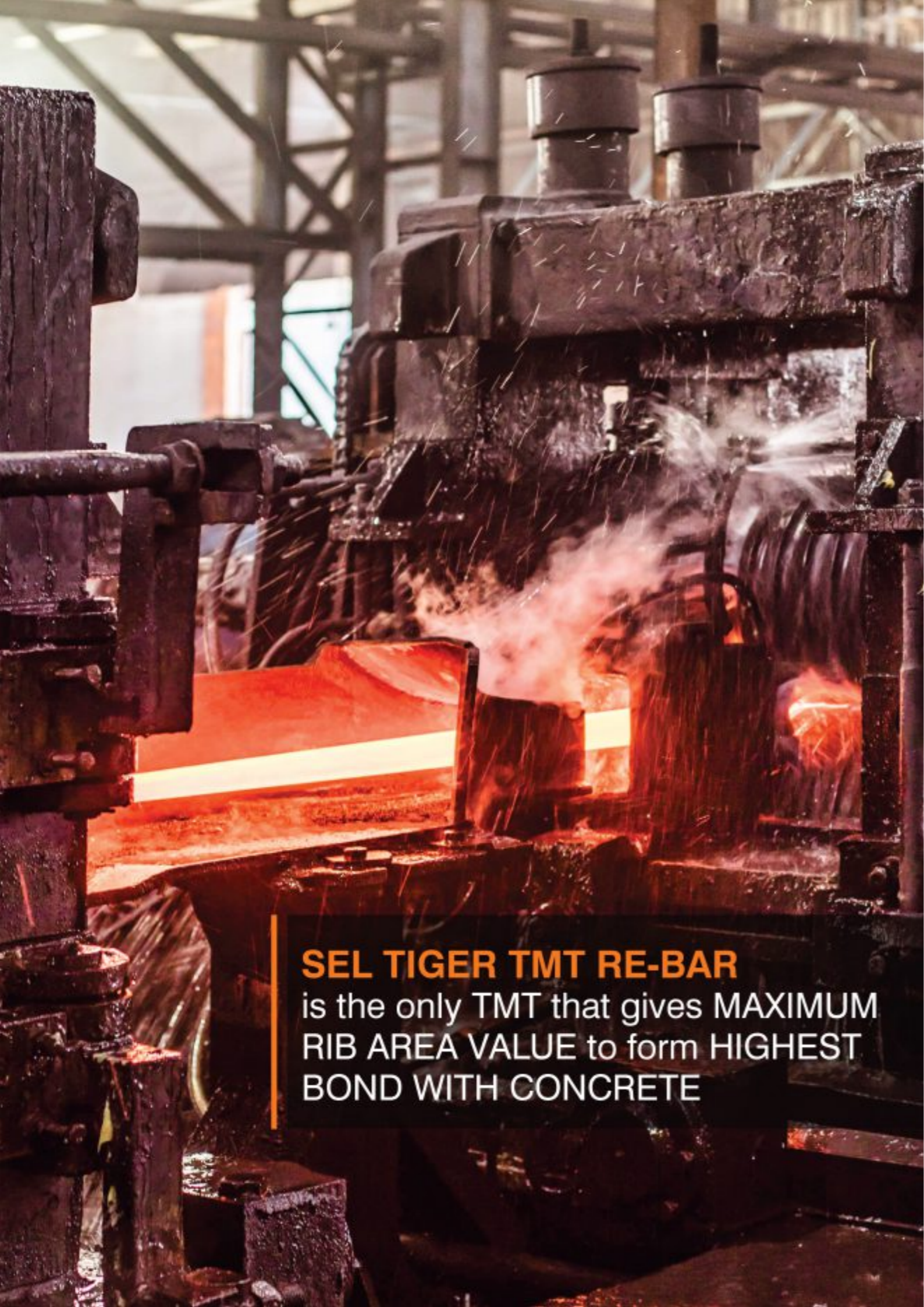


# SEL TIGER TMT SE FARQ PADTA HAI!





### SEL TIGER TMT RE-BAR

is the only TMT that gives **MAXIMUM RIB AREA VALUE** to form **HIGHEST BOND WITH CONCRETE**



## Give your home the strength of a tiger with **SEL TIGER TMT RE-BARS**

Ordinary TMT Bars are made from scrap, and do not follow or ensure even minimum Rib Area Value under BIS norms. In contrast, high quality SEL Tiger TMT Re-Bars not only ensure that BIS norms are fulfilled, but also give **Maximum Rib Area Value** because of a **unique, advanced rib design**.

