 00

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TEST REPORT

Unique Lab Report Number: ULR-TC80242200000054F

Test report number MTH/TR/21690	Date 06-04-2022	Page number 01 of 01
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Name of Customer: *The Executive Engineer, APMSIDC Division, Vizianagaram. For 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Upgradation of 50 to 100 bedded Community Health Centre at S.Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadravari, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District.

Customer reference: Letter dated 26-03-2022.

Requisition No. RQ- 11414	Sample No. S-25782	Date of receipt 04-04-2022	Date of testing 04 to 06-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019
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TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *16mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited		IS 1786 : 2008 *Grade Fe 500D
Tests:			
a)	Mass per metre, Kg	1.576	1.58 ± (- 6 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	587	Minimum, 500
c)	Tensile strength, N/mm ²	667	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.14	≥1.10
e)	Elongation, percent	21	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
2. Tests witnessed by: Sri S.V.T.R. Kumar, DEE & S.Bhaskar Raju, TA of Office of E.E. APMSIDC Division, Vizianagaram and K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. ♦ Tolerance on the nominal mass given for individual sample
7. Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House (India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



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TEST REPORT

Unique Lab Report Number: ULR-TC80242200000055F

Test report number MTH/TR/21691	Date 06-04-2022	Page number 01 of 01
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Name of Customer: *The Executive Engineer, APMSIDC Division, Vizianagaram. For 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Upgradation of 50 to 100 bedded Community Health Centre at S.Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadravilli, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District.

Customer reference: Letter dated 26-03-2022.

Requisition No. RQ- 11414	Sample No. S-25783	Date of receipt 04-04-2022	Date of testing 04 to 06-04-2022	Test method IS:1608 Part-1: 2018; IS:1786-2008, IS:1599: 2019
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TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *20mm (Nominal dia) HSD Bar Specimen Identification : **MANGAL TMT Fe 500D Make : *Maa Mahamaya Industries Limited Tests:		IS 1786 : 2008 *Grade Fe 500D
a)	Mass per metre, Kg	2.419	2.47* (- 4 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	539	Minimum, 500
c)	Tensile strength, N/mm ²	633	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.17	≥1.10
e)	Elongation, percent	20	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
2. Tests witnessed by: Sri S.V.T.R. Kumar, DEE & S.Bhaskar Raju, TA of Office of E.E. APMSIDC Division, Vizianagaram and K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. * Tolerance on the nominal mass given for individual sample.
7. Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by

K.S. Annamayya, M. Tech.
Quality Manager



For Material Testing House(India) Ltd
Authorised Signatory

Dr. K. Srinivasa Varma
Director



MATERIAL TESTING HOUSE (INDIA) LTD

Form No. MTH / F/SI: Rev:00

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TEST REPORT

Unique Lab Report Number: ULR-TC80242200000056F

Test report number MTH/TR/21692	Date 06-04-2022	Page number 01 of 01
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Name of Customer: *The Executive Engineer, APMSIDC Division, Vizianagaram. For 1) Strengthening of 30 bedded CHC at Nellimarla, 2) Strengthening of 30 bedded CHC at Kurupam, 3) Upgradation of 50 to 100 bedded Community Health Centre at S.Kota 4) Upgradation of 30-50 bedded CHC at Badangi, 5) Upgradation of 30-100 bedded CHC at Gajapathinagaram, 6) Upgradation of 30-100 bedded CHC at Saluru, 7) Upgradation of 30-50 bedded CHC at Bhadraviri, 8) Strengthening of 30 bedded CHC at Bhogapuram in Vizianagaram District.

Customer reference: Letter dated 26-03-2022.

Requisition No. RQ- 11414	Sample No. S-25784	Date of receipt 04-04-2022	Date of testing 04 to 06-04-2022	Test method IS:1608 Part-1: 2018; IS:1786:2008, IS:1599: 2019
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TEST RESULTS

S. No.	Description	Result	Requirements of
MECHANICAL TESTING: Mechanical Properties of Metals			
01.	Sample : *25mm (Nominal dia) HSD Bar. Specimen Identification : **MANGAL TMT Fe 500D Make: *Maa Mahamaya Industries Limited		IS 1786 : 2008 *Grade Fe 500D
Tests:			
a)	Mass per metre, Kg	3.722	3.85+ (-4 %Tolerance)
b)	0.2 percent proof stress, N/mm ²	546	Minimum, 500
c)	Tensile strength, N/mm ²	627	Not less than 565
d)	Tensile strength / 0.2 % proof stress ratio	1.15	≥1.10
e)	Elongation, percent	17	Minimum, 16.0
f)	Bend	Passed	No rupture or cracks visible
g)	Rebend	Passed	No rupture or cracks visible

Notes:

1. Sample Submitted by: Sri K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
2. Tests witnessed by: Sri S.V.T.R. Kumar, DEE & S.Bhaskar Raju, TA of Office of E.E. APMSIDC Division, Vizianagaram and K.V.Soma Sekhar, Engineer of M/s. NCC Limited.
3. Details furnished by the customer denoted by *
4. Details marked over specimen denoted by **
5. Elongation is reported on gauge length $5.65\sqrt{A}$, where A is the cross sectional area of the test piece.
6. ♦ Tolerance on the nominal mass given for individual sample.
7. Standard specification given for reference. If customer requirement is different, do not consider it.



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Test Results Reviewed by


K.S. Annamayya, M.Tech.
Quality Manager



For Material Testing House(India) Ltd
Authorised Signatory


Dr. K. Srinivasa Varma
Director

From

Sri S.Simmanna ,
Dy. Executive Engineer,
APMSIDC Sub-Division,
Srikakulam District

To

The Head of the Department
Civil Engineering Department,
Andhra University,
Visakhapatnam

Lr. No. DEE/ APMSIDC- /2020-21, Dt. 25-03-2022

Sir,

Sub: APMSIDC Seethampeta Sub Division, Srikakulam District – Testing of steel bar samples test for physical and mechanical properties for the work “*Establishment of super Speciality Hospital at Seethampeta in Srikakulam District*” – Steel bars testing – furnishing test report – Requested – Regarding.

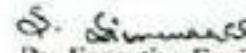
With reference to the above subject, it is to submit that steel bar samples each 3 specimen 1 meter length 3 sets of 8mm Dia, 10mm dia, 12mm dia, 16mm dia, 20mm dia, and 25mm dia of MANGAL TMT 500D now sending for physical and mechanical properties tests.

Test to be conducted:

- 1) Weight per meter length and dia of bars
- 2) 0.2% Proof Stress in N/Sq.mm
- 3) Tensile Strength in N/Sq.mm
- 4) Elongation in Percentage
- 5) Bend
- 6) Re-bend

The testing charges will be paid by agency M/s. NCC Limited, Hyderabad.
I request your good selves to furnish the test reports at an early date.

Yours faithfully,


Dy. Executive Engineer 25/3/22
APMSIDC Division,
Srikakulam.



ISO 9001:2008 Certified
Accredited with 'A' Grade by NAAC

DEPARTMENT OF CIVIL ENGINEERING
COLLEGE OF ENGINEERING (Autonomous)
ANDHRA UNIVERSITY

VISAKHAPATNAM-530 003.

Ph. : 0891-2844774(0)
email : auctvithod@gmail.com

F701/CE/SE/PT/T.No. 69/2022-23



Date : 21/04/2022

Test(s) conducted by : **STRUCTURAL ENGINEERING DIVISION**

Test(s) conducted for : The Dy, Executive Engineer, APMSIDC, Srikakulam.
Lr>No. DEE/APMSIDC/2020-21, Dated: 25.01.2022.

Reference Letter No. :

Description : Testing of steel bar samples test for Physical and Mechanical properties -- Construction of Establishment of Super specialty Hostel at APMSIDC Seethampeta Sub Division, Srikakulam District.

Note : steel bar samples Each 3 Specimens 1 meter length 6 sets of 8 mm, 10 mm, 12 mm, 16 mm, 20 mm & 25 mm.

Samples are sent by the party with description (identity mark) noted below and reference cited above.

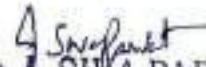
TEST RESULTS

Date of Testing : 16.04.2022

Mangal TMT 500D

S.No.	Description	Sample /Result		
		8 mm	10 mm	12 mm
1	Dia of the rod as specified by the party (mm)			
2	Weight per meter length (kg)	0.394	0.620	0.882
3	Area (mm ²)	50.19	78.98	112.35
4	Actual Diameter (mm)	7.99	10.02	11.96
5	0.2% Proof Stress (MPa)	528.0	521.65	523.81
6	Ultimate Tensile Stress (MPa)	622.63	621.04	628.84
7	Elongation (%)	22.50	26.00	21.67
8	Bend Test & Re bend Test	Withstood		

S.No.	Description	Sample /Result		
		16 mm	20 mm	25 mm
1	Dia of the rod as specified by the party (mm)			
2	Weight per meter length (kg)	1.600	2.468	3.878
3	Area (mm ²)	203.82	314.39	494.01
4	Actual Diameter (mm)	16.11	20.00	25.08
5	0.2% Proof Stress (MPa)	538.95	542.8	532.17
6	Ultimate Tensile Stress (MPa)	625.55	624.06	631.46
7	Elongation (%)	22.50	20.00	21.60
8	Bend Test & Re bend Test	Withstood		


Dr. I. SIVA PARVATHI
M.E, Hydraulics, Coastal & Harbour Engg.,
M.E, (Structures), Ph.D.,
TESTING IN-CHARGE


Head of the Department
Department of Civil Engineering
College of Engineering (A)
Andhra University, Visakhapatnam

ANDHRA PRADESH

MEDICAL SERVICES AND INFRASTRUCTURE DEVELOPMENT CORPORATION
ELURU DIVISION

From:

(M. SRINIVASA REDDY)
Deputy Executive Engineer
APMSIDC Sub-Division
ELURU

To:

The Head of Civil Eng. Dept.
M/S. KDM ENGINEERS
Vskakhatnam

Ly. NO. NMBARD/DYCC/ELURU/DB/2020 - 21/115/DL:

Sir,

Sub:- Works - APMSIDC Division, ELURU - NMBARD - XXIV, XXV, XXVI (NAVARATNALU) - Strengthening of AHU / CHC at -
i. Upgradation of 50-100 bedded CHC at Bhimavaram (NMBARD XXV) - in W.G. District - Testing of FE-500 D Steel of Simhadri make (8, 10, 12, 16 mm dia) - Requested.

Ref:- LS Agt No. 05/APMSIDC/2020 21, Dated:

In the reference cited, the work is estimate to M/s NCC limited, Hyderabad and agency has supplied steel of 8mm, 10mm, 12mm, 16mm dia of Fe-500 D grade of Mangal TMT brand of above works.

I request that the following test may please be conducted for these samples.

(a) Elongation (b) Bend (c) Re-Bend (d) Ultimate tensile stress (e) C 27 proof stress (f) Char (g) wt for moisture length (h) Dia.

The results may please be communicated at an early date.

Yours Faithfully,
M. Srinivasa Reddy
(M. SRINIVASA REDDY)
Deputy Executive Engineer
APMSIDC Sub-Division
ELURU



KDM ENGINEERS (INDIA) PRIVATE LIMITED

Complete Civil Engg. Solutions



TC-4036

REF: KDMEL/VSKP/STEEL/04/2022/7624

M/s. Deputy Executive Engineer,
APMSIDC Sub-Division,
Eluru.

Report issue Date: 13th April, 2022

Report No: TC40362200000513F



TEST REPORT

Description of the sample	:	Reinforcement Steel
Source of the sample	:	Sample supplied by the customer
No. of specimens tested	:	12(Twelve only)
Test method	:	IS: 1608, IS: 1786 & IS: 1599
Customer Reference	:	Letter. No. NABARD/DYEE/ELURU/DB/2020-21/115/Dated: 11.04.2022
Work	:	APMSIDC Division, Eluru - NABARD-XXIV, XXV & XXVI (NAVARATNALU) Strengthening/ Upgradation of 50-100 beded CHC at Bhimavaram (NABARD XXV) in West Godavari District
Ref	:	LC Agreement No. 05/APMSIDC/2020-21, Dated:
Make Grade*	:	MANGAL FE 500D
Material received on	:	13.04.2022
Period of test	:	13.04.2022 to 13.04.2022
Condition of samples	:	Satisfactory when received
Deviation if any	:	Not Applicable

Sl. No.	Dia* (mm)	Weight/ Meter (Kg/m)	Yield Stress (YS) (N/mm ²)	Tensile Strength (TS) (N/mm ²)	TS/YS Ratio	Elongation (%)	Bend Test	Re bend Test
1	8	0.390	539	629	1.17	20.8	Satisfactory	Satisfactory
2	10	0.614	551	630	1.14	20.4	Satisfactory	Satisfactory
3	12	0.858	504	589	1.17	23.7	Satisfactory	Satisfactory
4	16	1.596	603	703	1.17	19.6	Satisfactory	Satisfactory

* Details as furnished by the customer

Requirements as per IS: 1786

Dia (mm)	Mass (kg/m)		Dia (mm)	Mass (kg/m)		Grade	TS/YS Ratio	0.2% Proof Stress / Yield stress (N/mm ²) (Min.)	U.T.S (N/mm ²) (Min.)	Elongation (%) (Min.)
	Min.	Nominal		Min.	Nominal					
8	0.363	0.395	20	2.371	2.470	Fe500D	≥ 1.10, but TS not less than 565.0 N/mm ²	500	565 or 10% more than actual 0.2% Proof Stress/Yield stress whichever is higher	16.0
10	0.567	0.617	25	3.697	3.850					
12	0.834	0.888	28	4.638	4.830					
16	1.483	1.580	32	6.058	6.310	Fe550	≥ 1.06, but TS not less than 585.0 N/mm ²	550	585 or 6% more than actual 0.2% Proof Stress/Yield stress whichever is higher	10.0

- Note:**
- The results relate to the samples supplied by the customer.
 - Report shall not be reproduced, except in full, without the written approval of the laboratory.
 - Any corrections invalidate this report.
 - Retention period of samples are 15 days from the date of issue of test report, then it will be dispose off

Remarks: The tested parameters are satisfying the requirements of FE 500D

-----End of Report-----

Reviewed by. *B. Satyanarayana*
BSATYANARAYANA

for KDM ENGINEERS (INDIA) PVT. LTD.



Page 1 of 1



LION ENGINEERING CONSULTANTS PVT. LTD.

"Contributing in Building the Infrastructure of the Nation"

CIN No. U74999MP2020PTC050788

Sri Sobha Rani Nilayam,
1st Floor, Satyanarayana Nagar,
Opp. Durga Temple, Kusalapuram (Village),
Farad Peta (Post), Etcherla (Mandal),
Srikakulam (District), Andhra Pradesh-532405,
Tel: 08942-271799.

Date: 09.04.2021.

