



#### **OUR PRESENCE**

RS VIRLA GROUP: Pioneers in Steel Excellence

RS VIRLA Group is a powerful established Industries, with a vast experience in steel production in two different states with most advanced state of art for TMT manufacturing. To match the global infrastructure market with India, we are launching our most proficient & advanced construction bars, with an innovation after almost a decade in steel manufacturing unit.

RS Virla Group is redefining the TMT steel industry with an innovative and organized supply chain system that emphasizes transparency and visibility. By providing complete insight into every transaction, from manufacturing to distribution and beyond, RS Virla fosters trust and accountability among all stakeholders. Committed to quality assurance and excellence, the Group's approach not only sets a new industry standard but also contributes to building a more sustainable and resilient infrastructure ecosystem.

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Through our commitment to quality, sustainability, and economic development, we want to contribute to the growth and prosperity of nation.













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**RS VIRLA PRIVATE LIMITED** 

(TMT, RINGS, & WIRE MFG)



(TMT MFG.)







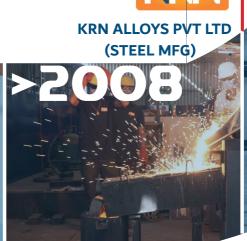






SHRI RAGHUVIR STEEL PVT LTD.









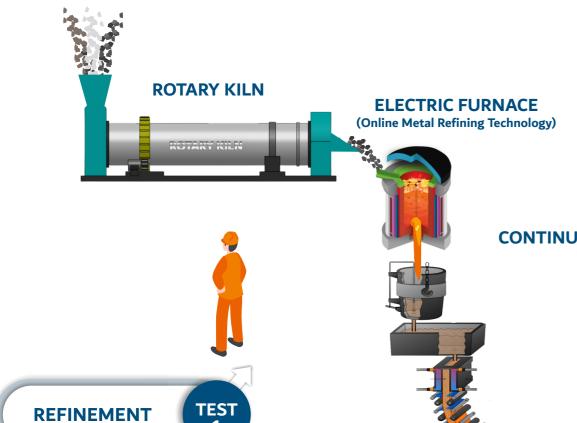


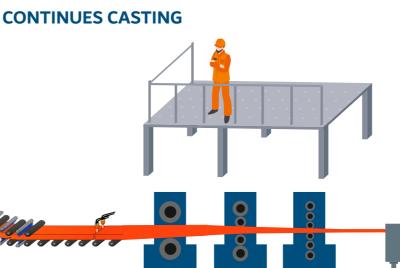


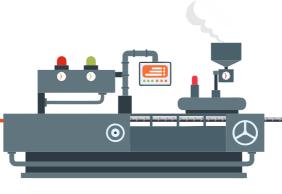


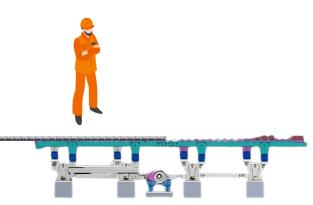
# PROCESS

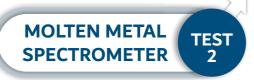
# 5X Testing 5X Stronger











ROLLING STAND (Most Advanced Single Pass 18 Stand Rolling Mill)

**TEST** 

THERMEX AND QUENCHING (HSE German Thermex Technology)

**FULLY AUTOMATED COOLING BED** 













INSPECTORATE KOLKATA - INDIA









## **BEST QUALITY**



High Fem Sponge Iron and HMS 1 along with Alloys addition is carefully chosen on adequate Quality parameters. Our USP Process of Online Metal refining allows us to optimize the usage Sponge iron and HMS is melted in Electric furnace at over 1700°C, turning it into Unified High graded molten metal. Impurities are removed to ensure a clean, uniform composition. The refined molten metal is cast into solid billets, ready for TMT bar production. RS VIRLA Group utilizes state-of-the-art electric heating furnaces to precisely heat 100mm to 150mm section billets with a length of 6 meters.

Our world-class TMT production is powered by India's most advanced straight-line single-pass 18stand rolling mill. This cutting-edge technology enables us to achieve exceptional accuracy in shaping the billets into the desired TMT bar profiles.

We have partnered with HSE German Thermex Technology for quenching, rapid, uniform cooling that delivers a hardened outer layer for enhanced strength. Automatic cooling beds control heat dissipation, preserving the bars' optimal mechanical properties.



#### **Quality Assurance with Bureau Veritas Certification**

At RS VIRLA, we take pride in delivering TMT bars of the highest quality. Every batch of our TMT bars undergoes rigorous inspection for mechanical and chemical properties by the renowned third-party agency, Bureau Veritas. This independent certification ensures that our products meet and exceed industry standards, providing you with the strength, durability, and reliability needed for your construction projects.