Size	As per BIS (Minimum)	Ordinary TMT Rib Area (AR) Value	SEL TIGER 550D Rib Area (AR) Value
8	0.96	1.18	1.85
10	1.20	1.46	2.20
12	1.80	2.02	3.48
16	2.40	3.01	5.28
20	3.40	3.96	6.01
25	4.25	4.98	6.42
32	5.44	5.92	7.86

It also forms a **stronger, more ductile and long-lasting Tiger Bond with Reinforced Cement Concrete (RCC)** to impart your dream home with supreme strength.

Strength of TMT Bar and Cement Bond



ILLUSTRATION OF PULL TEST



## CHOOSE SEL TIGER TMT

### The strongest grade in TMT

Strength and Ductility are the most desirable properties for different grades of steel.



Higher Strength is achieved by adding certain alloying elements while keeping the carbon percentage lower and ensuring that the steel remains ductile.



Ductility is simply how much strain a TMT Bar can hold before breaking.

The combination of Higher Strength and Superior Ductility make SEL Tiger TMT Re-Bar 550D the strongest TMT grade, and perfect for earthquake resistant structures.

## Save at every step with SEL TIGER TMT RE-BARS

Used in both residential and commercial RCC projects, TMT Re-Bars make up approx. 25% of the total construction cost. Using superior quality SEL Tiger TMT Re-Bars helps you save on costs at every step!



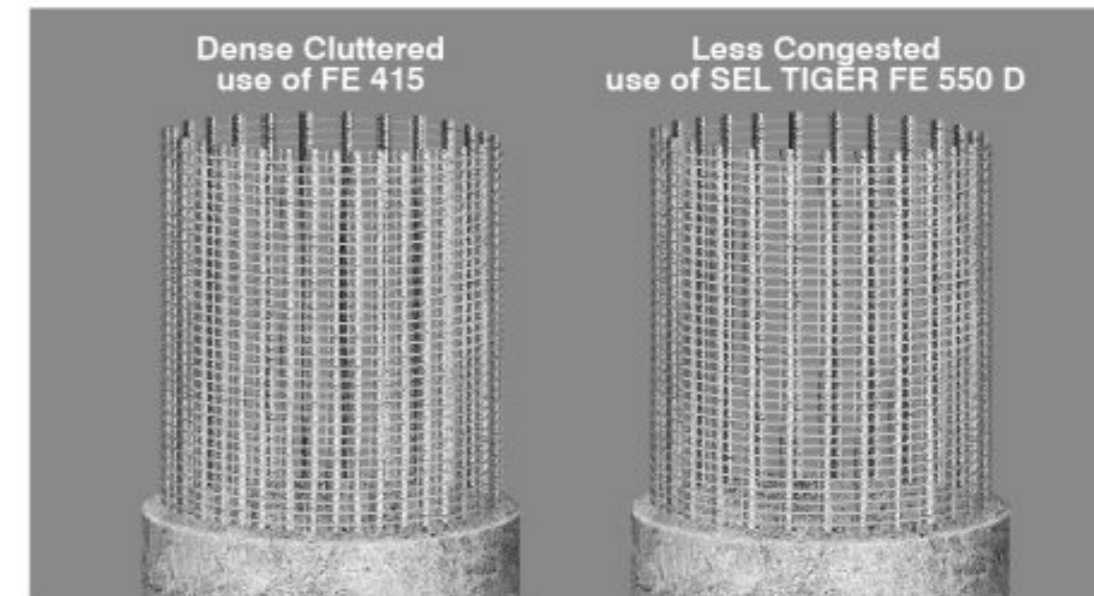
### Lesser consumption of steel

Consistent primary steel usage reduces the consumption by 12-15%.