Letter No. LION/IE-0418/2018/NHAI-APCO-NR /1537

To,
Mr. B. Eswara Rao,
M/s APCO Arasavalli Expressway Pvt. Ltd.
Km: 615, S.M. Puram Road,
Beside Kesava Reddy School, Etcherla,
Srikulam, Andhra Pradesh-532410, India.
Email: berao@apcoinfra.com, dc.nrmp@apcoinfra.com

Sub : Independent Engineer Services for Supervision of Six Laning of Narsannapeta-Ranastalam Section of NH-16 (Old NH-5) from design km 580.671 (Existing km 580.700) to design km 634.861 (Existing length 634.000) (Design Length=54.19 km) in the State of Andhra Pradesh under NHDP Phase-V on Hybrid Annuity Mode. **"Consent on Credential of M/s Maa Mahamaya Industries Ltd. brand of "Mangal TMT" Reinforcement Steel bars - R. G. Peta (V), L. kota (M), Vizianagaram District - 535161, A.P. - for Source Approval of Mangal TMT Reinforcement Steel bars."-Reg.**

Ref: 1. Concession Agreement dated 18th January 2018;
2. MORHT 5th Revision, Section 1000.
3. IS code: 1786.2008.
4. Your letter No: AAEP/ NR/-APCO/IE/2020-21/1558; dated on: 07.04.2021.

Dear Sir,

This has reference of above mentioned subject the Concessionaire submitted the credentials of M/s Maa Mahamaya Industries Ltd, brand of "Mangal TMT" Reinforcement Steel bars - R. G. Peta (V), L. kota (M), Vizianagaram District - 535161, A.P. - for Source Approval of Mangal TMT Reinforcement Steel bars to this office for review.

IE reviewed the submitted same and found that the submitted credential is meeting the MORTH 5th revision - 2013, section 1000 & IS code 1786-2008 and specification and requirement.

Please arrange for factory inspection to verify the Quality management system of the plant before procuring proposed material from this manufacturer.

This is for your information and necessary action.

Thanking You.

Yours sincerely,

For & On Behalf of M/s Lion Engineering Consultants Pvt Ltd,


(G. Ellappan)
Team Leader

Copy for information: -

1. The Project Director, Project Implementation Unit (GQ)-National Highways Authority of India (NHAI) Enclave, KM. 2/8 NH-16 Hanumanthavaka, Visakhapatnam-530 040 (AP).
Email-vis@nhai.orgnhaipluvs@gmail.com.
2. Corporate office, Lion Engineering Consultants Pvt Ltd, Bhopal.



KDM ENGINEERS (INDIA) PRIVATE LIMITED

Complete Civil Engg. Solutions

Dated: 19th June, 2021

TCKDMV21000006869



REF: KDMEI/VSKP/STEEL/07/2021/6776
M/s. APCO INFRATECH PVT.LTD.
Universal Trade Tower, 4th Floor,
Sector 48-49, Sohna Road,
Gorugram -122101(Haryana).

TEST REPORT

Description of the sample
Source of the sample
No. of specimens tested
Test method
Customer's Reference
Work*

Reinforcement Steel
Sample supplied by the customer
09(Nine only)
IS: 1608; IS: 1599
Letter No. APCO/NR-APCO/LAB/2021-1706, Dated: 15.07.2021
Six Laning of Narasannapeta-Ranastalam Section of NH-16 (Old NH-5) from
Design Km 580.671 (Existing Km 580.700) to Design Km 632.861 (Existing Km
634.000) (Design Length- 54.19 Km) in the State of Andhra Pradesh Under
NHDP Phase-V on Hybrid Annuity Mode.
MANGAL TMT FE 500D
15.07.2021
19.07.2021 to 19.07.2021
Satisfactory

Make & Grade*
Material received on
Period of test
Condition of samples

15.07.2021
19.07.2021 to 19.07.2021
Satisfactory

Sl. No.	Dia* (m m)	Lot No.*	Weight/ Meter (Kg/m)	Yield Stress (YS) (N/mm ²)	Tensile Strength (TS) (N/mm ²)	TS/YS Ratio	Elongation (%)	Bend Test	Re bend Test
1	8	695	0.378	511	615	1.20	20.5	Satisfactory	Satisfactory
1	10	682	0.602	529	622	1.18	20.8	Satisfactory	Satisfactory
3	12	692	0.882	519	609	1.17	20.8	Satisfactory	Satisfactory

* Details as furnished by the customer
Requirements as per IS: 1786

Dia (mm)	Mass (kg/m)		Dia (mm)	Mass (kg/m)		Grade	TS/YS Ratio	0.2%ProofStress / Yield stress (N/mm ²) (Min.)	U.T.S (N/mm ²) (Min.)	Elongation (%) (Min.)
	Min.	Nominal		Min.	Nominal					
8	0.363	0.395	20	2.371	2.470	Fe500D	≥ 1.10, but TS not less than 565.0 N/mm ²	500	565 or 10% more than actual 0.2% Proof Stress/Yield stress whichever is higher	16.0
10	0.567	0.617	25	3.697	3.850					
12	0.804	0.888	28	4.638	4.830	Fe500D	≥ 1.08, but TS not less than 600.0 N/mm ²	550	600 or 08% more than actual 0.2% Proof Stress/Yield stress whichever is higher	14.5
16	1.403	1.580	32	6.058	6.310					

- Note:
- The tests are witnessed by Mr. P.Ramakrishna (AQME, LEC) & Mr. M.Apparao (APCO).
 - The results relate to the samples supplied by the customer.
 - Report shall not be reproduced, except in full, without the written approval of the laboratory.
 - Any corrections invalidate this report.

Remarks: The above tested parameters are satisfying the requirements of FE500D as per IS: 1786 table-3 for the given sample.
for KDM ENGINEERS (INDIA) PVT. LTD.,

AUTHORISED SIGNATORY
NIVEDITA-BARIK

Page 1 of 1

Plot No. 93, E-Block, Autonagar, Visakhapatnam - 530 012, A.P.

Cell: 09912944495, 08328498601, E-mail: lab.vizag@kdmengineers.com, Website: www.kdmengineers.com



KDM ENGINEERS (INDIA) PRIVATE LIMITED

Complete Civil Engg. Solutions



REF: KDMEI/GNT/07-025/Steel/2021/07-8220

Dated: 23rd July 2021

M/s. Apco Infratech Pvt Ltd.,
Universal Trade Tower,
4th Floor, Sector 48-49, Sohna Road,
Gurugram-122 101, Haryana.

TC5518 21000008257

TEST REPORT ON REINFORCING STEEL

Source of the sample	:	Sample supplied by the customer
No. of samples tested	:	03(Three Only)
Test method	:	IS: 8811 - 1998 (Reaffirmed 2012)
Customer's Reference	:	Lr.No. APCCO/NR-APCCO/LAB/2021-1706, Dt:15.07.2021
Subject*	:	Six Lining of Narasannapeta-Ranastalam Section of NH-16 (Old NH-5) from design Km.580.671 (Existing Km.580.700) to design Km.632.861 (Existing Km.634.000) Design Length-54.19 Km) in the State of Andhra Pradesh under NHDP Phase-V on Hybrid Annuity Mode.
Brand*	:	MANGAL TMT, Fe 500D
Material received on	:	19.07.2021
Date of test	:	23.07.2021
Condition of samples	:	Satisfactory

TESTED FOR Fe 500D GRADE

Sl. No	Sample Description*	Lot No*	Dia (mm)	C %	S %	P %	S+P %
1	Reinforcement Steel	695	8	0.101	0.024	0.019	0.043
2	Reinforcement Steel	682	10	0.118	0.024	0.024	0.048
3	Reinforcement Steel	692	12	0.126	0.022	0.021	0.043


* As furnished by the customer

Requirements as per IS: 1786 - 2008(RA2013)	C % (max.)	S % (max.)	P % (max.)	S+P % (max.)
Fe 500	0.30	0.055	0.055	0.105
Fe 500D	0.25	0.040	0.040	0.075

- Note: 1. The results relate to the samples supplied by the customer.
2. Report shall not be reproduced, except in full, without the written approval of the laboratory.
3. Any corrections invalidate this report.

Remarks: The tested samples conform to IS: 1786-2008 (RA 2013) requirements for the abovementioned tests For Fe500D Grade

For KDM ENGINEERS (INDIA) PVT. LTD.,


AUTHORISED SIGNATORY
P.VIJAY KUMAR
TECHNICAL MANAGER



Page 1 of 1



Lr. No: TL/NH-234/LOT-II/Chik/2016/200

Date: 29-07-2016

To

M/s Ashoka Buildcon Ltd,
S.No. 861, Ashoka House,
Ashoka Marg, Vadala
Nashik-422011,
Maharashtra.

Sub:- Rehabilitation and Upgrading to 2 lanes/ 2 lane with paved Shoulders Configuration and Strengthening of Madhugiri- Mulbagal section from km 343.800 to km 483.151 of NH-234 in the state of Karnataka for Lot-II (Km . 400.330 to km 483.151) under Phase-I of NHIP –Maa Mahamaya Industries Ltd - reg

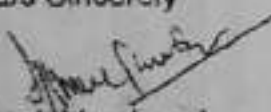
- Ref:**
- 1) Your letter no: ABL/MORTH/NH234/site/16-17/248 dated 04/07/2016
 - 2) Our letter no: TL/NH-234/LOT-II/Chik/2016/ 190 dated 13-07-2016
 - 3) Your letter no: ABL/MORTH/NH234/site/16-17/248 dated 04/07/2016
 - 4) No.CNH/ TA2/ AE8/ MMIL/ vendor/ 2016-17/ 652 dated 28-05-2016

Dear Sir,

In continuation with the above letters and Chief Engineer's office letter, we have no objection to procure steel from above source. However, before Steel is delivery at site, you have to arrange our representative to conduct essential tests to be carried out at Manufacturers plant Laboratory.

Thanking you.

Yours Sincerely


(Jacob Varghese)

Team Leader

(EE-Theme JV)

- Copy to 1) SE, PPP Cell, Bangalore,
2) SE RO Bangalore
3) EE, PIU, Chikkaballapur for information
4) Eurostudios - S. L, Delhi for information
5) Theme Engineering Services Pvt. Ltd. Jaipur for information
6) PMC Roughton-Aarvee

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
EAP (ZONE)

1-Parliament Street
Transport Bhawan
New Delhi-110001
Dated: 30.01.2017

RW/NH-12013/33/6/2010/SP(A-2)/P-9/EAP

(Certificate No. NH-234/Excise/Ashoka Buildcon Limited/Lot-II-10) ³¹
TO WHOMSOEVER IT MAY CONCERN

This is certify that work of "Rehabilitation and upgrading to 2 line with/without paved shoulders configuration and strengthening of Madugiri-Mulbagal section (km 343.800 to km 483.151) of NH-234 in the State of Karnataka Lot-II (from km. 400.330 to km. 483.151) under Phase-I of National Highways Inter-Connectivity Improvement Projects (NHIIP)" (Package No. NHIIP-KA-234-10) has been awarded to M/s Ashoka Buildcon Limited, Ashoka House, Ashoka Marg, Ashoka Nagar, Nashik, Maharashtra-422011. The Contract Agreement was signed on 24.03.2015. The project is being implemented by the Government of India with Loan assistance from the World Bank under Loan Agreement No. 8301 IN.

Certified further that M/s Ashoka Buildcon Limited has proposed to procure the following materials and the same are required for execution of the project:


S. NO	Material	Manufacturer/Supplier	Quantity approved by Ministry	Type of Exemption
1.	Steel(HSD of grade Fe-500)	M/s MAA Mahamaya Industries Ltd. R.G. Peta Village, L. Kota Mandal, Vizianagaram Dist-535161, Andhra Pradesh		Excise
	8 mm		120 MT	
	10 mm		150 MT	
	12 mm		125 MT	
	16 mm	200 MT		
		Total	595	


It is further certified that the aforesaid material is required for the execution of the above said project has duly been approved by the Government of India. Construction work is scheduled to be completed by 17.01.2018.

It is requested that the necessary exemption from Excise Duty may be allowed against above referred material to M/s Ashoka Buildcon Limited as per Government of India (Ministry of Finance, Department of Revenue) Notification No. 108/95-C.E. dated 28.08.1995 as amended time to time. This certificate is being issued subject to condition that product should meet the minimum standard as fixed by BIS and confirming to specification of MORT&H/IRC.

This certificate shall remain valid for six months from the date of issue.

Countersigned by:


(Leena Nandan)
Joint Secretary (EAP)
MoRTH, New Delhi


(Khushal Chand)
Superintending Engineer (EAP)

CEMOSAARMENG E/IEAP/NHAI/VSKP/2020/551

22.02.2020

TO
The General Manager,
M/s DILIP BUILDCON LIMITED,
Anandapuram - Anakapalli Road Project
Neelakundilu village, Sontyam,
Anandapuram, Visakhapatnam,

Sub : Consultancy Services for Independent Engineer for Supervision of Six laning of Anandapuram-Pendurthi-Anakapalli Section of NH-5 (new NH-16) from Km.681.000 (Existing Km.681.000) to Km.731.780 (Existing Km.742,400) (Design Length=50.78 Km) in the State of Andhra Pradesh under Bharatmala Pariyojana on Hybrid Annuity Mode - Source Approval Of Steel (MANGAL TMT) From Mahamaya Industries Ltd.-Reg.

Ref: 1) Circular No. 11041/218/2007-Admin.	Dated: 18.08.2010
2) DBL/NHAI/DBLAAHPL/19-20/384	Dated: 04.10.2019
3) CEMOSAARMENG E/IEAP/NHAI/VSKP/2019/265	Dated: 16.10.2019
4) DBL/NHAI/DBLAAHPL/19-20/586	Dated: 17.02.2020

Dear Sir,

In reference to the above cited letter (4), the concessionaire had submitted the credentials of M/S Mahamaya Industries Ltd. (Mangal TMT) plant/Factory located at L kota mandal, Vijaynagaram District, (Andhra Pradesh) has been inspected by our under signed person along with our SQME on 28.12.2019 along with your Authorized Representative and found in order as per standards IS 1786 2008, For the procurement of TMT steel for construction of structural works of the project, we noticed the following observations during visiting of steel factory,

- Mahamaya Industries Ltd. (Mangal TMT) produces its own billet for making their TMT through own integrated process from Iron Ore.
- In house QC Laboratory is well equipped like spectrometer analysis and Universal Testing machine to conduct all Mechanical and Chemical test.
- Sample of different diameter bars were tested for physical and chemical composition and found satisfactory as per IS: 1786 2008.
- This approval has accorded as per guidelines of Ministry of Steel, Government of India Gazette notification as appended.

Therefore, we accord source approval for TMT reinforcement steel in the Structures of the project, from manufactured at M/S Mahamaya Industries Ltd. (Mangal TMT).

However, we inform to fulfill the following requirements before you incorporate these materials in the permanent works.

- Each consignment must be supported with manufacturing test certificate.
- Only new materials shall be supplied to the site and defective or non confirming material to be discarded.
- Each lot of supply should be tested in recognized independent NABL accredited laboratory and sampling must be done in presence of IE.

Site office:

G-1, Dinesh Homes, Penderthi, Andhra Pradesh, PIN - 530047

Mob: 9414184839 email: cemosarmenge.apa@gmail.com

Central Offices India:

502, 5th Floor, DDA-5 Building, District Centre, Janakpuri, New Delhi - 210058, India. Tel.: (+91) 011-47503189.

