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[www.suryadev.in](http://www.suryadev.in)

A P R I M A R Y S T E E L M A N U F A C T U R E R

**Innovative Steel  
Solutions for  
Every Industry**  
*State-of-the-Art Manufacturing Facility*



[www.suryadev.in](http://www.suryadev.in)





Established in 2006,  
Suryadev Alloys & Power is  
among India's leading  
integrated steel manufacturers



Suryadev is engaged in manufacturing intermediate & finished steel Products, including  
**TMT Bars, MS Billets, MS Rounds & Sponge Iron.**

CERTIFIED BY



ISI 2830:2012



ISI 1786:2008



ISI 2062:2011



ISO 9001:2015



ISO 45001:2018



ISO 14001:2015



**THERMEX**<sup>®</sup>



The company also operates 2 x 80MW thermal power plants and 1 x 25 MW WHRB power plant. The organisation is ISO 9001, ISO 14001 and ISO 45000 certified. Suryadev also has strong credit ratings; the company has received CARE A2 for its short term banking facilities and CARE A- for long -term banking facilities. The company is run by an expert workforce of 2000+ professionals with rich and diversified experience in the metals and mining industry.



Product Range TMT  
Reinforcement Bar



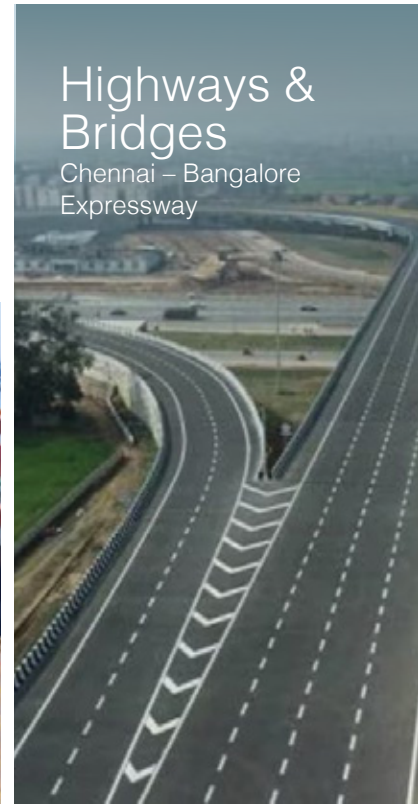
Factories &  
Warehouses

Foxconn, Elephant projects  
Modern tall buildings

With an ever growing demand for stronger infrastructure Suryadev TMT Rebars finds extensive use in a variety of modern construction.