### Lesser number of TMT Re-Bars required

Higher grade SEL Tiger TMT Re-Bar has higher load bearing capacity, which means lesser number of Re-Bars with lower diameters are required for a construction.



### Saves time

Less time is wasted on placing the Re-Bars, which in time improves construction efficiency.



### Lesser labour cost

Higher grade SEL Tiger TMT Re-Bar has higher load bearing capacity, which means lesser number of Re-Bars with lower diameters are required for a construction.



### Bigger Savings

Using SEL Tiger 550D TMT Re-Bar over ordinary 415 grade TMT ensures approximately 12.7% savings in steel across different steps of construction.





## SEL Tiger TMT Re-Bars are forged in Integrated Steel Plants (ISPs)

where high quality raw materials like iron ore, coal and dolomite are brought directly from mines.

Smaller and non-integrated steel plants often use scrap generated by ISPs as raw materials, thus compromising in both quality and reduction of adverse objects.

**Always choose  
SEL Tiger 550D TMT  
Re-Bar made in ISPs.**

## Forged In Integrated Steel Plants and Perfect For Your Home

SEL Tiger TMT Re-Bars are **manufactured in Ore to Metal integrated steel plants** and impart superior strength to every corner of your home.



**Eco-friendly Processes and Systems** for sustainable manufacturing



**90% Own-generated Power Consumption** for self-reliance and adaptability



Jamuria



Sambalpur

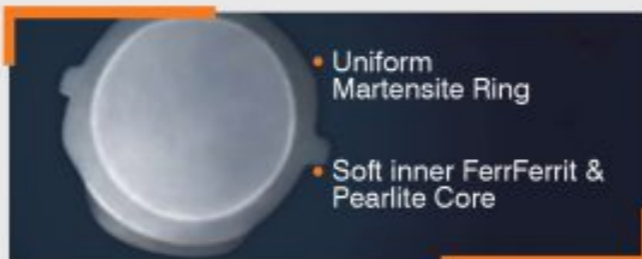
# SEL TIGER TMT RE-BAR v/s TMT BAR MADE FROM SCRAP: KNOW THE DIFFERENCE

SEL Tiger TMT Re-Bars have a multitude of advantages over TMT Bars made from scrap, which make them the best choice for all your construction needs.

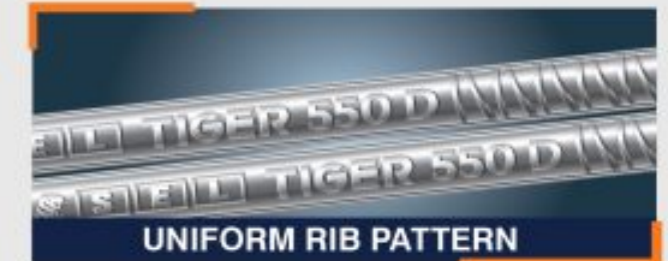
SEL Tiger TMT Re-Bars are made using virgin iron ore and state-of-the-art steelmaking and refining processes. TMT Bars made from scrap or ingots have no secondary refining process.