Letter no: SSI dated 22/2/20

- Material stock shall be maintained at site and shall be produced as and when required.
- Storage and protection needs to be assured as per MORT&I section 1603. Only fresh lot of material shall be delivered at site.
- If test on selected piece do not confirm with the specification, the entire lot is liable for rejection without any consideration for retesting.
- Quality control test should be done at the required frequency, as specified.
- Approval shall not relieve the contractor from any of his responsibilities under the contract.
- Procurement, storage and use of the material shall be in conformity with relevant IS/IRC codes and manuals issue from time to time.

Yours truly,

For Centro de Estudios de Materials y Control de Obra, SA in association with
ARMENGE Engineering and Management Consultants Pvt Ltd

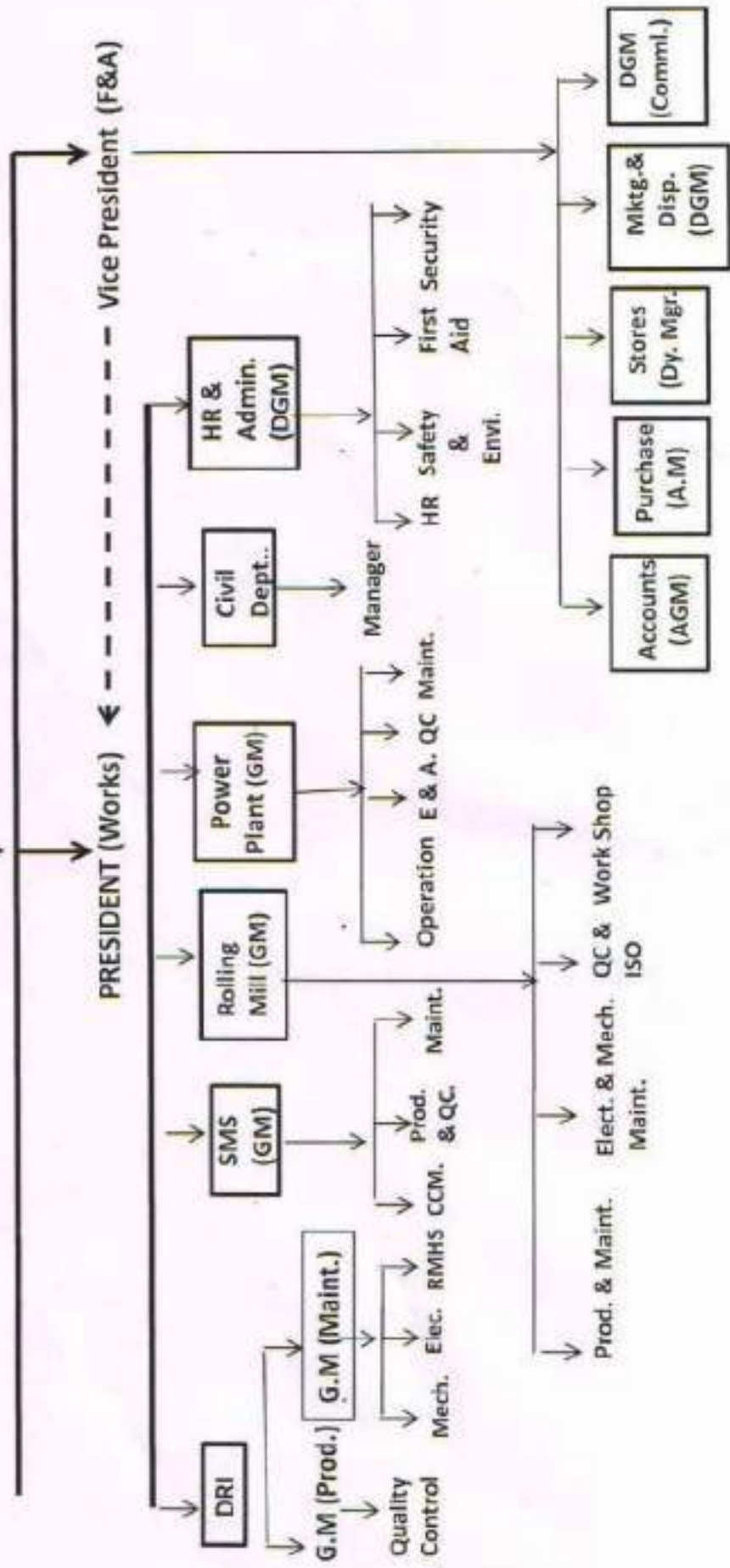

(P. Devidas)

Team Leader cum Senior Highway Engineer.

Copy To :- 1.PD-PIU, NHAI, Visakhapatnam.

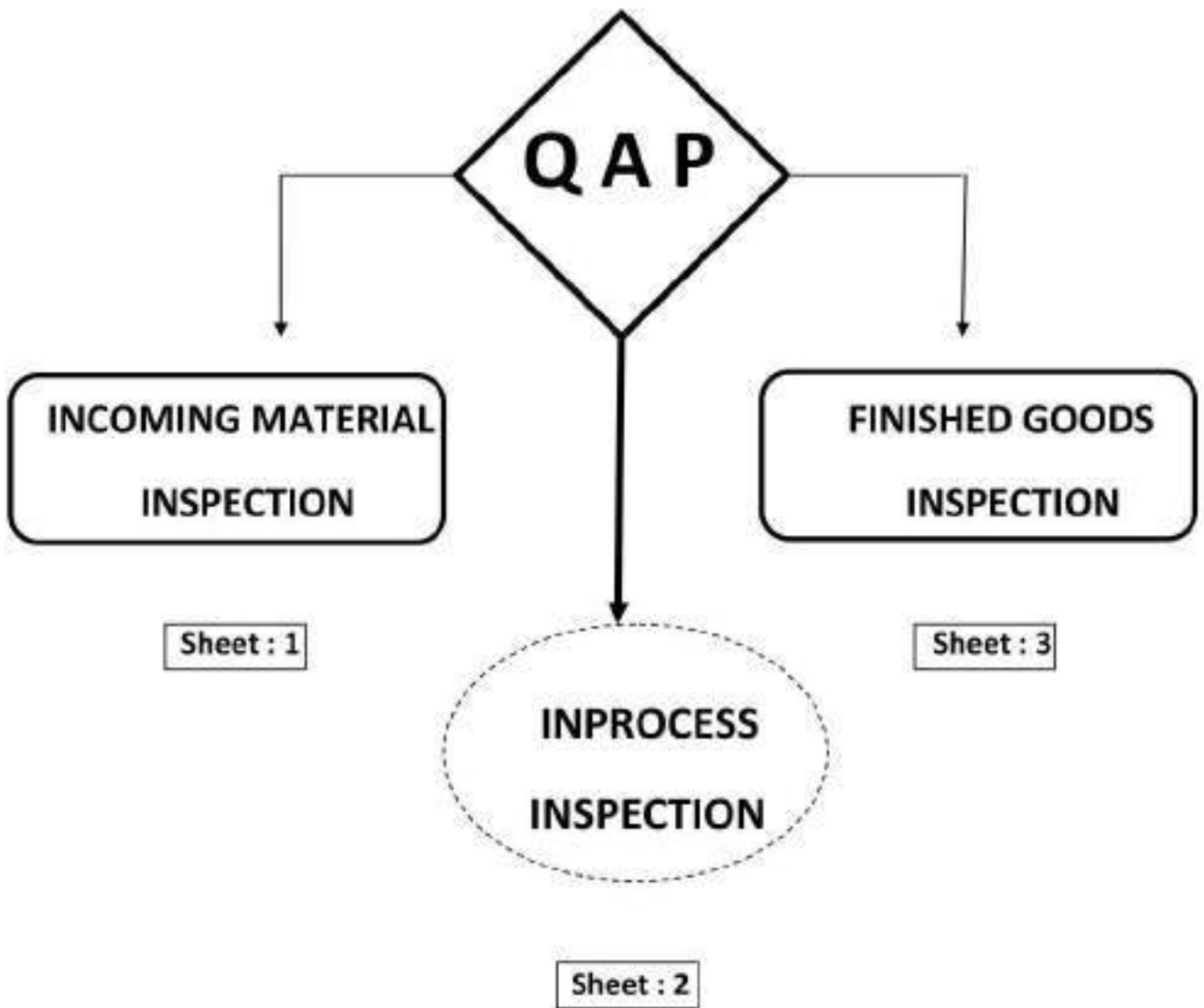
ORGANISATION CHART OF MAA MAHAMAYA INDUSTRIES LIMITED

Chairman & Managing Director



13. QUALITY ASSURANCE PLAN

MAA MAHAMAYA INDUSTRIES LIMITED



SHEET : 1

INCOMING MATERIAL INSPECTION

Material	Testing Frequency	Tested For		Specification
		Physical parameter	Chemical parameter	
Iron Ore	Once in a day for source wise receipt.	Moisture, Sieve analysis, TI, AI & Contamination	Fe(t), LOI, SiO ₂ , Al ₂ O ₃ & Phosphorus	TI=92.00min, AI=3.00max, Fe(t)=65.00min, SiO ₂ &Al ₂ O ₃ =5.00max, P=0.035max, IS:15774:2007
Coal	Once in a day for source wise receipt.	Moisture, Sieve analysis & Contamination	Proximate analysis(IM, VM, Ash & FC), GCV & Sulphur	MOI=9.00max, GCV=3500to6200, Sulp=0.80max. IS:1350(Part-1):1984
Dolomite	Once in a day for source wise receipt.	Sieve analysis & Contamination	LOI, CaO, MgO & SiO ₂	LOI=42.00min, CaO=29.00min, MgO=20.00min & SiO ₂ =3.00max, IS:1760(Part-3):1992
Pig Iron	Once in a day for source wise receipt.	Contamination	Carbon, Sulphur & Phosphorus	Carbon=3.50min, Sulphur=0.040max & Phosphorus=0.120max, IS:13502:1992
Billet	Cast number wise	Length, Section, Camber, Raising, Bend & Freedom from defects.	Carbon, Manganese, Sulphur, Phosphorus, Silicon & CE	Carbon=0.23max, Manganese=0.45to1.00, Sulphur=0.040max, Phosphorus=0.040max, S+P=0.075max, Silicon=0.10min & CE=0.42max, IS:1786:2008 Fe500 D

SHEET : 2

INPROCESS INSPECTION

Material	Testing Frequency	Tested For		Specification
		Physical parameter	Chemical parameter	
Sponge Iron	Every Two hours	Mag, N.Mag & Sieve Analysis	Fe(m), Fe(t), Mz ⁰ , Carbon, Sulphur, Phos	Fe(m)=76.0min, Fe(t)=88.0min, Mz=86.0min, Carbon=0.08to0.12, Sulphur=0.030max, Phos=0.035 , IS:15774:2007
Liquid Metal	Every Heat before Casting	-	Carbon, Mangnace, Sulphur, Phosphours, Silicon & CE	Carbon=0.23max, Mangnace=0.45to1.00, Sulphur=0.040max, Phosphours=0.040max, S+P=0.075max, Silicon=0.10min & CE=0.42max, IS:1786:2008, Fe500 D

SHEET : 3

FINISHED GOODS INSPECTION

Material	Testing Frequency	Tested For		Specification
		Physical parameter	Chemical parameter	
Sponge Iron	Every Four hours	Mag. N.Mag & Seve Analysis	Fe(m), Fe(t), Mz ² , Carbon,Sulphur, SiO ₂ +Al ₂ O ₃ & Phosphorus	Fe(m)=76.0min, Fe(t)=88.0min, Mz=86.0min, Carbon=0.08to0.12, Sulphur=0.030max, Phos=0.035 IS:15774:2007
Billet (Check Analysis)	Every Heat Casting wise	Length, Section, Camber, Raising, Bend & Freedom From defects	Carbon, Mangnace, Sulphur, Phosphours, Silicon & CE	Carbon=0.23max, Mangnace=0.45to1.00, Sulphur=0.040max, Phosphours=0.040max, S+P=0.075max, Silicon=0.10min & CE=0.42max, IS:14650:1999 IS:1786:2008, Fe500 D
HSD T M T BAR	Every Half an Hour	Surface defects, Nominal size, Wt/mtr,	-	IS:1786:2008, Fe500D, Saparate Sheet Enclosed
HSD T M T BAR	Every Hour	Yield Stress, Tensile Stress, Ratio(TS/YS),Elongation, Bend & Rebend	-	
HSD T M T BAR	Every Nominal size once in a day	Rib Area	-	
HSD T M T BAR	Every Nominal size lot wise	Surface defects, Nominal size, Wt/mtr, Yield Stress, Tensile Stress, Ratio(TS/YS),Elongation, Bend, Rebend & Rib Area	Carbon, Mangnace, Sulphur, Phosphours, Silicon & CE (Cast No wise Feeding)	Carbon=0.23max, Mangnace=0.45to1.00, Sulphur=0.040max, Phosphours=0.040max, S+P=0.075max, Silicon=0.10min & CE=0.42max, IS:1786:2008, Fe500 D

SHEET : 4
FINISHED GOODS T M T Specification

Nominal Size (mm)	8 mm	10 mm	12 mm	16 mm	20 mm	25 mm	28 mm	32 mm
Freedom from Defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects	Free from surface defects
Wt/mtr Kg	0.395	0.617	0.888	1.58	2.47	3.85	6.81	6.11
Yield Stress N/mm2 (min)	500	500	500	500	500	500	500	500
Tensile Stress N/mm2 (min)	565	565	565	565	565	565	565	565
Ratio (TS/YS)	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10	>/= 1.10
Elongation %	16	16	16	16	16	16	16	16
Bend	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks
Re-Bend	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks	No rupture or cracks
Deformation & Surface Characteristics(Rib Area (Ar)) mm	0.12xDia min	0.12xDia min	0.15xDia min	0.15xDia min	0.17xDia min	0.17xDia min	0.17xDia min	0.17xDia min

MAA MAHAMAYA INDUSTRIES LTD
QUALITY ASSURANCE
LIST OF INSTRUMENTS SMS & Rolling Mill

Sl.No	Name of Instrument/Equipment	Least Count /Range/Cap	Use of Instrument/Equipment	Qty
1	Jaw Crusher	Input:40mm, Output:5mm	For Coal & Sponge Iron Crushing	1
2	Disc Grinder	Input:5mm, Output:212µm	Sponge Iron Powder	1
3	Tumbler	25 rpm	Iron Ore Tumbler & Aibration Index (Iron Ore Hardness test)	1
4	Magnetic Stirrer with Hot Plate	150 dig	Fe(m) test in Sponge Iron	1
5	Hot Air Oven	0 to 300, LC:1 dig	Moisture test & Fee in Raw materials	2
6	Muffel Furnace	0 to 1200 dig, LC:1dig	V.M, Ash & Silica Ignition	2
7	Carbon Appratus	0 to 1.5%, LC:0.01%	Carbon Test in Raw materials & STEEL	2
8	Combustion Furnace	0 to 1300 dig, LC:1 dig	Carbon Test in Raw materials & STEEL	1
9	Hot Plate	0 to 200 dig	During analysis Solutions Boiling purpose	2
10	Analytical Balance	0 to 200 grm, LC:1 mg	Weighing the test sample	1
11	Digital Analytical Balance	0 to 220 grm, LC:1 mg	Weighing the test sample	1
12	Weighing Balance	2gr to 25kg, LC:2 gr	Physical Analysis weighing	1
13	Barometer	433mm/Hg	To be know Atmosphere Pressure	1
14	Bomb Calorimeter	LC:0.01 dig	Grass Calorific Value test	1
15	Thermometer 50 ^o C	0 to 50 dig, LC:1 dig	To know temperature in water & Diesel ect...	1
16	Thermometer 100 ^o C	0 to 100 dig, LC:1 dig	To know temperature in water & Diesel ect...	1
17	Measuring Scale	0 to 1 mtr, LC:0.01mm	To be Mearure the length of Billet & T M T	1
18	Venire Calipers	0 to 300mm, LC:0.02mm	Section and dia measure in the Billet & T M T	1
19	U T M 60	60KN to 600KN, LC:0.1 KN	T M T Physical testing (Yield Stress, Tensile Stress, Ratio(TS/YS), Elongation, Bend & Rebend)	1
20	Extensometer	200 to 2000µm, LC:1µm	Maximum load Elongation	1
21	Mandrels	24,30,32,36,40,48,50,56,60,64,70,72,80,84,96,100,112,120,125,128,140,150,160,168,175,192,196,200,224,256	Bend & Rebend test	30
22	Water Tub	20 ltr	Bend & Rebend test	1
23	Heater	230 W	For water heating	2
24	BCS/SS-CRM NO.435/2 Plain Carbon Steel Standard sample	100 gr	For Solutions standardization	1
25	Spectrometer	32 elements	For Steel Chemical analysis	1

Technical Literature

TMT – Thermo mechanical process is a metallurgical process that combines mechanical deformation process like rolling with thermal process like heat treatment, water quenching, heating and cooling at various rates into single process.