Ports  
Chennai port



Highways &  
Bridges

Chennai – Bangalore  
Expressway



Railways &  
Metro Rail - CMRL



The Heart of High  
Quality Steel Bars

ORIGINAL PRODUCER OF STEEL

Approved By



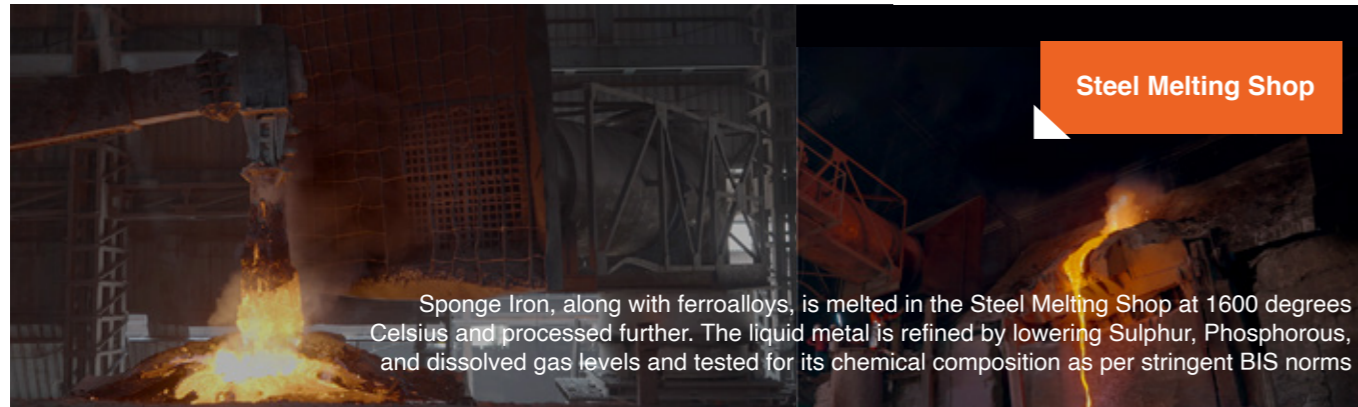


# Manufacturing Process



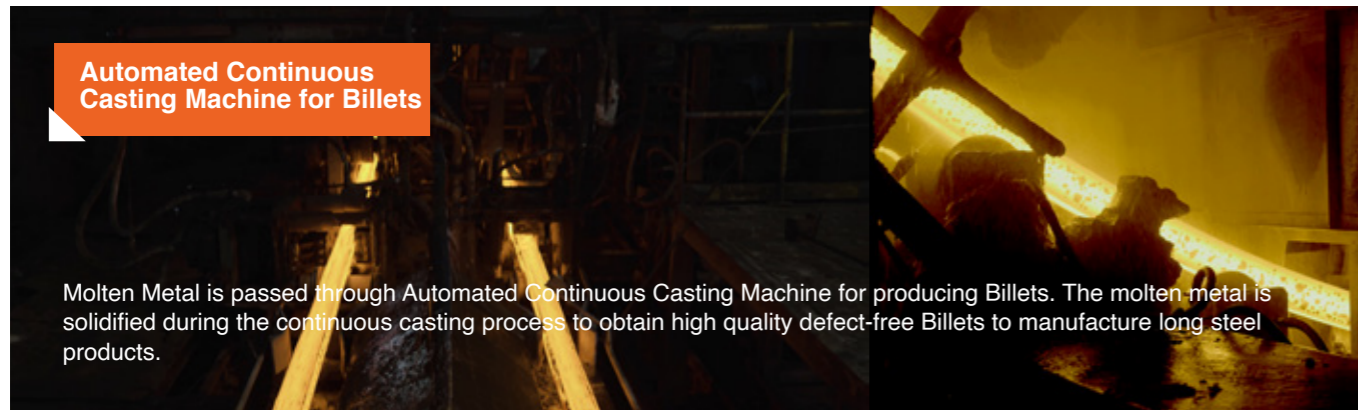
**Sponge Iron Unit (DRI)**

Iron Ore, Coal, and Dolomite are sourced and processed at our DRI plant to obtain Sponge Iron, which is a metallic mass of iron obtained through direct reduction of iron ore. Stringent quality control measures are undertaken to test every batch of raw material. Sponge Iron is then tested for its final chemical composition and sent to Steel Melting Shop.



**Steel Melting Shop**

Sponge Iron, along with ferroalloys, is melted in the Steel Melting Shop at 1600 degrees Celsius and processed further. The liquid metal is refined by lowering Sulphur, Phosphorous, and dissolved gas levels and tested for its chemical composition as per stringent BIS norms



**Automated Continuous Casting Machine for Billets**

Molten Metal is passed through Automated Continuous Casting Machine for producing Billets. The molten metal is solidified during the continuous casting process to obtain high quality defect-free Billets to manufacture long steel products.