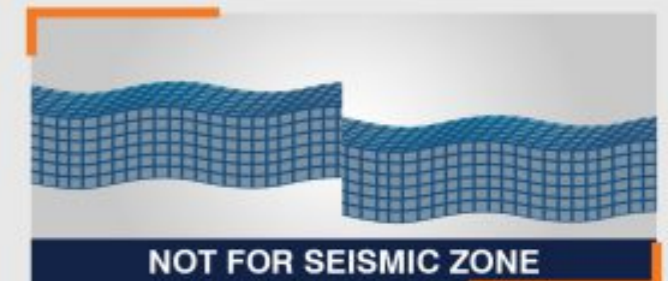
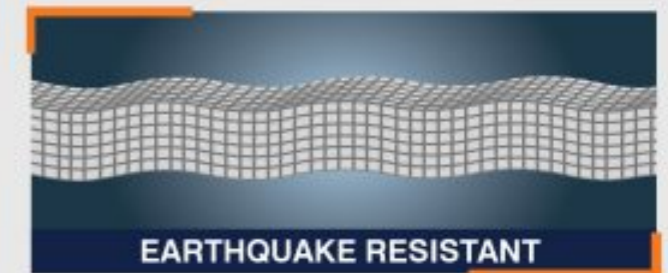
SEL Tiger TMT Re-Bars are manufactured using High Yield Quenching and Self Tempering process (HYQST) or Quenching and Self Tempering process (QST) which gives high strength and ductility. TMT Bars made from scrap use outdated rolling processes and technology.



SEL Tiger TMT Re-Bars are manufactured using computer-controlled notch-making machines which provide Uniform Rib Pattern for excellent bond strength with concrete or cement that surpass the minimum specified levels of Bureau of Indian Standards (BIS) for Rib Area (AR) Value. TMT Bars made from scrap use conventional machines for X-ribs or non-uniform patterns which reduce bond strength due to low fatigue life.

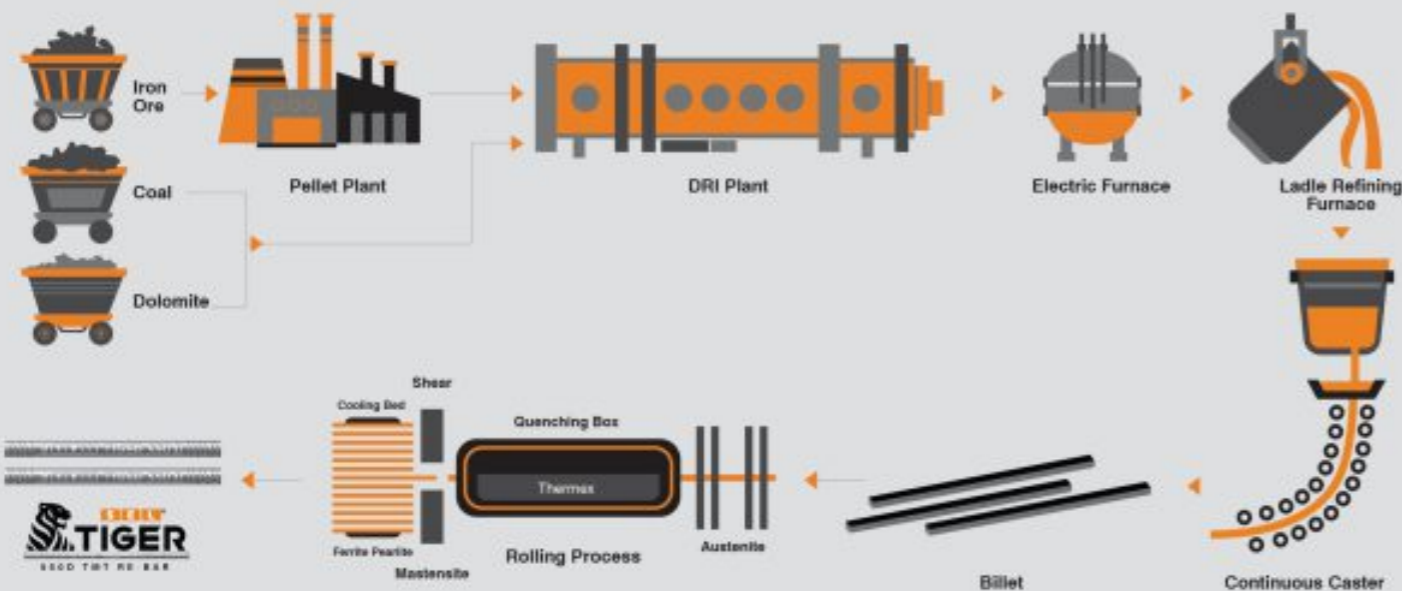


SEL Tiger TMT Re-Bars have superior earthquake resistant qualities as they meet the Ultimate Tensile Strength to Yield Strength (UTS/YS) ratio and have a high percentage of elongation. TMT Bars made from scrap are not recommended for seismic zones as they have much lower resistance to cyclic loading.