This process produces a high strength bar from low carbon steel.

Steel billets are heated up to 1200 degree C temp approx in reheat furnace progressive rolled to final size shape of a reinforcing bar of grade Fe 500, Fe 500D, Fe 550.

The physical properties are in accordance to IS 1786:2008.

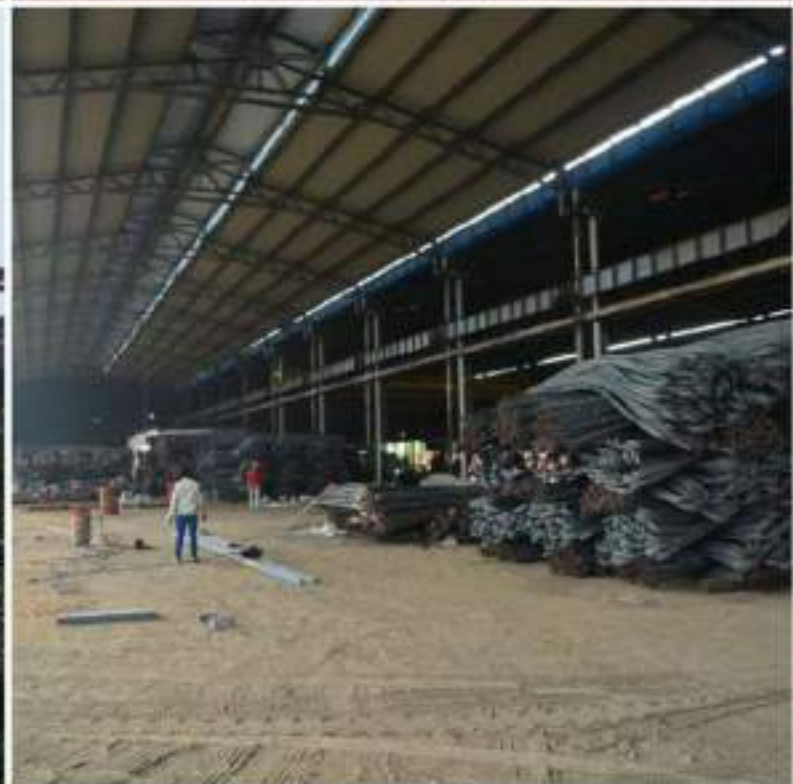
Advantages of the Product:

We at Mangal TMT, prejudice give top priority to quality.

The Raw materials are sourced from NMDC, Mines with a long term agreement signifies the values of company. We are also having a stringent QAP at all levels from Raw materials to finished products to ensure the compliance of IS code requirements.

Being centrally located at R.G.Peta, 50km away from Visakhapatnam city enables a easy transport to various cities directly from factory.

Further we would also like to bring your notice that we are the first mini integrated steel plant in Andhra Pradesh. We also have a technical team of qualified civil/mechanical Engineers for after sales and pre sales technical discussions with Engineer In charge for improving & maintaining the established standards.









MAHAMAYA
TOUGHER THAN THE HUMAN WILL

Manufactured by

MAHAMAYA INDUSTRIES LIMITED
R.G. Peta, L. Kota Mandel, Vizianagaram District



IS : 1786
ENR-DIST

TEST CERTIFICATE FOR HIGH STRENGTH DEFORMED STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT ACCORDING TO IS 1786: 2008
TEST CERTIFICATE NO. - MMLQA/20/21

TO M/S-

It is certified that the material described below fully conforms to IS : 1786 - 2008 Chemical composition and Mechanical Properties of the Product as tested according with the scheme of inspection and testing contained in the BIS Certification Marks Licence No. CML - 6635477 are as indicated below against each order No.

(PLEASE REFER TO IS : 1786 - 2008 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Order No. & Date	Nominal Size (mm)	Lot no.	Quantity (T)	Date of Testing	CHEMICAL ANALYSIS							MECHANICAL PROPERTIES					Remarks	
					C %	S %	P %	S+P %	CE %	0.2 % Proof Stress /	0.2 % Proof Stress /	Tensile Strength / h	TS / YS ratio	Elongation %	Total elongation %	Burd Test		Reburd Test
8	488			27.02.21	0.20	0.033	0.037	0.070	0.30	528	563	658	1.18	19	7.5	OK	OK	PASS
10	491			28.02.21	0.21	0.033	0.037	0.070	0.31	634	567	661	1.17	19	7.5	OK	OK	PASS
12	492			28.02.21	0.20	0.034	0.036	0.070	0.30	634	565	671	1.18	19	8	OK	OK	PASS
16	478			22.02.21	0.19	0.034	0.036	0.070	0.28	527	568	670	1.19	19	8.5	OK	OK	PASS
20	479			22.02.21	0.19	0.034	0.037	0.071	0.28	529	564	670	1.19	18	8.4	OK	OK	PASS
25	485			26.02.21	0.20	0.033	0.039	0.072	0.29	535	545	658	1.21	20	7.8	OK	OK	PASS
32	187			11.10.20	0.22	0.032	0.038	0.078	0.28	520	552	666	1.25	19	8.3	OK	OK	PASS

The Material supplied conforms to the standard rolling mass tolerance

Surface Defects: Absent/ Present
Internal Piping: Absent/ Present
Welding Defects: Absent/ Present

REMARKS :-

SHIPPING ADVISE NO.
WAGON NOS.

FOR: Maa Mahamaya Industries Limited

SIGNATURE:



RW/NH-34066/09/2017-S&R (B)
GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
S&R -(Bridges)
Transport Bhawan, 1, Parliament Street, New Delhi-110001

Dated: 28.10.2020

To

1. The Chief Secretaries of all the State Governments / UTs.
2. The Principal Secretaries / Secretaries of all States / UTs Public Works Department dealing with National Highways, other Centrally sponsored schemes.
3. The Engineers-in-Chief and Chief Engineers of Public Works Department of States/UTs dealing with National Highways, other Centrally sponsored schemes.
4. The Director General (Border Roads), Seema Sadak Bhavan, Ring Road, Delhi 110010.
5. The Chairman, National Highways Authority of India, Plot G-5 & 6, Sector-10, Dwarka, New Delhi 110075.
6. The Managing Director, NHIDCL, PTI Building, Parliament Street, New Delhi 110001.

Sub: Reinforcing Bars: Clause 1009.3.1 of Ministry's Specifications for Road and Bridge Works-regarding.

Sir,

The grade and other parameters of the reinforcing bars to be used for plain, reinforced or pre stressed concrete works on National Highways has been specified in Clause 1009.3.1 of Ministry's Specifications for Road and Bridge Works. This Clause also prescribe that the steel shall be procured from original producers. In case, the original producers are unable to supply the steel within the required time period or they are not producing the reinforcing bar of required size /diameter, the supply from other producers are also allowed, provided the reinforcement is manufactured from billets procured from Original producers.

2. Ministry has received various representations from the manufacturers / associations that secondary producer /other producers, who produce steel reinforcement from billets with technical parameters conforming to IS: 1786, unable to supply the steel for National Highways works due to aforesaid Clause 1009.3.1 of Ministry's Specifications for Road and Bridge Works. Moreover, Ministry of Steel vide their Order No.4 (13)/2016-SD (I) dated 9th August, 2016 has also excluded the distinction between Primary (Original) & Secondary (Other) steel producers.

3. The matter has been considered in the Ministry and it has been decided that steel reinforcement manufactured by the Secondary (Other) producers are also permitted for National Highway works provided the reinforcement bars are manufactured from the billets.

4. As such, the 2nd and 4th para of Clause 1009.3.1 of Ministry's Specifications for Road and Bridge Works shall be amended as per following:-

2nd Para

"All steel shall be procured from producers who manufacture billets directly from iron ores and roll the billets to produce steel conforming to IS: 1786. No re-rolled steel shall be incorporated in the works. The steel shall also be procured from other producers provided it is manufactured from the billets made directly from iron ores and not from shredded scrap and sponge iron as basic feedstock. In such cases, the other producers will have to submit the proof of purchase such as GST, Invoice etc from the billet producers to establish that billets are made directly from iron ores and have been procured from them. The steel shall be got tested by the Engineer in the NABL affiliated laboratories only as a third party check. It shall be ensured that all the test results conform to IS: 1786."

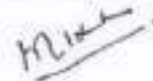
P.T.O

4th Para

"For the steel procured from producers who manufacture billets directly from iron ores also, the Engineer/Employer may carry out checks on materials through third party as mentioned above, for conforming to the test results shown in the certificates so as to ensure the quality of steel supplied."

5. The contents of this Circular may please be brought to the notice of all the Concerned in your Organization for strict implementation. This circular will be implemented from the date of its issuance.
6. This issues with the approval of the Competent Authority.

Yours faithfully,



(Jitendra Kumar)
Superintending Engineer-S&R(Bridges)
For Director General (Road Development) & SS.

Copy to:

1. All Technical Officers in the Ministry of Road Transport & Highways.
2. All Joint Secretaries in the Ministry of Road Transport & Highways.
3. All ROs & ELOs of the Ministry of Road Transport & Highways.
4. The Secretary General, Indian Roads Congress with a request to incorporate the contents of this circular in the revised Ministry's Specifications for Road and Bridge Works.
5. The Director, IAHE.
6. Technical circular file of S. R&T (B) Section.
7. NIC for uploading on Ministry's website under "what's new".

Copy for kind information to:

1. PS to Hon'ble Minister (RT&H, MS&ME) / PS to Hon'ble MOS (RT&H).
2. Sr. PPS to Secretary (RT&H).
3. PPS to DG (RD) & SS.
4. PPS to AS & FA/ADG-I.

***** End *****

E-4289575

8/11/2

**GOVERNMENT OF ANDHRA PRADESH
WATER RESOURCES (REFORMS) DEPARTMENT**

Memo No. ICDO1-COOROMISC/7/Reforms/2021, Dt. 08/02/2021

Sub: W.R. (Reforms)- Steel brands in Estimates/ Tenders - Certain instructions-Issued.

- Ref: 1. Govt. Memo No. 15021/ 8/ 2018-RDS dt. 04-04-2019 of TR&B Dept. of GoAP.
- 2. From the ENC(AW/IW) , WRD & Chairman, BoCEs, Lr. No. ENC/IW/P&M/ EE.1/DEE.2/AEE(S)/6th BoCEs-2021/Vol. I, dated: 08.01.2021.

S-15/2021

The Engineer-in-Chief (AW / IW), WRD and Chairman, BoCEs in the reference 2nd cited have stated that in the 6th BoCEs meeting held on 15.12.2020, a power point presentation was given by "SURYADEV TMT & RADHA TMT FE550", requesting for empanelling their brands as manufacturers of TMT bars for ongoing & upcoming projects in Andhra Pradesh. Further, stated that similar proposals were also received from other Steel Manufacturing agencies.

2. The issue was discussed in detail in the 6th BoCEs meeting held on 15-12-2020 and made certain observations.

3. Government after careful examination of the proposal and based on the observations/ recommendations of the BoCEs, hereby issue the following instructions to all the Engineer-in-Chiefs, Water Resources Department / Commissioner of Tenders, A.P./ Chief Engineers, Water Resources Department and all the concerned Engineering works Departments:

DEE-2
8/11/2

As far as Steel products are considered, Ministry of Steel, Govt. of India withdrawn various definitions of steel producers such as 'Integrated Steel Producers', 'Primary Steel Producers', 'Secondary Steel Producers' etc. and hence no Steel manufacturing company can be empanelled based on the manufacturing process.

AEE(L)
15/2

Currently, both in SoR as well as monthly minutes of Sub-Committee, the average rates of Steel rates are displayed without recommending any brand names which is appropriate in the light of Ministry of Steel, Government of India's Quality Control Order.

In view of the above observations, and also based on the earlier recommendation of Sub-Committee to the TR&B Dept., and as recommended by the BoCEs, all the Engineer-in-Chiefs, Water Resources Department / Commissioner of Tenders, A.P./ Chief Engineers, Water

(P.T.O)

//2//

Resources Department and all the concerned Engineering works Departments are directed to continue the current procedure of taking average steel rates of ISI specifications complied Steel Manufacturing companies and to instruct the field staff not to mention any particular brands in the Estimates/Tender Documents/Agreements but to insist on companies which comply to ISI specifications including Physical and Chemical properties, while inviting Tenders / Estimates/ Agreements for the works in their jurisdiction in future, duly following the recommendations made by the Sub-Committee as above.

4. All the Engineer-in-Chiefs, Water Resources Department / Commissioner of Tenders, A.P./ Chief Engineers, Water Resources Department and all the concerned Engineering Works Departments are directed to follow the above instructions scrupulously.

SYAMALA RAO JAMJAM
SECRETARY TO GOVERNMENT

To

The Engineer-in- Chief (Irrigation) & Chairman, SLTC,WRD,Vijayawada.

✓The Engineer-in- Chief (Admn), WRD& Chairman, BoCEs,Vijayawada.

The Commissioner of Tenders, AP., Vijayawada.

All Chief Engineers, Water Resources Department.

The MA & UD Department, A.P Secretariat.

The PR & RD Department, A.P Secretariat.

The Housing Department, A.P Secretariat.

The HM & FW Department, A.P Secretariat.

The Industries & Commerce Department, A.P Secretariat.

The TR & B Department, A.P Secretariat.

The Hon'ble Judge, Judicial Preview, A.P.

Copy to:

The P.S to the Secretary to Govt., WRD.

SC/SF

//FORWARDED:BY ORDER//

P.K. Bhannalata
SECTION OFFICER

J

C/C

Ref: PMC/GVSCCL/ISA/2019/18

4 Sept. 2019

To
M/s. RKEC Projects Limited
#10-12-L, 3rd floor, Rednam Alcazar,
Rednam Gardens, Opp SBI Main Branch,
Visakhapatnam – 530 002.