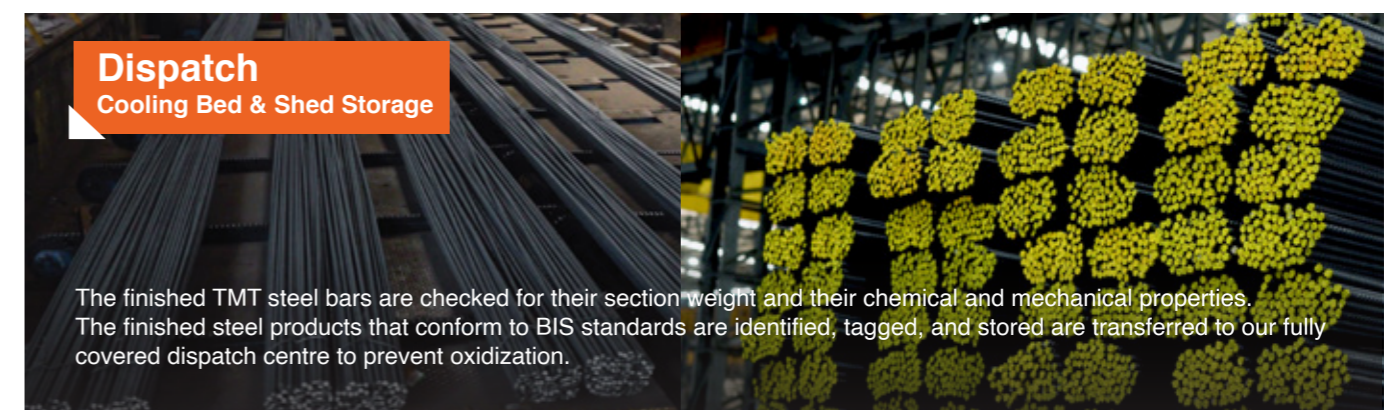
**Automated Rolling Mill**

The casted Billets are tested for quality and immediately transferred to Automated Rolling Mill through conveyor belts to avoid reheating and any possible changes in the chemical composition. Billets pass through high-speed roughing, intermediate, and finishing mills where they are converted into hot rolled steel bars.



**Thermex Quenching**

The steel bars are rapidly cooled in the THERMEX plant using high pressure water spray system. The THERMEX technology is used for Thermo-Mechanical treatment of steel bars to ensure consistent mechanical properties.



**Dispatch Cooling Bed & Shed Storage**

The finished TMT steel bars are checked for their section weight and their chemical and mechanical properties. The finished steel products that conform to BIS standards are identified, tagged, and stored are transferred to our fully covered dispatch centre to prevent oxidization.



## Welcome to the World Class Premium TMT BARS

### Fe 550

Suryadev Fe550 TMT bars are ideal for small and medium-sized residential projects. They have higher tensile strength compared to ordinary grades of TMT bars. This enables significant cost-savings as a lesser number of TMT bars are required to reinforce a structure. Furthermore, the high tensile strength of Fe550 TMT bars improves bonding between concrete and steel thereby increasing longevity of the structure. Suryadev Fe550 TMT bars also have excellent weldability and superior bend and re-bend properties making them the preferred choice of engineers and masons alike.

#### Range of TMT Rebars



### Fe 550D

Crafted for superior strength, incredible flexibility, and exceptional longevity, Fe550D is Suryadev's flagship TMT bar. Suryadev Fe550D TMT bars combine high strength with outstanding ductility. This is achieved by increasing yield and tensile strength and maintaining low carbon, phosphorous and sulphur content. They are meticulously manufactured with precise chemical composition and physical properties that make them highly resistant to fire, corrosion, and earthquakes. Suryadev Fe550D TMT bars are well-suited for all kinds of construction, including high-rise residential and critical infrastructure projects.

### Fe 550D CRS

Suryadev Fe550D CRS rebars are meticulously manufactured for construction projects in coastal, flood-prone, and humid regions with high acidity and salinity. They have superior strength and flexibility compared to ordinary TMT rebars. Furthermore, they provide exceptional longevity to any structure due to their corrosion, fire, and earthquake resistance properties. This is achieved by maintaining low carbon content and adding copper, chrome, and nickel. Suryadev Fe550D CRS rebars are the preferred choice of engineers as they greatly improve the structural stability of the building and minimize losses due to corrosion.