# Advanced manufacturing process for stronger homes

SEL Tiger TMT Re-Bars are produced through an advanced, quality-controlled manufacturing process, right from extraction of ore to the finished product. This gives a fine finish to our TMT Bars and makes them less prone to corrosion, more ductile, highly durable and the perfect choice for strong, lasting homes.



SEL Tiger TMT Re-Bars also come in a variety of sizes.

5.5/6 mm

12 mm

25 mm

8 mm

16 mm

28 mm

10 mm

20 mm

32 mm

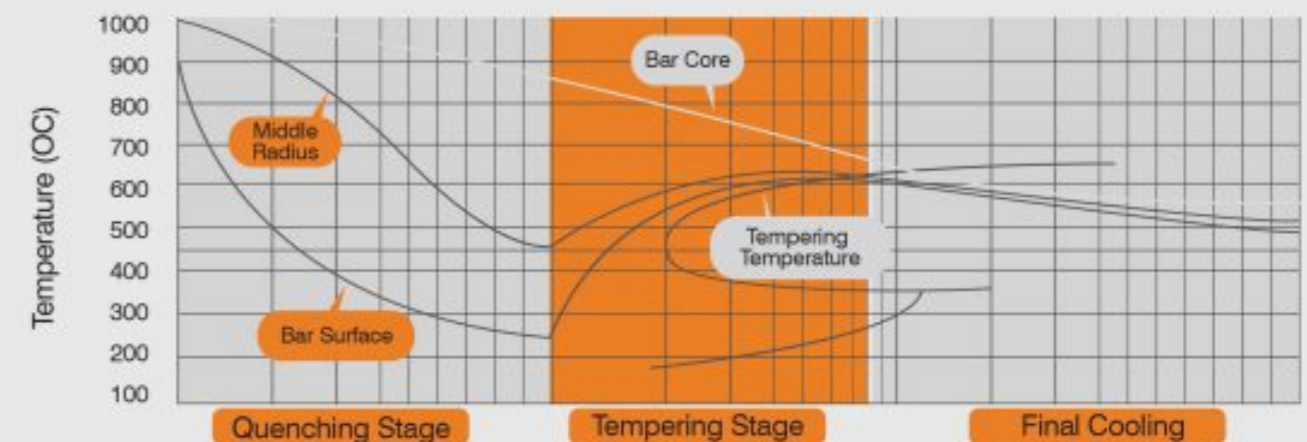
# Choose SEL TIGER TMT RE-BAR choose quality

SEL Tiger TMT Re-Bars are Thermo Mechanically Treated (TMT) steel bars produced through advanced High Yield Quenching and Self Tempering Process (HYQST) or Quenching and Self tempering Process (QST).

These processes not only deliver greater tensile strength to the Re-Bars, but provide higher elongation as well, which improves their bendability and re-bendability. This makes them highly resistant to natural calamities.

SEL Tiger TMT Re-Bars have a combination of different microstructures which provide both strength and ductility.

## Quality Control System



SEL Tiger TMT Re-Bars can be easily welded into desired shapes without producing any defects, leading to smoother surface conditions and lower thermal conductivity.



The combined chemistry of steel and advanced quenching process of SEL Tiger TMT Re-Bars make them resistant to fire and corrosion.



SEL Tiger TMT Re-Bars ensure the highest level of purity through usage of 100% pure steel.

SEL Tiger TMT 550D Re-Bars offer many advantages over regular 500D that make it just the right choice for your home.