Subject: Submission of Updated Vendor details of M/s MAA MAHAMAYA INDUSTRIES LIMITED
(MANGAL TMT), for Fe 500D, for structural steel.

Ref: i) Ref. Material Approval Request (MAR) No: RKEC/GVMC/MAR_26.
ii) Your letter No: RKEC/2018 -19/GVSCCL/AECOM/096
iii) PMC Letter: PMC/GVSCCL/ISA/2019/17, dated 20 Aug 2019.

Dear Sir,

The Material Approval Request (MAR) for Fe 500D, for structural steel of Vendor details of M/s MAA MAHAMAYA INDUSTRIES LIMITED (MANGAL TMT) has been reviewed for the following

- 1) The Validity for Certificate of Registration for ISO 9001: 2015, is up to 22/08/2022.
- 2) The Validity for Certificate of Registration for ISO 14001: 2015, is up to 22/08/2022.
- 3) The Validity for Certificate of Registration for ISO 45001: 2018, is up to 22/08/2022.

And Renewal of Certification from Bureau of Indian standards have been attached. Hence, Material Approval Request (MAR) is approved for Procurement.

Yours Sincerely,

For AECOM Asia Company Limited



Prabhu Sheelavantha
Programme Director

CC: Managing Director,
GVSCCL, Visakhapatnam.

V. Akhila Kumar
05/09/2019



Reference: URS SW/APRSP-B/TL/ECI-SEPL JV/PNV-08-B/2017/287

Date: 07th August 2017

The Authorized Representative,
M/s ECI - SEPL JV,
Plot No. A12, A13, Panchavati Township,
Manikonda - Village, Rajendra Nagar - Mandal,
Rangareddy, Hyderabad -500 089

Sub: Construction Package PNV-08-B: Widening and Strengthening of Pedana - Nuzvid - Vissannapet Road from Km. 22+100 to Km. 40+000 in Krishna District, A.P (Balance Work).
MANGAL TMT STEEL (Maa Mahamaya Industries Ltd) Provisional Source approval - Reg

Ref: (i) ECI-SEPL (JV)/PNV-08(B)/RE/2017/038 dated 03.07.2017

Gentlemen,

In the lime light of the above cited subject and reference, profile and credentials of M/s Maa Mahamaya Industries Ltd. Brand Name Mangal Steel have been reviewed by this office and found in order.

M/s Maa Mahamaya (Mangal TMT) Industries Ltd Plant/Factory located at RG peta, L kota Mandal, Vizainagaram District, AP has been inspected by our Senior Quality Materials Engineer on 08.07.2017 along with your Authorized Representative and found in order as per standards laid down in IS1786:2008.

In house QC Laboratory is well equipped like Spectrometer analysis and Universal Testing machine to conduct all Mechanical and Chemical tests.

The Plant has instituted a Quality Management System (QMS) and had a defined Quality assurance plan in place.

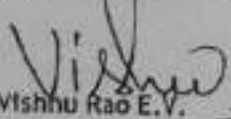
Hence considering the above merits M/S Maa Mahamaya Industries Ltd, Mangal Steel herewith provisionally approved as source to procure steel as and when required. Final Source approval Shall be accorded on submission of TPA Test report to this office.

Further Sampling, inspection and Testing shall be in accordance with IS:1786-2008 .

This approval has accorded as per guidelines of Ministry of Steel, Government of India Gazette notification as appended.

Thanking You,

For AECOM Infrastructure & Environment UK Limited.,
JV with URS Scott Wilson India Pvt. Ltd.


Vishnu Rao E.V.

Project Manager/Engineer



Enclosure: As appended

Copy to:

- Srl. G. Jagannadha Rao, Engineer in-Chief (R&B) Admn, SH, EAP, CP & Managing Director, APRDC - for information please.
- Resident Engineer, PNV-08-B, AECOM-URS Scott Wilson, - for info & necessary action.

AECOM Infrastructure & Environment UK Limited.,
JV with URS Scott Wilson India Pvt. Ltd.
1st and 2nd Floor, Door No: 54-14-3/7-2, H. No. 409
7th Right Road, Sdnivas Nagar, Bank Colony,
Vijayawada (Urban) - 520 008 India
Tel: +91 866 2544971
www.aecom.com



ಬೆಂಗಳೂರು ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಮಂಡಳಿ

BANGALORE WATER SUPPLY AND SEWERAGE BOARD.

Office of Chief Engineer (Project)
Cauvery Bhavan, III Floor, Bangalore 560009

No. BWSSB /CE(P)/ACE (P-2)/ /2018-19 Date: /11/2018

To,
EE CMC-12, EE CMC -13,
EE CMC -14, EE CMC-15
EE Stores

Sub: Work of Providing Water Supply to 110 Villages of BBMP and UFW reduction in Core Area and Construction and Rehabilitation of GLR in Malleshwaram, Bangalore - regarding approval of makes/manufacturers for TMT Steel for civil works.

Ref:- 1) No. SSC IPL/SO/21a/BWSSB/110OHT & GLR/20/2017-18 dt:16.11.2018
2) No:TCE/JT/WS-110/P816/2018 Date:20.11.2018

With reference to the above subject, approval is hereby accorded to Mangal TMT by vendor M/s Maa Mahamaya Industries Ltd for procurement of TMT steel for the above said work.

Further, it is herewith informed to submit vendor QAP for TMT Steel incorporating project details and obtain approval for the same before procurement.

Chief Engineer (Projects)
BWSSB

Copy to M/s Sri Srinivasa Constructions India Private Limited, Siva Shankar Nilayam, Opp. Shakthi Nursing Home, Talur Road, Bellary - 583 103 for information and needful.

Also note that the validity of the licence of Maa Mahamaya Industries Limited is valid upto 31.12.2019.

Hope this clarifies the matter.

Regards / सादर

Pankaj Bhattacharjee
for,

Regards / सादर

S R Sahu / एस आर साहू

Resident Construction Manager / आवासीय निर्माण प्रबंधक

Engineers India Limited. / इंजीनियर्स इंडिया लिमिटेड

VRMP Project, HPCL Refinery/ वी.आर.एम.पी परियोजना, एचपीसीएल रिफाइनरी

Visakhapatnam / विशाखपट्टणम

(0891-2513053) Mb: 70777 00162

**EASTERN POWER DISTRIBUTION COMPANY OF A.P. LIMITED
CORPORATE OFFICE :: VISAKHAPATNAM**

Phone: 0891-2582300

Phone : 9703216883

From
The Chief General Manager,
Purchase & Material Management,
A.P.E.P.D.C.L., Corporate Office,
T.P.T. Colony, Near Gurudwara,
Seethammadhara,
Visakhapatnam-530 013.

To
M/s Maa Mahamaya Industries Ltd.
R.G.Peta Village,
L.Kota Mandal,
Vizianagaram Dist,
535 161

Lt.No.CGM/P&MM/EPDCL/VSP/VR/P2/E/CI/D.No. 5262 /15, Dt. 29/09/2015.

Sirs,

Sub: EPDCL, VSP - Registration of your firm as approved vendor for supply of "TMT Bars" -
Regarding

Ref: 1) Vendor Application No.EVR2147/2015

2) Inspection Report of AEE / Civil / Vizianagaram on 09.09.2015

o-o-o

Referring to the above, you are registered as an approved vendor for supply of "TMT Bars"
with registration No **CGM/P&MM/VR/CI/ No. 1393 / 2015-2016.**

The registration is subject to the following conditions:

- 1) APEPDCL reserves the right to cancel your registration at any time without assigning any reason.
- 2) It is noted that you are a Manufacturer for the above materials.
- 3) This registration, however, would not hold good for the global tenders to be floated under IDA/IBRD/USAID loan.
- 4) This registration will be valid upto 30-09-2017.
- 5) For considering renewal of vendor registration, you have to remit renewal fee of Rs.500/- in the shape of DD drawn in favour of Pay Officer, APEPDCL, Visakhapatnam from any Nationalized bank along with your application before 6 months of the expiry of validity period i.e. on or before 31-03-2017 along with the details of orders executed in APEPDCL. You have to enclose a copy of reference of this letter to the tenders to be submitted to APEPDCL.

Copy to the Chief General Manager/P&MM/SPDCL, NPDCL, CPDCL.

Copy to the Chief General Manager/Expenditure/EPDCL/Visakhapatnam

Copy to the Chief General Manager/Projects/EPDCL/Visakhapatnam

Copy to the Superintending Engineer/Operation/Srikakulam, Vizianagaram,

Visakhapatnam,Rajmundry,Eluru

Yours faithfully,

CHIEF GENERAL MANAGER(P&MM)
VISAKHAPATNAM.

Signature valid

Digitally signed by
KANCHUMURTHY PRASAD
Date: 2015.09.28 12:20:38 IST
Reason: Approved

Greater Visakhapatnam Smart City Corporation Limited

Registered Office C/o. GVMC, Room No. 308, Tenneti Bhavan, Asilmetta Junction,
Visakhapatnam- 530002, Andhra Pradesh, India. CIN No. U74900AP2016PLC098495

VISAKHAPATNAM

Dt: 25-03-2021

To

M/s. MAA MAHAMAYA Industries Limited
R.G.Peta Viloge, L.Kota Mandal
Vizianagaram District-535161.
Andhra Pradesh

- Ref:** (1) Your letter ref MIP/S&T/GVMC/01 dated 22-03-2021
(2) AECOM Lr no : PMC/GVSCCL/ISA/2019/18 DATED 04 SEPT 2019

With reference to request in 1st reference cited, M/s. MAA MAHAMAYA Industries Limited is approved for usage as TMT MANGAL Fe500D as per above cited letter no 2 subject to the following conditions:

- 1) M/s. MAA MAHAMAYA Industries Limited MANGAL TMT branded bars should be supplied conforming to 15 1786-2008 and valid BIS license (8mm to 32mm dia bars). No rerolled material/secondary steel producer conversion agent material will be accepted or allowed for any structural works.
- 2) Company should provide all necessary reports and certificates that ensures traceability between billets and supplied furnished products every time of the supply
- 3) M/s. MAA MAHAMAYA Industries Limited Shall ensure maintenance of quality of supplies intact.
- 4) GVSCCL reserves the right to conduct mandatory quality control checks in approved laboratories when ever steel is procured from the company by contractors who are entrusted with the projects.
- 5) Any feedback on deterioration in the quality as also abnormal delays in Supply if noticed would render suspension cancellation of this approval.
- 6) GVSCCL is not bound in any way to purchase your products for its projects.

Note: The letter is issued upon the request of the company.

Yours faithfully

V. S. S. S.
25/3/2021
SUPERINTENDING ENGINEER
(PROJECTS - I)
GVMC
SUPERINTENDING ENGINEER
Projects
Greater Visakhapatnam



भारतीय प्रौद्योगिकी संस्थान भुवनेश्वर
INDIAN INSTITUTE OF TECHNOLOGY BHUBANESWAR

9th May, 2016

TO WHOMSOEVER IT MAY CONCERN

On request of M/S Maa Mahamaya Industries Limited, we visited their works located at R G Peta Village, L Kota Mandal, Vizianagaram District, A P State-535161, for assessment of their Quality Control Laboratory and Quality Assessment Plan.

The following are our observations:

- 1.0 Maa Mahamaya Industries Limited is a Steel Plant which produces TMT Steel bars starting from Iron ore through Sponge Iron-Steel Melting-Rolling Mill route. They also have a captive power plant.
- 2.0 Their in house Laboratory is well equipped for the testing of Raw Materials and Finished Products, the list of equipments annexed. The calibration certificates were also found to be in order.
- 3.0 The Plant has a defined Quality Assurance Plan in place.
- 4.0 The Plant is producing TMT bars as per IS 1786:2008 in sizes 8mm to 32mm, in Grades Fe 415, Fe 500, Fe 550, and Fe 500D. The BIS Licenses found to be valid Also Test Certificates examined and found to be in order.

AB
9/5/16
Dr. Akhilesh Barve

V. Pandu Ranga
9/5/16
Dr. V. Pandu Ranga

डॉ. अखिलेश बरवे / Dr. Akhilesh Barve
सहायक प्राध्यापक / Assistant Professor
संरचनात्मक विज्ञान विभाग / School of Mechanical Sciences
Indian Institute of Technology Bhubaneswar
Bhubaneswar-751013, Odisha, India

डॉ. वि. पांडुरंगा / Dr. V. Pandu Ranga
सहायक प्राध्यापक / Assistant Professor
संरचनात्मक विज्ञान विभाग / School of Mechanical Sciences
Indian Institute of Technology Bhubaneswar
Bhubaneswar-751013, Odisha, India



KARNATAKA ROAD DEVELOPMENT CORPORATION LTD.

No. KRDC/CE/EE-1/MMIL./2016-17/799

Dated: 23.06.2016

24

To,

✓ M/s. MAA MAHAMAYA Industries Limited
R.G.Peta Village, L.Kota Mandal,
Vizianagaram District-535161,
Andhra Pradesh.

Sub: Enlistment of M/s. MAA MAHAMAYA Industries Limited as a "Primary Producer of Steel" for supply or reinforcement steel for ongoing and upcoming projects in KRDC.

Ref: Additional General Manager Marketing letter dated: 13.05.2016.

===

With reference to above, and your request for enlistment of your company as a prime Producer of reinforcement steel to be used in the ongoing and upcoming projects of KRDC is examined.

It is stated that M/s. MAA MAHAMAYA Industries Limited is an IMS (ISO 9001-2015/ISO 14001:2015/OHSAS 18001-2007) certified company. The company produces the MANGAL TMT branded HYSD Steel bars of Fe 415, Fe500, Fe500D and Fe550 grade of sizes 8mm to 32mm bars conforming to IS 1786:2008, which confirmed after inspection of the factory site on 10.06.2016 and 11.06.2016 by the officers of KRDC.

In view of above, M/s. MAA MAHAMAYA Industries Limited is enlisted for TMT MANGAL brand as a primary producer of HYSD steel bars and approved to be used in the ongoing & upcoming projects of KRDC subject to the following conditions:

- 1) M/s. MAA MAHAMAYA Industries Limited MANGAL TMT branded bars should be supplied conforming to IS 1786-2008 (8mm to 32mm dia bars).
- 2) No re-rolled material/secondary steel producer conversion agent material will be accepted or allowed for any structural works of KRDC.
- 3) Company should provide all necessary reports and certificates that ensures traceability between billets and supplied furnished products.
- 4) M/s. MAA MAHAMAYA Industries Limited, Shall ensure maintenance of quality of supplies intact.

- 5) KRDCCL reserves the right to conduct mandatory quality control checks in approved laboratories when ever steel is procured from the company by contractors who are entrusted with the projects in KRDCCL.
- 6) Any feedback on deterioration in the quality as also abnormal delays in supply if noticed would render suspension/cancellation of this approval.
- 7) The KRDCCL wholly reserves the right to suspend/cancel this approval.
- 8) The KRDCCL is not bound in any way to purchase your products for KRDCCL projects.
- 9) Any changes in the name of company/Plant etc. shall be informed to KRDCCL immediately.

