



**S E L**®

**TIGER**



**550 D TMT RE-BAR**

**IN DEEWARON MEIN  
TIGER REHTA HAI**

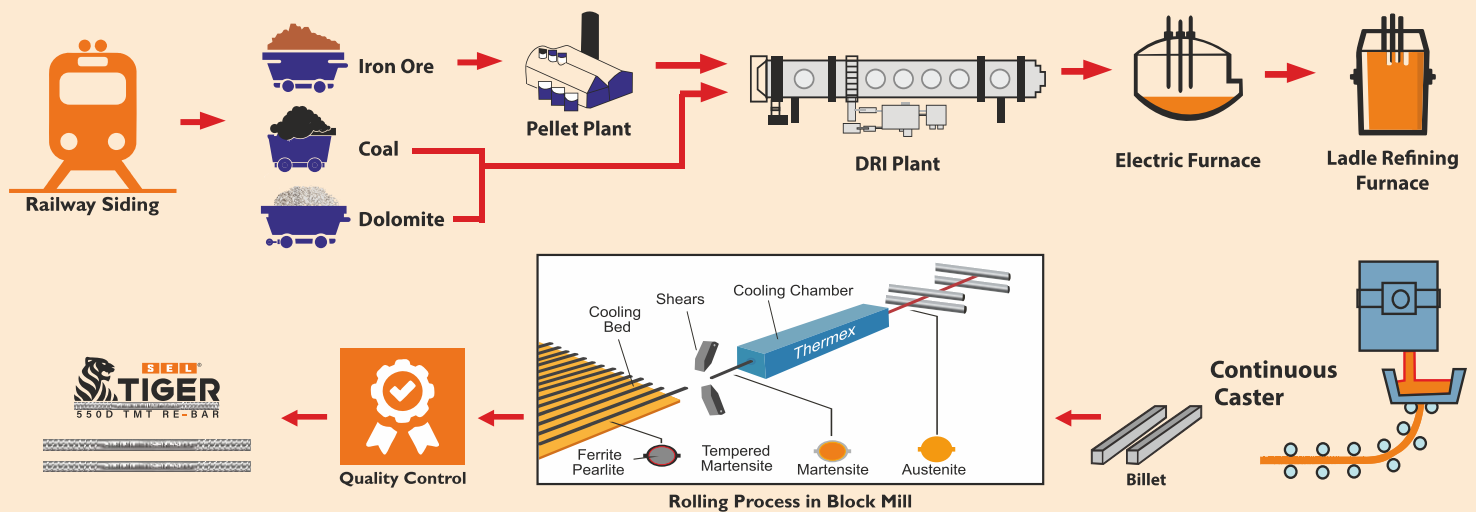


## ABOUT SHYAM METALICS

- **FULLY INTEGRATED STEEL PLANTS** with **ORE TO METAL** Process in **Odisha & West Bengal** having own private **Railway Sidings** with multiple lines.
- India's Leading **INTEGRATED STEEL** Producer with **Annual Consolidated capacity of over 13.50 MTPA.\***
- Manufacturing **Stainless Steel Reinforcement Bars** at our **Madhya Pradesh** Plant.
- State of the Art **Aluminium foil plants** at **Bengal & Jharkhand**.
- Leading Producer of **Ferro Alloys** in India - Manganese, Silicon and Chrome.
- Upcoming : **Blast Furnace, Coke Oven Plant, Sinter Plant & Cold Rolling Mill** for **Color Coated, Galvanized Sheets** during FY 24.
- **A NSE & BSE** listed company with Group revenue of over US \$ 2 Billion.

\*(as on 31/03/2024)

## ADVANCED TMT RE-BAR PROCESSING



It's your fundamental right to attain knowledge of the manufacturing process, to learn the benefits of your TMT.

## TESTING FACILITIES



1. NABL accredited quality control laboratory as per ISO/IEC 17025:2017.
2. Testing 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.

## CERTIFICATIONS



ISO 9001:2015 For QMS  
ISO 14001:2015 For EMS  
ISO 45001:2018 For OHSMS

IS 1786 : 2008

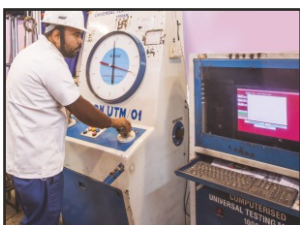


CML No. 5363162  
CML No. 5399082

IS 1786:2008 For HSDS Bars  
IS 2062:2011 For Structural Steel  
IS 2830:2012 for Billets

Green Pro Certified by CII-Green Products & Services Council.