Parameter	Fe-500	Fe-500D	SEL Tiger FE-550D	Benefits
Yield Stress(N/mm <sup>2</sup> )	500	500	575	Greater Strength
Ultimate Tensile Strength (Min N/mm <sup>2</sup> )	545	565	650	Greater Strength
Elongation (%)	12	16	> 18	Superior Elasticity and Flexibility
Ratio (UTS/YS)	1.08	1.13	1.15	More Resistant to Earthquakes due to Maximised Energy Absorbing Capacity

# Stringent testing, superior quality and wide acceptance

All the manufacturing facilities of SEL Tiger TMT Re-Bars have cutting-edge and meticulous testing facilities, which lead to these bars being superior to ordinary TMT bars.



SEL Tiger TMT Re-Bars adhere to strict standards of quality, and our processes also comply with the best environmental, health & safety certifications.



1. NABL accredited quality control laboratory as per ISO/IEC 17025:2017.
2. Checking of chemical composition of billet with spectrometer.
3. 0.2% proof stress, UTS, percentage of elongation, bend & re-bend tests are done through advance UTM.
4. Macro Etching tests are done to ensure the use of proper thermal treatment.



- ISO 9001:2015 For QMS
- ISO 140001:2015 For EMS
- OHSMS 45001:2018
- IS 1786:2008 For HSDS TMT Re-Bars

The superior quality of SEL Tiger TMT Re-Bar has been widely accepted by the Govt. and private projects Pan India. It also has a satisfied retail network of 3000+ and is still growing.

Andhra Pradesh	Arunachal Pradesh	Assam	Bihar	Chhattisgarh
Gujarat	Haryana	Himachal Pradesh	Jammu	Jharkhand
Karnataka	Madhya Pradesh	Maharashtra	Manipur	Meghalaya
Mizoram	Nagaland	Punjab	Rajasthan	Odisha
Sikkim	Telangana	Tripura	Uttarakhand	Uttar Pradesh
West Bengal				

# SHYAM METALICS

Innovation, expansion and profitability



## SEL Tiger TMT Re-Bar is a product from the house of Shyam Metalics

India's leading metal producing company and a name synonymous with quality. With a Group turnover of more than ₹10,000 crores (unaudited), **the organisation has a history of constant innovation to come up with products that meet ever-evolving consumer needs.**

**Shyam Metalics Launched it's IPO & got listed on both National Stock Exchange and Bombay Stock Exchange in June 2021.**

And ever since our inception, we have been pursuing new landmarks and bigger glories that accelerate the pace of development.

# A LEGACY OF STRENGTHENING THE NATION





# MANUFACTURING EXCELLENCE FOR A STRONGER TOMORROW

Ore to Metal, backward and forward integrated steel plants with Captive Railway Siding

Fourth largest Sponge Iron player in India

Strategically located plants with proximity to Mineral Belts, National Highways and Ports

Leading Integrated Steel and Ferro Alloys producer in East India

Combined production capacity of 8.12 MTPA\*

AA / Stable CRISIL Credit Rating

Leading player in terms of Pellet capacity

Sustainable manufacturing by using waste as productive inputs



## TRUSTED BY THE NATION

The superiority of the various products manufactured by Shyam Metals, as well as the company's commitment to quality and dynamic strategy, has led to the forging of strong partnerships with Government bodies and private organisations.



ENGINEERS INDIA LIMITED



And this trust inspires us to keep improving ourselves for you, always.



The team of Tigers at Shyam Metalics are together laying the foundations of today and roaring ahead towards a future of possibilities. With a commitment to quality, a fast-paced growth trajectory, landmark achievements and sustainable manufacturing.

## POWERING TODAY FUELLING TOMORROW



### Our Offices :

S.S. Chambers, 5 C.R.  
Avenue, 2nd & 3rd Floor,  
Kolkata - 700072  
West Bengal, India

Viswakarma Building, North West  
Block, 1st, 2nd & 3rd Floor  
86C, Topsia Road, Kolkata- 700046  
West Bengal

Trinity Towers  
83 Topsia Road, 7th floor  
Kolkata: 700046  
West Bengal, India

TOLL FREE NO. 1800 202 2233

follow us on     [www.shyammetalics.com](http://www.shyammetalics.com)