Yours faithfully

24/8/16
Chief Engineer
KRDCCL, Bengaluru

OP

MSV**MSV INTERNATIONAL INC.**

In Association with

**JSV ASSOCIATES ENGINEERS &
CONSULTANTS PVT. Ltd**Sub Office
Vedakkal
Punalayam
Alappuzha
Email: msv
CIN: EQ42

ENGINEERING SERVICES FOR ALAPPUZHA CITY ROADS IMPROVEMENT PROJECT (ACRIP) PHASE I THROUGH DBFOMT HYBRID- ANNUITY

Ref. No: MSV-JSV/RRAPL/IE/ACRIP-1/2019/35

Date: 06-

To,
The Project Manager,
Rohan Rajdeep Alappuzha Projects Ltd,
Shalom House,
Behind DTDC Courier Service,
Opp. LIC Office, Vellakkinar Junction,
Alappuzha-688001, Kerala,
Alappuzha.

Kind Attn: Mr. Vijay Kumar Pillai (Project Manager)

Sub: - Development of Alappuzha City Roads Improvement Project in the state of Kerala to be under Public Private Partnership (Design, Building, Finance, Operate, Maintain and Transfer) DBFOMT) Hybrid Annuity Basis: Source Approval for TMT Steel-Reg

Ref: - 1) Concession Agreement for between KRFB and Rohan Rajdeep Alppuzha Projects L Alappuzha city Roads Improvement Project Phase -I, through DBFOMT Hybrid-Annuity dated:03-08-2018.

2) Your Letter No. RRAPL/Site/17/2019-20 dt 19.06.2019

3) MSV-JSV/RRAPL/IE/ACRIP-1/2019/28 dt 26.06.2019

Dear Sir,

With reference to the above mentioned letter and plant visit by our Material Eng and the test reports, the documents submitted by you for source approval of Mangal TN verified and our observations are as under.

- a) M/S Maa Mahamaya Industries Ltd is an integrated Steel plant which produces making TMT bars.
- b) They produce billets from Sponge iron from the iron ore of NMDC.
- c) After verification of the profile it is noted that there is an agreement between Mahamaya Industries Ltd to extract Iron Ore.
- d) During the plant visit Mechanical properties of the TMT bars had been tested and found satisfactory as per IS 1786-1985.
- e) M/S Maa Mahamaya Industries Ltd is making their TMT bars in the brand name

MSV INTERNATIONAL INC.

In Association with

JSV ASSOCIATES ENGINEERS & CONSULTANTS PVT. Ltd

MSV In
House N
Sundara
Vadacke
Punnapp
Alappu:
Email
CIN. F

ES FOR ALAPPUZHA CITY ROADS IMPROVEMENT PROJECT (ACRIP)-PHASE 1 THROUGH DBFOT HYBRID- A'

of the above, we are hereby accorded our approval of Mangal TMT for the procure
our project works (ACRIP) subject to

Every consignment of steel brought to site should be supported with MTC.

Only new steel lots shall be delivered to the site.

Each consignment of steel shall be tested third party laboratory as per specification.

You,

Sincerely,

MSV International INC., In association with JSV Associates Engineers & Consult:

Handwritten signature
arghese
ader



CEO, KRFB, Thiruvananthapuram.

The Project Manager, KRFB, Alappuzha.

MSV International Inc., Delhi- For Information.

JSV AECPL, Hyderabad-For information

Received
Handwritten signature
06/7/2019



Ltr: No 34/C/13923/KSR/2016/205

Dt: 31st December, 2016

To,

BSCPL Infrastructure Limited,
#8-2-502/1/A, JVI Towers,
Road No.7, Banjara Hills,
Hyderabad - 500034

Attn: Mr. B Mallikarjunaiah, Project Manager

Subj: Design and Construction of multilevel /Grade Separators at Four junctions at LB Nagar and Surroundings in Hyderabad under engineering procurement and construction (EPC) – Turnkey (Package – II) – Source approval for “Mangal TMT” – reg.

Ref: Your letter no. GHMC/FO/PKG-IVF.No-1/ BM/16/26, Dated: 29/12/16

Sir,

With reference to your letter mentioned above and plant visit by our Construction Engineer on 26.12.16, the proposals/documents submitted by you for source approval of “Mangal TMT” Steel of M/s Maa Mahamaya Industries Ltd. which have been examined and following observations made:

- a. **M/s Maa Mahamaya Industries Ltd** is an integrated steel plant which produces their billets for making their TMT bars through their own integrated process.
- b. They produce billets from sponge iron directly extracted from Iron ore from NMDC.
- c. From verification of documents which have been submitted by them, they have an agreement with NMDC for the period of 3 years for extracting the Iron ore from NMDC.
- d. During the plant visit, tests were conducted for mechanical properties of TMT bars in their in house laboratory and results found satisfactory
- e. **M/s Maa Mahamaya Industries Ltd** is making their TMT bars in the brand name of “Mangal TMT”

In view of the above, we confirm our approval of Mangal TMT for procurement of TMT bars for the subject project works. Subject to:

1. Every consignment of steel brought to site should be supported with MTC.



//2//

- ii. Only new steel lots shall be delivered to the site.
- iii. Each consignment of steel shall be tested in outside laboratory as per specification.

Thanking you,

Yours faithfully,
For STUP Consultants P. Ltd.

K. Srinivasa Rao
Project Manager

CC: Executive Engineer – PD-NZ-1, GHMC



TAMIL NADU HOUSING BOARD: QUALITY CONTROL WING

CERTIFICATE OF PRODUCT APPROVAL File No. SF/QC/12140/2016 dated 24.06.2016

The Quality Control Wing of Tamil Nadu Housing Board examined various aspects of your following product with reference to your letter dated:09.06.2016 to The Chief Engineer TNHB and have accorded approval on 24.06.2016 to use "Mangal TMT" from "MAA MAHAMAYA INDUSTRIE LIMITED" following items on works carried out by TNHB:

1) Name of the Products/Product Range	Mangal TMT High Strength deformed steel bars and wires for concrete reinforcement Steel Fe 415, Fe 500 & Fe 550 from MAA MAHAMAYA INDUSTRIE LIMITED.
2) Brand Name	MANGAL TMT Fe 415, Fe 500 & Fe 550.
3) Trade Mark Reg No.	Not Furnished.
4) Testing / Certifying Agencies and Test Certificates / Certifications References;	1. ISO 9001:2015, Certificate No. 160505019101 dt: 05.05.2016. 2. ISO 14001:2015, Certificate No. 160505029101 dt: 05.05.2016. 3. OHSAS 18001:2007, Certificate No. 160505039101 dt: 05.05.2016.
5) Address of Manufacturer/Factory	M/s. Maa Mahamaya Industries Ltd. R.G. Peta village, L. Kota Mandal, Dist: Vizianagaram Andhra Pradesh-535161.
6) BIS License Number/Reference	IS 1786:2008, Licence No: CM/L-6635477.
7) Standards/Specifications No.	IS 1786:2008.

Limitations ::

1. This Approval is to use the materials on works carried out by TNHB.
2. Approval is subject to validity of BIS License for the product.
3. Test results copy of the lot should be produced along with all supplies to TNHB site (adhering to the test result produced at the time of this approval).
4. You should inform any change of your address of office, factory, contact telephone numbers, partnership deed, or any other articles of association of your organizations, materials, manufacturing process, quality control routines that may affect the validity of this approval, to the undersigned (or) The Chief Engineer, Tamil Nadu Housing Board who is empowered to cancel the use of the products in TNHB works and hence its approval also.
5. This approval is subject to satisfactory field performance, continuing surveillance Audits, and strict conformity to the constructions of TNHB. This approval shall not bind TNHB to give any preference in placement of purchase orders.



To
 M/s. Maa Mahamaya Industries Ltd,
 R.G. Peta village,
 L. Kota Mandal,
 Dist: Vizianagaram
 Andhra Pradesh-535161

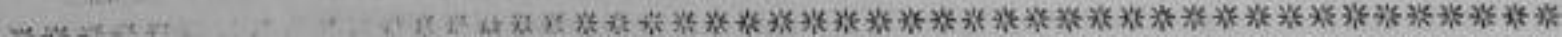
M. Thayumanasamy
 24/6/16

Er. M. THAYUMANASAMY, B.E.
 Superintending Engineer (Quality Control),
 Tamil Nadu Housing Board,
 493, Anna salai, Nandanam, Chennai-55.

Subb
 24/6/16

Submitted to: The CE's of TNHB ✓

All the SEs and the EEs of TNHB (By this approval, Mangal TMT can be used in all TNHB Works and incorporated in the list of approved brand and appended to the Tender Schedule/Agreement. EEs may send feedback about this product in satisfactory field performance to the CE's of TNHB constructions)



VISAKHAPATNAM METROPOLITAN REGION DEVELOPMENT AUTHORITY

VISAKHAPATNAM
Dt.31-03-2021.

To
Ms. MAA MAHAMAYA Industries Limited
R.G.Peta Viloge, L.Kota Mandal,
Vizianagaram District-535161,
Andhra Pradesh

Ret: (1) Your letter ref MIPI/S&T/VMRDA/01 dated 22-03-2021

With reference to your letter, it is to inform that usage of TMT Mangal Fe-500/Fe-500D Manufactured by M/s. MAA MAHAMAYA Industries Limited can be allowed for usage in our projects subject to the following conditions:

- 1) MAA MAHAMAYA Industries Limited MANGAL TMT branded bars should be supplied conforming to IS 1786-2008 and valid BIS license (8mm to 32mm dia bars).NO rerolled material/secondary steel producer conversion agent material will be accepted or allowed for any structural works.
- 2) Company should provide all necessary reports and manufacturer test certificates that ensures traceability between billets and supplied furnished products every time of the supply
- 3) The Manufacturer shall ensure maintenance of quality of supplies intact.
- 4) VMRDA Engineers reserve the right to conduct mandatory quality control checks in approved laboratories when ever steel is procured from the company by contractors who are entrusted with the projects.
- 5) VMRDA is not bound in any way to insist the contractor to purchase your products for its projects.


31/3/21
Chief Engineer
VMRDA
Chief Engineer
VMRDA, Visakhapatnam



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CIN No. U74999AP2020PTC114919



TC-8430

TEST REPORT

MECHANICAL PROPERTIES OF REINFORCING STEEL BARS

Report Number	: 1512220702228	Issue Date	: 06.07.2022
Test Order Number	: 2022071151	ULR No	: TC943022000001431F
Test Order Date	: 06.07.2022	Page No.	: 1 of 2

Project /Work*	: Not Specified
Client Details	: M/s MANGAL TMT –MAA MAHAMAYA INDUSTRIES LIMITED. R.G. Peta Village, L. Kota Mandal, Vizianagaram.
Customer Reference	: Mail dated 06.07.2022
Contractor Details	: M/s MANGAL TMT –MAA MAHAMAYA INDUSTRIES LIMITED.
Source of Sample*	: Sample submitted by Customer
Condition of Sample	: Satisfactory
Material Received On	: 06.07.2022
No. of Samples Tested	: 06 (Six)
Room temperature during test	: 28.2°C
Equipment Details	: Computerized Universal Testing Machine, ID: AEL/LAB/EQP/UTM/063 Calibration Valid up to 11.08.2022.
Date of Testing	: 06.07.2022
Discipline - Group	: Mechanical – Metal and Alloys



S. NO	IDENTIFICATION OF SAMPLE*	Grade*	Dia.* (mm)	TEST PARAMETERS							
				MASS PER METER (Kg)	YIELD STRESS (N/mm ²)	TENSILE STRENGTH (N/mm ²)	TS/YS Ratio	ELONGATION (%)	BEND TEST	REBEND TEST	
1	MANGAL TMT	Fe 550D	8	0.385	593.8	701	1.18	23.8	Satisfactory	Satisfactory	
2	MANGAL TMT	Fe 550D	10	0.597	692.6	805	1.16	21.0	Satisfactory	Satisfactory	
3	MANGAL TMT	Fe 550D	12	0.876	565.0	627	1.11	18.6	Satisfactory	Satisfactory	
4	MANGAL TMT	Fe 550D	16	1.51	563.0	676	1.20	18.1	Satisfactory	Satisfactory	
5	MANGAL TMT	Fe 550D	20	2.47	644.1	743	1.15	16.2	Satisfactory	Satisfactory	
6	MANGAL TMT	Fe 550D	25	3.74	651.1	742	1.14	17.8	Satisfactory	Satisfactory	
Test Method				IS 1786:2008 (RA 2018)	IS 1608 (Part 1) : 2018			IS 1599: 2019	IS 1786: 2008		

*As furnished by the Customer

This Report is subjected to terms and conditions mentioned over here

S. SATYANARAYANA

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Autonagar, Visakhapatnam - 530 012
Andhra Pradesh, India
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Mail Id : info@aelanalytical.com
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Our Services:

Amrutha Engineering Laboratories Pvt. Ltd.

- Geo-Technical investigation
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- Structural Stability Analysis
- 3rd Party Quality Control

S. Satyanarayana



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CIN No. U74999AP2020PTC114919



TC-9430

Report Number	: 1512220702228	Issue Date	: 06.07.2022
Test Order Number	: 2022071151	ULR No	: TC943022000001431F
Test Order Date	: 06.07.2022	Page No.	: 2 of 2

REQUIREMENTS AS PER IS 1786:2008 (RA 2018)	TEST PARAMETERS						
	MASS PER METER (Kg)	YIELD STRESS (N/mm ²)	TENSILE STRENGTH (N/mm ²)	TS/YS Ratio	ELONGATION (%)	BEND TEST	REBEND TEST
For Fe 550D	8 mm : 0.363 to 0.395, 10mm: 0.568 to 0.617, 12mm: 0.835 to 0.888, 16mm: 1.49 to 1.58, 20mm: 2.37 to 2.47, 25mm: 3.70 to 3.85,	Min. 550.0	Min 600	≥ 1.08	Min. 14.5	Satisfactory: No cracks- visible	Satisfactory: No cracks visible

Conformity Statement: MANGAL TMT: 8mm, 10mm, 12mm, 16mm, 20mm, 25mm sample Parameters **Conforms** to the requirements of Fe 550D as per IS 1786:2008(RA 2018).

- Note:**
- 1) The results relate only to the items tested.
 - 2) Report shall not be reproduced, except in full, without the written approval of the lab.
 - 3) Any correction invalidates the report.
 - 4) The Samples will be retained in our laboratory for 30 days after the completion of testing.
 - 5) Conformity Statement provided above is based on Internal Document no: AEL/02/QP/22.
 - 6) Test Conducted in the presence of client representative.

For AMRUTHA ENGINEERING LABORATORIES PVT. LTD

Reviewed and Authorized By

Form No: AEL/FORM/31
Issue No: 02, Issue Date: 01.04.2021
Amendment No: 01, Amend. Date: 01.04.2021

End of Report

S. SATYANARAYANA
Quality Manager

Amrutha Engineering Laboratories Pvt. Ltd.

This Report is subjected to terms and conditions mentioned overleaf

Office Address :

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CIN No. U74999AP2020PTC114919



TC-9430

TEST REPORT

CHEMICAL PROPERTIES OF REINFORCING BAR

Report Number	: 1512220702229	Issue Date	: 06.07.2022
Test Order Number	: 2022071151	ULR No	: TC943022000001432F
Test Order Date	: 06.07.2022	Page No.	: 1 of 2

Project /Work* : Not Specified

Client Details : M/s MANGAL TMT –MAA MAHAMAYA INDUSTRIES LIMITED.
R.G. Peta Village, L. Kota Mandal, Vizianagaram.