Superior Strength



Exceptional Longevity



Incredible Flexibility



High Bonding Strength



Fire, Earthquake & Corrosion Resistant

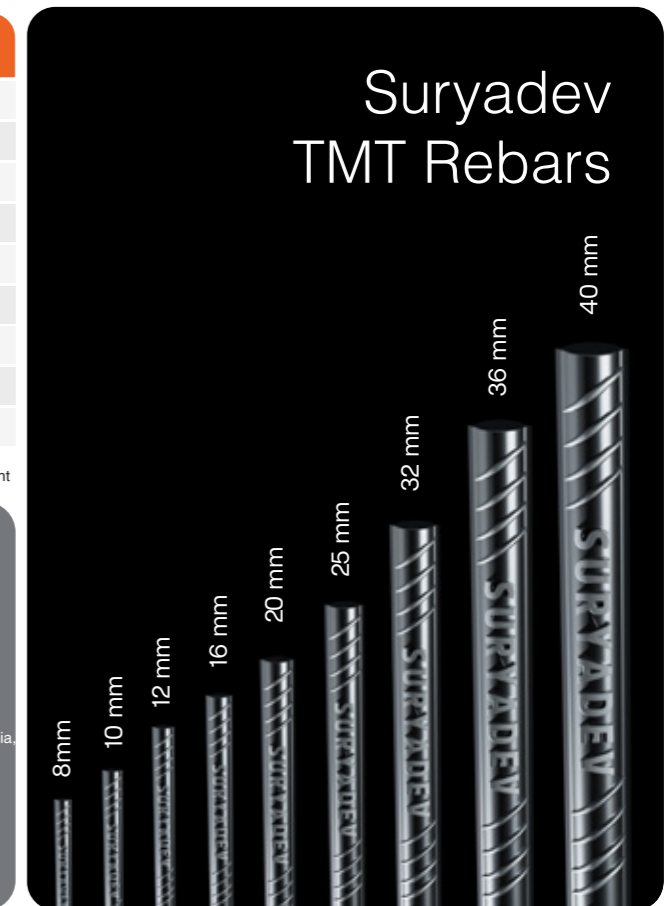


Unmatched Quality

#### Size range

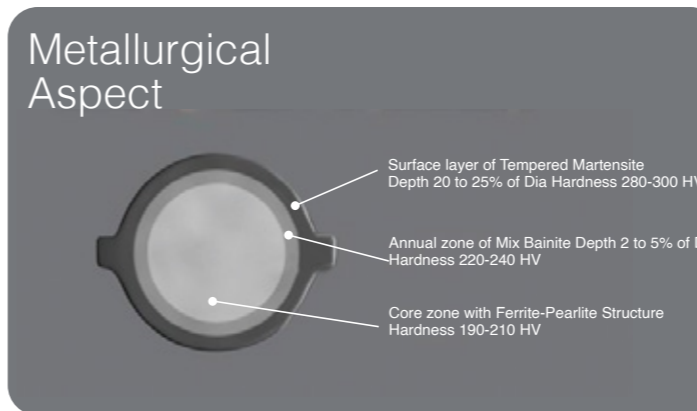
Size (mm)	Cross Sectional Area (mm <sup>2</sup> )	Section Weight Range (kg/m)	Total Bars per Bundle
8	50.3	0.375-0.415	10
10	78.6	0.586-0.648	7
12	113.1	0.857-0.919	5
16	201.2	1.525-1.635	3
20	314.3	2.421-2.519	2
25	491.1	3.773-3.927	1
32	804.6	6.184-6.436	1
36	1018.3	7.830-8.150	1
40	1257.2	9.662-10.057	1

Suryadev TMT Rebars are available in the following sizes as per: 1786-2008 for Concrete Reinforcement



### Chemical & Mechanical Properties of TMT Rebars

Rebar Grade %	BIS Fe 550	Fe 550	BIS Fe 550D	Fe 550D	BIS Fe 550D CRS	Fe 550D CRS
Carbon (max)	0.30	0.25	0.25	0.25	0.15	0.15
Sulphur (max)	0.055	0.040	0.040	0.040	0.040	0.030
Phosphorus (max)	0.050	0.055	0.040	0.040	0.040	0.10
Sulphur + Phosphorus (max)	0.100	0.09	0.075	0.075		
Alloy Elements (min)					0.40	0.40
Yield Strength (min)	550	570	500	500	550	570
Ultimate Tensile Strength (min)	10	14.5	16	16	14.5	16
Elongation (min)	585	650	600	650	600	630
Total Elongation (min)	1.06	1.10	1.10	1.12	1.08	1.10





## A look at our Lab Tamper Proof Testing Equipment

- 🌀 Optical Emission Spectrometers
- 🌀 Setmagan Testing Machines
- 🌀 2000kN Universal Testing Machines
- 🌀 Hardness Testers
- 🌀 Bend and Rebend Testing Machines
- 🌀 Impact Testing Machines
- 🌀 Wet Analysis Laboratory
- 🌀 Optical Microscopes
- 🌀 Salt Spary Chamber
- 🌀 Alternate Immersion Testing Machine

We ensure accurate quality checks with continual Research and Development for product up-gradation. Besides the latest computerized machines, our skilled employees are trained to monitor quality 24x7 to produce the finest TMT Bars.

## Esteemed Clients



## Awards & Accolades