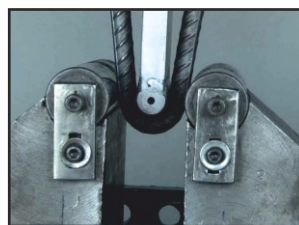
## ADVANCED QUALITY CONTROL



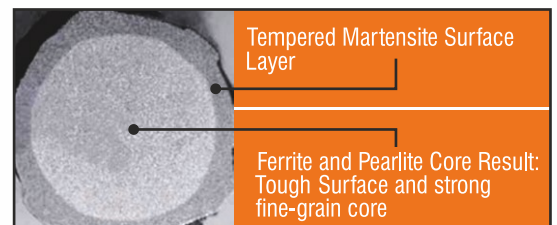
Universal Testing Machine



Spectro Machine



Bend / Re-bend Testing



Metallographic Structure of S-E-L TIGER TMT RE-BAR



S-E-L TIGER 550D

MECHANICAL PROPERTIES			SECTIONAL WEIGHT : DATA COMPARISON WITH ISI BENCH MARK							Bundle Details			
	ISI Benchmark	S-E-L TIGER TMT RE-BAR	ISI Benchmark			S-E-L TIGER 550D TMT RE-BAR				Wt./ Bundle in Kg. (approx.)	Pcs/ Bundle		
TEST	Fe 550D	Fe 550D	Dia Size (mm)	Nom. wt. (kg/m)	Tolerance wt. (kg/m)	Wt. var. (gr./m)	Indv. Sample (% var.)	Weight Tolerance (kg/m)	Wt. var. (gr./m)			Indv. Sample (% var.)	Av. Wt. (kg./m)
Yield Stress (Min.) N/mm <sup>2</sup>	550	565	6	0.222	0.206 - 0.237	31	± 7	0.206 - 0.224	18	-7, +1	0.222	51	20
Ultimate Tensile Strength (Min.) N/mm <sup>2</sup>	600	650	8	0.395	0.367 - 0.423	56	± 7	0.367 - 0.399	32	-7, +1	0.383	54	12
Stress Ratio%	1.08	1.15	10	0.617	0.574 - 0.660	86	± 7	0.574 - 0.623	49	-7, +1	0.599	56	8
Elongation (Min.)%	14.5	19	12	0.888	0.844 - 0.932	88	± 5	0.844 - 0.897	53	-5, +1	0.871	52	5
Bend Test Upto and including 20mm	4 Ø	3 Ø	16	1.580	1.501 - 1.659	158	± 5	1.501 - 1.596	95	-5, +1	1.549	54	3
Over 20mm	5 Ø	4 Ø	20	2.470	2.396 - 2.544	148	± 3	2.396 - 2.482	86	-3, +0.5	2.439	58	2
Rebend Test Upto and including 20mm	6 Ø	5 Ø	25	3.850	3.735 - 3.965	230	± 3	3.735 - 3.869	134	-3, +0.5	3.802	45	1
Over 20mm	7 Ø	6 Ø	28	4.830	4.685 - 4.975	290	± 3	4.685 - 4.854	169	-3, +0.5	4.770	58	1
			32	6.310	6.120 - 6.500	380	± 3	6.120 - 6.342	222	-3, +0.5	6.231	75	1



### Lower Steel Consumption

With **S-E-L TIGER 550D TMT Re-Bars**, structures are designed to consume less steel, offering savings of up to **14%** in steel usage.



### Cost Saving

Consumption of TMT Re-Bars is lower for the same load-bearing structure using **Fe 550D** when compared to Fe 500D & Fe 415.

**Savings upto 14%**



### Time Saving

Time required for the placement/tying of **S-E-L TIGER 550D TMT Re-Bars** is saved and enhances construction efficiency.



Ordinary 500D TMT Re-Bar (High Density)



S-E-L TIGER 550D TMT Re-Bar (Low Density)



### Strong Structure

A structure design based on **Fe 550D TMT Re-Bar** can bear more load than one based on Fe 500D.



### Earthquake Resistance

The enhanced strength of **Fe 550D TMT Re-Bars** provide increased protection during earthquakes when compared to structures based on 500D TMT Re-Bars.



### Low Labour cost

Using less number of TMT Re-Bar means using less labour, which saves cost.



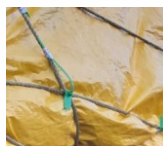
### More Space

New- Columns made of **Fe 550D TMT Re-Bar** are of a smaller cross-sectional area compared to Fe 500D in the same load-bearing design. Thus, structures based on Fe 550D offer more carpet area.



### Automatic Bundle & Strapping

**S-E-L TIGER 550D TMT Re-Bars** are bundled and strapped using automatic machines, ensuring safe transportation and prevent unauthorized access.



### Unique Locking System

The unique locking system with tarpaulin ensures zero theft during transportation and significant cost benefits.

# IN DEEWARON MEIN TIGER REHTA HAI



## WIDE DISTRIBUTION NETWORK

ANDHRA PRADESH	MANIPUR
ARUNACHAL PRADESH	MEGHALAYA
ASSAM	MIZORAM
BIHAR	NAGALAND
CHHATTISGARH	ODISHA
GUJARAT	PUNJAB
HARYANA	RAJASTHAN
HIMACHAL PRADESH	SIKKIM
JAMMU & KASHMIR	TAMIL NADU
JHARKHAND	TELANGANA
KARNATAKA	TRIPURA
KERALA	UTTAR PRADESH
MADHYA PRADESH	WEST BENGAL
MAHARASHTRA	

## PRODUCT RANGE

S-E-L TIGER 550D TMT RE-BAR  
TMT IN COIL  
WIRE ROD  
HB WIRE  
MS BINDING WIRE  
ANGLE  
Z ANGLE  
CHANNEL  
GATE CHANNEL  
BEAM  
FLAT  
SQUARE  
H BEAM / RS JOIST  
SS RE-BAR  
SS WIRE ROD  
SS ROUND  
ALUMINIUM FOIL  
COLOUR COATED SHEET

Due to its high quality S-E-L TIGER 550D TMT RE-BAR is widely used in the following sectors



AIRPORT



BUILDING



DAM



FLYOVER



HIGHWAY



RAILWAY

## SHYAM METALICS AND ENERGY LIMITED SHYAM SEL AND POWER LIMITED

### Sales and Marketing Office

VISWAKARMA BUILDING, NORTH WEST BLOCK, 1ST, 2ND, 3RD & 4TH FLOOR, 86C, TOPSIA ROAD, KOLKATA- 700046, WEST BENGAL  
P19 CPT COLONY, TARATALA ROAD, KOLKATA 700088, WEST BENGAL