Customer Reference : Mail dated 06.07.2022

Contractor Details : M/s MANGAL TMT –MAA MAHAMAYA INDUSTRIES LIMITED.

Source of Sample* : Sample submitted by Customer

Condition of Sample : Satisfactory

Material Received On : 06.07.2022

No. of Samples Tested : 06 (Six)

Test Method : IS 8811:1998 (RA 2018)

Equipment Details : Optical Emission Spectrometer(ARC/SPARK), Id: AEL/LAB/EQP/OES/235
Calibration Valid Up to 17.01.2023.

Date of Testing : 06.07.2022

Discipline - Group : Chemical – Metal and Alloys



S. No	Identification of sample/ Invoice no/ P.O. No *	Grade*	Dia. (mm)	TEST PARAMETERS										
				C (%)	S (%)	P (%)	Mn (%)	Cr (%)	Mo (%)	V (%)	Ni (%)	Cu (%)	S+P (%)	CE (%)
1	MANGAL TMT	Fe550D	8	0.244	<0.005	0.015	0.603	0.431	<0.008	<0.005	0.100	<0.008	0.020	0.44
2	MANGAL TMT	Fe550D	10	0.207	<0.005	0.012	0.904	0.554	<0.008	<0.005	0.101	0.014	0.017	0.48
3	MANGAL TMT	Fe550D	12	0.089	0.006	0.009	0.758	0.028	<0.008	<0.005	0.104	0.050	0.014	0.23
4	MANGAL TMT	Fe550D	16	0.200	0.017	0.008	0.964	0.232	<0.008	<0.005	0.101	0.014	0.025	0.42
5	MANGAL TMT	Fe550D	20	0.163	<0.005	0.010	0.766	0.399	<0.008	<0.005	0.103	0.038	0.015	0.38
6	MANGAL TMT	Fe550D	25	0.174	0.010	0.011	1.045	0.217	<0.008	<0.005	0.101	0.010	0.021	0.40

*As furnished by the Customer

** Carbon Equivalent will be calculated using the formula: CE = C + (Mn / 8) + ((Cr + Mo + V) / 5) + (Ni + Cu) / 25

S. SATYANARAYANA *Satyana*

This Report is subjected to terms and conditions mentioned on page 01 of the Quality Manager

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Contact Us at :

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CIN No. U74999AP2020PTC114919



TC-9430

Report Number	: 1512220702229	Issue Date	: 06.07.2022
Test Order Number	: 2022071151	ULR No	: TC943022000001432F
Test Order Date	: 06.07.2022	Page No.	: 2 of 2

REQUIREMENTS AS PER IS 1786:2008 (RA 2018)	TEST PARAMETERS				
	Carbon (C) Maximum %	Sulphur (S) Maximum %	Phosphorous (P) Maximum %	Sulphur and phosphorous Maximum %	Carbon Equivalent** Maximum %
For Fe 550D	0.25	0.040	0.040	0.075	0.61

Conformity Statement: MANGAL TMT: 8mm, 10mm, 12mm, 16mm, 20mm, 25mm sample Parameters Conforms to the requirements of Fe 550D as per IS 1786:2008(RA 2018).

- Note: 1) The results relate only to the items tested.
 2) Report shall not be reproduced, except in full, without the written approval of the lab.
 3) Any correction invalidates the report.
 4) The Samples will be retained in our laboratory for 30 days after the completion of testing.
 5) Conformity Statement provided above is based on Internal Document no: AEL/02/QP/22.
 6) Test Conducted in the presence of client representative.

For AMRUTHA ENGINEERING LABORATORIES PVT. LTD
 Reviewed and Authorized By

S. Satyanarayana
 S. SATYANARAYANA
 Quality Manager

Form No: AEL/FORM/41
 Issue No: 01, Issue Date: 01.04.2021
 Amendment No: 00, Amend. Date: -

End of Report

This Report is subjected to terms and conditions mentioned over here.

Amrutha Engineering Laboratories Pvt. Ltd.

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Our Services :

- ✦ Geo-Technical investigation ✦ NDT Services
- ✦ Testing of Building Materials ✦ Chemical Analysis
- ✦ Structural Stability Analysis ✦ 3rd Party Quality Control



తెలంగాణ తెలంగాణ TELANGANA

Sl. No. 3854 Dt. 16/08/2018 Rs. 100/
 Purchaser G. Sreenivasa setty
 S/o. W/o. Late. G. krishappa R/o. Hyd.
 For Whom N.M.D.C., Hyd.

M 646335
 Syed Yaseen
 SYED YASEEN
 LICENSED STAMP VENDOR
 LIC. NO: 16-03-15/2016,
 H. No: 19-3-294/63/75, Vattepally, Hyd, T.S.
 Cell: 9849765752

AGREEMENT BETWEEN

M/s NMDC LIMITED

AND

M/s MAA MAHAMAYA INDUSTRIES LIMITED

FOR SALE OF IRON ORE LUMP

This agreement is made and entered into on this 1st day of September 2018 at Hyderabad between M/s NMDC Limited, (A Government of India Enterprise) having its Registered Office at Khanj Bhavan, 10-3-311/A, Castle Hills, Masab Tank, Hyderabad 500028 (hereinafter called the "Seller" which expression shall unless repugnant to the context include its successors and assigns) of the one part and M/s Maa Mahamaya Industries Limited having its Registered Office at Industrial Ward, Dhamtari, Chhattisgarh - 493773 (hereinafter called the "Buyer" which expression shall unless repugnant to the context include its successors and assigns), of the other.

NMDC/MAA MAHAMAYA industries Ltd.
 Date: 01-09-2018

సుమిత దేవ/SUMIT DEB
 మహాసంఘ (కమిషనర్)
 General Manager (Comm.)
 ఒక ల.న.టి.సి. లి./NMDC Ltd.
 హైదరాబాద్/Hyderabad-500 028.

For Maa Mahamaya Industries Ltd.

Bhavisu Bhimani
 Authorized Signatory

WHEREAS, the Buyer had an earlier agreement dated 28-10-2015 for purchase of DRCLO, B.ROM and Baila lump from seller's Bailadila mines, which was in force up to 31-03-2018.

WHEREAS the Buyer is desirous of purchasing iron ore lump (DRCLO/B.ROM/Baila lump/10-20 mm) from Bailadila Mines (Bacheli/Kirandul Complex) of the Seller in Bailadila Sector for its own use.

WHEREAS the Seller agrees to sell and deliver and the Buyer agrees to purchase and receive and pay for the Product specified below for a period from 01-04-2018 to 31-3-2021 upon the following terms and conditions:

CLAUSE 1: PRODUCT AND GUARANTEED SPECIFICATION

The Product agreed to be sold hereunder shall be iron ore lump (DRCLO/B.ROM/Baila lump/10-20 mm) (hereinafter called the "Product") produced by the Seller at its Bailadila Mines (Bacheli / Kirandul Complex in Bailadila Sector, Chhattisgarh State) and shall be of the following specifications:

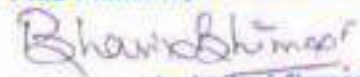
Chemical Composition	Baila ROM	10-20 mm lump
	Guaranteed Specification	Guaranteed Specification
Fe	65.5 %	65.5 %
Alumina	2.25% max.	2.25% max.
Silica	2.25% max.	2.25% max.
Alumina+Silica	4.0% max.	4.0% max.
Phosphorous	0.075% max.	0.075% max.
Sulphur	0.04% max.	0.04% max.
Physical Composition		
Size	-150+10 mm	10 - 20 mm
Over size	+150 mm: 2.5% max	+20 mm: 8% max
Undersize	-10 mm: 15% max	-10 mm: 15% max

Chemical Composition	Guaranteed Specification	
	DRCLO	Baila Lump
Fe	67.0 %	65.5%
Alumina+Silica	2.60% max	4.0% max
Phosphorous	0.05% max.	0.05% max
Sulphur	0.01% max	0.01% max
Physical Composition		
Size	10 - 40 mm	6-40 mm
Over size	+40 mm: 5% max.	+40 mm: 5% max
Undersize	-10 mm: 7.5% max	-6 mm: 15% max

The above specifications are at FOR/FOT Bacheli/Kirandul as the case may be. For the purpose of arriving at the specifications, a unit of 05 rake loads for lump shall be taken. If transported through road, a unit of 100 truckloads for each product would be taken. The weighted average specifications of the unit shall conform to the specifications mentioned above.


सुमित देव/SUMIT DEB
 महाप्रबंधक (व्यापिका)
 General Manager (Comm.)
 एन.एम.डी.सी. लि./NMDCLtd.
 हैदराबाद/Hyderabad-500 078.

For Maa Mahamaya Industries Ltd.


Bhanubhoomi
 Authorised Signatory

CLAUSE 2: QUANTITY & QUARTERLY LIFTING OF QUANTITIES

- a) This agreement is for an annual quantity of 2.75 lakh WMT of iron ore lump (DRCLO/B.ROM/Baila lump/10-20 mm) to be sold and delivered at FOR / FOT/ Bachel / Kirandul basis during the financial year 2018-19. The range quantity (minimum & maximum), quantity (allocation) to be allocated during each financial year shall be decided at the time of annual review of the agreement.

The quantity agreed to be sold and delivered for the said financial year as indicated above is subject to availability of the Product at the Seller's mines mentioned above and satisfactory performance by the buyer against the contracted terms and conditions. It is also further subject to the currency of the relevant mining leases and their renewal thereon in favour of the Seller by the concerned statutory authorities from time to time. The Seller however confirms that all appropriate steps shall be taken for ensuring the renewal of their mining lease.

The supply quantity for the year 2018-19 shall be 2.75 lakh WMT of iron ore lump (DRCLO/B.ROM/Baila lump/10-20 mm)

For the purpose of supply and dispatch, the annual quantity will be broadly split up into following approximate percentage on quarterly basis:

	(%age of Annual Qty.)
1 st Quarter	25 %
2 nd Quarter	15 %
3 rd Quarter	30 %
4 th Quarter	30 %


Supply and lifting of the monthly quantities shall be scheduled accordingly.

- b) The quantities agreed for the year (indicated in sub Clause-2 (a) above) will be broadly split up and allocated on quarterly basis as given in the said Clause for the purpose of supply and dispatch by the Seller. However, the buyer shall make efforts to lift the quantities on monthly pro-rata basis. In case the Buyer fails to lift the proportionate or allocated quantity for a particular quarter or short lifts the quantity for the quarter, such un-lifted / short lifted quantity pertaining to that quarter shall lapse and the Buyer shall not have any right to avail the un-lifted/short lifted quantity in the subsequent quarters. However, the Seller may at his discretion supply the un-lifted / short-lifted quantities in subsequent quarters within the financial year subject to availability of material, rakes, order load etc.
- c) The seller may supply even beyond the pro-rata quantities depending on the availability of material, availability of rakes etc..

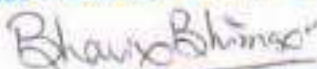
CLAUSE 3: TRANSPORTATION

It shall be the responsibility of the Buyer to obtain Railway clearance and coordinate with Railways for transportation of the Product on the Buyer's account from Bachel / Kirandul. Seller will raise the indents accordingly subject to availability of funds. Movement of the product can be allowed by road at the discretion of seller (NMDC).

NMDC/MAA MAHAMAYA Industries Ltd.
Date: 01-09-2018


सुमित देव/SUMIT DEB
महामायक (कमिश्नर)
General Manager (Comm.)
एन.एम.डी.सी. लि./NMDC Ltd.
हैदराबाद/Hyderabad - 500 009

For Maa Mahamaya Industries Ltd.


Authorised Signatory
3/10

CLAUSE 4: PRICES

4.1 The Base price and bonus/penalty on FOR / FOT basis applicable to all long-term customers for the period from April 2018 to August 2018 (till further review) are as follows:

Product: Baila ROM

Month	Base Price, Rs/WMT	Bonus/Penalty*, Rs/WMT/Fe%
04/04/2018 to 17/04/2018	2760	132
18/04/2018 to 22/05/2018	2670	128
23/05/2018 to 21/06/2018	2810	135
22/06/2018 to 09/07/2018	2810	135
10/07/2018 to 25/07/2018	2950	142
26/07/2018 to 21/08/2018	2950	142
22/08/2018 to till further review	3090	149

*Fraction Pro-rata

Product: DRCL0

Month	Base Price, Rs/WMT	Bonus/Penalty*, Rs/WMT/Fe%
04/04/2018 to 17/04/2018	3480	132
18/04/2018 to 22/05/2018	3370	128
23/05/2018 to 21/06/2018	3540	135
22/06/2018 to 09/07/2018	3540	135
10/07/2018 to 25/07/2018	3720	142
26/07/2018 to 21/08/2018	3720	142
22/08/2018 to till further review	3890	149

*Fraction Pro-rata

Product: Baila Lump

Month	Base Price, Rs/WMT	Bonus/Penalty*, Rs/WMT/Fe%
04/04/2018 to 17/04/2018	3000	132
18/04/2018 to 22/05/2018	2900	128
23/05/2018 to 21/06/2018	3050	135
22/06/2018 to 09/07/2018	3050	135
10/07/2018 to 25/07/2018	3200	142
26/07/2018 to 21/08/2018	3200	142
22/08/2018 to till further review	3350	149


*Fraction Pro-rata

Product: Baila sized Lump (10-20 mm)

Month	Base Price, Rs/WMT	Bonus/Penalty*, Rs/WMT/Fe%
26/07/2018 to 21/08/2018	3200	142
22/08/2018 to till further review	3350	149

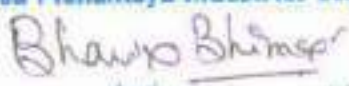
*Fraction Pro-rata

4.2 For the balance period of the financial year 2018-19 and further the pricing mechanism and/or the applicable base prices and bonus/penalty of the products will be as decided by NMDC (seller) from time to time.


सुमित देव/SUMIT DEB
अनुसंधान (व्यवस्थापक)
General Manager (Comm.)
एन.एम.डी.सी. लि./NMDC Ltd.
हैदराबाद/Hyderabad - 500 009

NMDC/MAA MAHAMAYA Industries Ltd.
Date: 01-09-2018

For Maa Mahamaya Industries Ltd.


Bhawo Bhimani
Author

CLAUSE 5: TAXES AND DUTIES

The prices so determined by the Seller as per Clause-4 above are exclusive of royalty, forest permit fee, labour welfare cess, Infrastructure & Environment Development cess, levies, duties, all applicable taxes, surcharges, DMF (District Mineral Fund), NMETF (National Mineral Exploration Trust Fund), GST etc. All royalty, levies, cess, duties, taxes including labour welfare cess, DMF (District Mineral Fund), NMETF (National Mineral Exploration Trust Fund), GST or any other statutory duties that are in force or that may be introduced in future are payable by the Buyer.

CLAUSE 6: TERMS & MODE OF PAYMENT

The Buyer shall establish a divisible irrevocable Letter of Credit (LC) on any Nationalized Bank or a scheduled commercial Bank acceptable to the Seller, in favour of the Seller payable at Bachel/Kirandul Branch of the Bank, covering both cost of the Product as well as royalty, statutory levies, duties, all applicable taxes, surcharges, DMF (District Mineral Fund), NMEF (National Mineral Exploration Fund) etc. The Letter of Credit shall be negotiable for 100% price of the Products, bonus/penalty referred to in Clause-4 and royalty, duties, taxes etc., referred to Clause 5, when presented to the Bank by the Seller with the following documents:

- a. Invoice
- b. Original/ Photocopy of RR/LR.
- c. Analysis report showing the Fe content
- d. Seller's certificate of weight

All charges for opening of the Letter of Credit and its negotiation shall be to Buyer's account. The buyer can also make advance payment towards supply of ore through RTGS.

CLAUSE 7: WEIGHMENT

- a. The Seller shall arrange at its own expense weighment at Loading Station at Bachel / Kirandul through Electronic Weighometer. The weight of the Product delivered by the Seller to the Buyer shall be determined on the basis of the weight as recorded by the Electronic Weighometer and such weight shall be final for all purposes.
- b. However, in the event the Electronic Weighometer at the Loading station goes out of order, the RR weight recorded by Railways at the in-motion weighbridge at Bachel/Kirandul shall be considered for invoicing purpose. If at any time, the in-motion weigh bridge at Bachel/Kirandul goes out of order, then the RR weight recorded by Railways at Bhansi or the nearest Railway station shall be final for all purposes. In such cases, the Seller shall enclose along with its Invoice for payment, a certificate to the effect that the Electronic Weighometer is out of order. The Seller shall also take all necessary steps to restore the working of the Electronic Weighometer in the shortest possible time.
- c) In case of road movement, the weighment shall be carried out by seller on its weighbridge and weight so recorded shall be final for all purposes.

CLAUSE 8: SAMPLING AND ANALYSIS

The Seller shall carry out the sampling and analysis as per ISI standards. The sampling shall be carried out in the appropriate manner during loading of wagons at designated transfer points on conveyor system & during loading in to trucks. The samples so drawn shall be analyzed in the Seller's Laboratory for Fe, Silica, Alumina, Phosphorus and Sulphur and a copy of the report shall be furnished to the Buyer as and when it is ready. However, if so desired by the buyer, the Fe% can be communicated within 36 hours of dispatch of rake/truck. The Seller shall not have any objection for the Buyer's representative to be associated with the drawal of samples and conduct of analysis, which however, shall be at the cost of the Buyer. If the Buyer so desires, three sample packets may be prepared from the quantities dispatched in the rakes/trucks in the presence of the Buyer's representative out of which one will be for the Seller, one for the Buyer and one packet will be jointly sealed and kept as umpire sample. If the sample analysis variation in Fe content falls within 0.75%, the Seller's analysis will be treated as final. In case variation in Fe content between the analysis of Seller and Buyer is more than 0.75%, if so desired by buyer the umpire sample shall be tested in any neutral laboratory and the result will be binding on both Buyer as well as Seller. The expense/cost towards testing of umpire sample shall be to Buyer's account.

CLAUSE 9: TITLE AND RISK OF LOSS, DAMAGE ETC.

Title with respect to Product in each rake or truck shall pass from Seller to Buyer when Seller has negotiated the concerned documents and has received sale proceeds from the negotiating bank including payment through RTGS with effect retrospective to the loading of such rake or truck. Risk with respect to Product in each rake or truck shall pass from the Seller to the Buyer when the Product has been loaded into the rake or truck at Bachel /Kirandul by the Seller.

CLAUSE 10: VALIDATION AND ALTERATION

This Agreement shall become effective retrospectively from 01-04-2018 and remain in full force till 31-03-2021 once the duly authorized representatives of the Seller and Buyer sign thereon. Any amendment to any of the Clauses of this Agreement shall be proposed and sent in writing to the other party. If both the Seller and the Buyer agree to such amendment, then the same shall be incorporated as part of this Agreement.


CLAUSE 11: ASSIGNMENT

Without prior written consent of the other party, this Agreement is not assignable or transferable in full or in part by either party.

CLAUSE 12: FORCE MAJEURE

- (a) If at any time during the existence of this Agreement either party is unable to perform whole or in part any obligation under this Agreement or delays the performance or the delivery of all or any part quantity of the Product under the Agreement is obstructed and/ or delayed owing to or resulting from cause or causes beyond the control of Seller and Buyer such as acts of God, strikes, go-slow, Loading Plant

NMDC/MAA MAHAMAYA Industries Ltd.
Date: 01-09-2018


सुमित देव/SUMIT DEB
नरुदाजबुका (वर्गिणर)
General Manager (Comm.)
एन.एम.डी.सी. लि./NMDC Ltd.
हैदराबाद/Hyderabad-500 028.

For Maa Mahamaya Industries Ltd.


Authorized Signatory

breakdown, Government edicts or rulings, war, blockade, revolution, civil commotion, riots, destruction of goods by fire or floods, plague/epidemic, or other causes. the Buyer or Seller shall be relieved of the responsibility for performance of this Agreement as per Para (c) of this clause to the extent to which such performance has not been achieved or has been obstructed.


- (b) In the event that such force majeure condition as specified in sub clause (a) above of this clause occurs, the party shall give prompt notice to the other party as soon as possible and then shall within 2 (two) weeks after occurrence of such event, furnish the other party in writing with the particulars of the relevant event and documents explaining that its performance is prevented or delayed due to cause or causes as set forth in sub clause (a) of this clause and further shall furnish at the same time or at least within 3 (three) weeks after occurrence of such event the documentary evidence duly proving such force majeure condition. The party declaring a force majeure shall during the duration of such force majeure condition use its best effort to resume the performance of its obligations under this Agreement with the least possible delay and such party shall always advise the other party of detailed progress of the event of force majeure and the prospect of settlement of such event and of the resumption of the performance of its obligations under this Agreement.
- (c) Seller or Buyer shall be relieved of the responsibility for performance of this Agreement to the extent to which such performance has been obstructed and if approved by the other party, the time of delivery or performance may be postponed for the duration of time, but not longer, in which delivery or performance is prevented by any such cause or causes herein mentioned above.
- (d) In the event that the duration of the postponement of this Agreement mentioned herein exceeds 3 (three) months, the other party shall have the option to cancel this agreement in respect of the undelivered / unlifted quantity or extend the period of delivery by mutual agreement.

CLAUSE 13: RE-SALE AND RESTRICTION ON USE OF PRODUCT

The Buyer shall use the Product covered under this Agreement as "Actual User" and shall not have any right to resell/loan/ gift/ Export nor will use it in full or in part for any purpose other than its use in its Sponge iron plant at R.G. Peta (Village), L.Kota (Mandal), Vizianagaram District – 535161 (AP) except with the specific approval and consent of the Seller in writing. Any deviation / lapse from the subject condition would entail stopping supplies forthwith by the Seller and in extreme circumstances it would also entitle the Seller to foreclose the Agreement. For this purpose, the Buyer shall provide the supporting Production data periodically to the Seller.

CLAUSE 14: LAWS GOVERNING THE AGREEMENT

The Agreement shall be subject to Indian Laws, Rules and Regulations, notifications etc. issued under such laws.


सुमित देव/SUMIT DEB
महाराजगंज (सफ़िदर)
General Manager (Comm.)
एन.एम.डी.सी. लि./NMDC Ltd.
हैदराबाद/Hyderabad-500 028.

For Maa Mahamaya Industries Ltd.


Bharis Bhingra
Authorized Signatory

CLAUSE 15: ARBITRATION

In the event of any dispute or difference between the parties hereto, such dispute or difference shall be resolved amicably by mutual consultation. If, however, any dispute or difference remains unresolved, the same shall be settled by arbitration by referring the claims to the sole Arbitrator to be appointed by the Chairman-cum-Managing Director/Chief Executive (designated by any other name) of the Seller, who shall be the appointing authority of sole arbitrator.

Chairman-cum-Managing Director of the Seller shall send a panel consisting of three names to the Buyer for selecting one person out of the panel. Such selected person shall be the Sole Arbitrator for adjudicating disputes so referred to him. The award of such sole Arbitrator shall be binding on both parties.

The venue of arbitration shall be Hyderabad and the cost of the arbitration shall be as decided in the arbitration award. No court shall have the jurisdiction to settle any dispute in view of this arbitration Clause. The award of such arbitration shall be binding on both parties.

In case the matter is referred to Arbitration, the seller shall be relieved of its responsibility if the buyer does not pay the amount due to seller (NMDC) or does not fulfill the terms & conditions as agreed to under this agreement.

Subject to above the proceedings shall be as per the Arbitration and Conciliation Act 1996.

CLAUSE 16: DURATION OF AGREEMENT


This Agreement shall remain valid for a period from 01-04-2018 to 31-03-2021. If either of the parties hereto desire for any extension in the period of this Agreement, it shall request the other party with prior notice in writing of its such intention at least one year before the expiry of the period stipulated herein above. Such request shall be considered by the other party on such terms and conditions as may be mutually agreed to, based on the circumstances prevailing at that time. Provided further, if the renewal is agreed to, the renewal agreement shall be finalised and executed between the parties before January 2021 i.e., three months before the expiry of the period stipulated above.

CLAUSE 17: CONFIDENTIALITY:

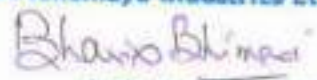
It is expressly agreed by both Buyer and Seller that they shall not disclose the terms and conditions & contents of this agreement to any person, except in so far as disclosure is necessary, for the effective performance by either party of their respective obligations under this agreement or when such disclosure is required by a court or a statutory authority acting under the Indian laws.

CLAUSE 18: NON-CIRCUMVENTION AGREEMENTS

The Buyer agrees that it shall not attempt to circumvent the Seller by trying to deal with the Seller's suppliers. Similarly, the Seller also agrees that it shall not attempt to circumvent the Buyer by trying to deal directly with the Buyer's clients to that effect.


सुमित देव/SUMIT DEB
अनुमानक (व्यवस्थापक)
General Manager (Comm.)
एन.एम.डी.सी. लि./NMDC Ltd.
हैदराबाद/Hyderabad-500 028.

For Maa Mahamaya Industries Ltd.


Bhawna Bhimani
Authorized Signatory

NMDC/MAA MAHAMAYA Industries Ltd.
Date: 01-09-2018.

CLAUSE 19: TERMINATION

This agreement shall stand terminated, worked out and become inoperative with effect from 01-04-2021 unless a written agreement is executed between the parties extending the validity of this agreement or replaced by a new agreement with mutually acceptable terms and conditions.

CLAUSE 20: CESSATION OF LONG TERM CUSTOMER STATUS

The Seller has informed the Buyer that it follows a differential pricing policy with reference to categorization of its various customers into long term customers, and spot customers. It is clearly understood and confirmed by the Buyer that the price agreed to by the buyer & seller in Clause-4 of this agreement is as applicable to its long-term customers and it continues to be applicable only when the Buyer remains as long-term customer of the Seller in terms of the Seller's policy.

"As per the existing policy of the Seller, in the event of (i) The Buyer's lifting performance is less than 60% of total allocated quantity (lump + fines) during the year or (ii) the Buyer violates the conditions stipulated in Clause-13; or (iii) this agreement is terminated before its natural expiry or foreclosed either in terms of Clause-12 at the Seller's option or owing to the breach or default of the Buyer in respect of any other terms of this agreement, the seller reserves the right to review including cancellation of the Long term status of the buyer".

CLAUSE 21: REVIEW OF AGREEMENT

Notwithstanding anything contained in any of the clauses above, the agreement shall be reviewed every year with reference to the fulfillment of performance only under the agreement and to take appropriate actions accordingly.

CLAUSE 22: INTEREST CHARGES FOR DELAY IN PAYMENTS OF DUES

In case of any outstanding amount under any head including arrears due to changes in law / Govt. / Local bodies etc, 15 days time shall be given for clearing arrears from the date of debit note. In case, a customer fails to clear the outstanding amount within 15 days of raising of the debit note, interest @ 12% per annum or 1% above the bank borrowing rate applicable to NMDC, whichever is higher shall be charged from the date of debit note on the outstanding arrears. Any default in payment of outstanding amount including interest continuing beyond 3 months from the date of debit note, NMDC may even consider to stop supplies.

CLAUSE 23: INTEREST CHARGES FOR DELAY IN PAYMENT OF RAILWAY FREIGHT:

In case of failure in payment of Railway Freight by the customers within 48 hours from the loading of rake, interest @ 12% per annum or 1% above the Bank borrowing rate applicable to NMDC, whichever is higher, shall be charged from the date of despatch of rake till the submission of Railway Receipt (RR). Any default in payment beyond 3 months from the date of debit note, NMDC may even consider to stop supplies.

CLAUSE 24: PREVIOUS CORRESPONDENCE

All discussions and meetings held and correspondence exchanged between the Buyer and the Seller in respect of this agreement with respect to material purported to be supplied from Bailadila (Bacheli / Kirandul Complex) mines and any decisions arrived at therein in the past and before the commencement of this agreement, including agreement dated 28-10-2015 hereby stand superseded by this agreement. The terms and conditions of this agreement shall prevail over all such previous correspondence and decisions / commitments, including the agreement dated 28-10-2015.


IN WITNESS WHEREOF both the parties hereto have Signed, Sealed and delivered this Agreement on the date and place mentioned above.

For and on behalf of
NMDC Limited


सुमित देव/SUMIT DEB
अहायबंदक (वणिज्य)
General Manager (Comm.)
एन.एम.डी.सी. लि./NMDC Ltd.
हिराबाटा/Hirabata

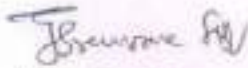
Sumit Deb
General Manager (Commercial)

For and on behalf of
Maa Mahamaya Industries Limited

For Maa Mahamaya Industries Ltd.

Authorised Signatory

Bhavin Bhimani
Asst. General Manager (Finance)

Witness:



1. Dr G S Setty
Jt.G.M.(Commercial)


2. Rajiv Bagde
DGM (Commercial)

हिंदी लेटर अभी उपलब्ध नहीं है

भारतीय मानक ब्यूरो

BUREAU OF INDIAN STANDARDS

Attachment to Licence No. CM/L- 6635477

CM/L-	Name of the Licensee with the Factory Address	Name of the Product	Indian Standard No.
6635477	Maa Mahamaya Industries Ltd., R.G.Peta village, L.Kota Mandal, null, L. Kota, Vizianagaram, Andhra Pradesh-535161	High strength deformed steel bars and wires for concrete reinforcement-	IS 1786:2008

Endorsement No. 21 Dated 12-April-2022

The following addition in the scope of licence have been approved by the Bureau with effect from Twelfth April Two Thousand Twenty Two:

Fe 550 and Fe 550 D with Nominal size 8 mm to 32mm

Consequent upon the above changes, the revised scope of licence in Column (3) of the table in schedule of the Licence along with the Standard Mark in Column (1) of schedule is amended as follows

Fe 415, Fe 500, Fe 550 Fe 500D Nominal size 8mm to 32mm

Fe 550 and Fe 550 D with Nominal size 8 mm to 32mm

Other terms and conditions of licence remain same.

M A J Vinod
Scientist-E & Head