Trust in our commitment to excellence, reinforced by Bureau Veritas' stamp of approval.

#### **FIVE - STEP**

### **INSPECTION PROCESS**

The RS Virla Quality Framework - A robust quality framework is essential for delivering products that exceed expectations. The RS Virla Quality Framework encompasses a comprehensive approach to ensure product excellence.

**REFINEMENT**: Examine raw materials for defects, impurities, or inconsistencies.

MOLTEN METAL - SPECTROMETER : Conduct spectrometric analysis to verify the chemical composition of the molten metal. Additionally, we partner with Bureau Veritas for independent third-party verification of our spectrometric results, ensuring the accuracy and reliability of our chemical composition data.

MECHANICAL & CHEMICAL - BILLETS :Verify the dimensions of the hot billet to ensure it meets the specified tolerances along with independent dimensional checks performed by Bureau Veritas. This dual verification process provides added assurance of product quality and compliance with industry standards.

**TMT MECHANICAL**: The rolled bar's temperature is precisely monitored to ensure it remains optimal for the quenching process. Final TMT bars are checked to meet strict dimensional standards and tolerances. Tensile, bend, and impact tests are performed to ensure strength, ductility, and toughness.

**OVERALL ANALYSIS**: Inspect the microstructure of TMT bars post-heat treatment, checking for surface defects or imperfections.

> "By integrating five quality assurance checks in the process we ensures that every TMT Bar is a testament to Our Commitment to Excellence."

## OUR PRODUCT



RS Virla Group is set to revolutionise the Indian construction landscape. After two decades of intensive research and development, we proudly introduce our cutting-edge Double P Ribbed 5 in 1 QST TMT bars. This groundbreaking product, incorporating Japanese and German technology, is a testament to our commitment to delivering world-class construction solutions. It is also designed to meet the demands of India's growing infrastructure.





Our 5 in 1 QST bar is a testament to RS Virla's commitment to innovation. This advanced TMT bar offers a unique combination of properties:

#### **PRO DUCTILITY**

Experience unparalleled ductility with RS
Virla TMT Bars. Ensure your structures are
strong, flexible, and built to last!

#### **PRO STRENGTH**

Engineered for superior strength, ensuring your structures stand tall and resilient.



Provides the best solution for structures subject to earthquakes, thanks to high dissipation of energy.



Built to resist corrosion, ensuring longlasting durability and protection for your structures.

#### **PRO FIRE RESISTANCE**

Designed for superior fire protection, safeguarding your structures with unparalleled safety and strength.



Pro Bond Ribs Make Stronger Bond

#### **OUR**

### **SPECIFICATION TABLE**

#### **PHYSICAL PROPERTIES**

GRADE	FE-500/CRS	FE-550	FE-700
YIELD STRESS (N/mm²)Min	500D	550D	700
Tensile Strength_ (N/mm²)Min Ratio	>1.10More Than Actual 2.0% Proof Stress/Yield Stress But not less than 565 N/mm²	>1.08More Than Actual 2.0% Proof Stress/Yield Stress But not less than 600 N/mm	_ >1.04More Than Actual 2.0% Proof Stress/Yield Stress But not less than 760 N/mm

#### **CHEMICAL PROPERTIES**

GRADE	FE-500D	FE-500D	FE-550D	FE-550D	FE-700	FE-700
(%) Max	BIS:1786	RS VIRLA/CRS	BIS:1786	RS VIRLA	BIS:1786	RS VIRLA
CARBON	0.25	0.18-0.25	0.25	0.18-0.23	0.30	0.18-0.25
SULPHUR	0.040	0.030-0.035	0.040	0.025-0.035	0.040	0.025-0.035
PHOSPHORUS	0.040	0.028-0.035	0.040	0.025-0.035	0.040	0.025-0.035
S+P	0.075	0.062-0.070	0.075	0.062-0.070	0.075	0.062-0.070

#### **PRODUCT RANGE**

NOMINAL SIZE (mm)	BIS STANDARDS WEIGHT PER METER IN KG	RS VIRLA EQR PER METER IN KG	BIS TOLERANCE	RS VIRLA EQR BIS TOLERANCE
8	0.395	0.390-0.397	<u>+</u> 7%	<u>+</u> 4%
10	0.615	0.592-0.600	<u>+</u> 7%	<u>+</u> 4%
12	0.888	0.861-0.880	<u>+</u> 5%	<u>+</u> 3%
16	1.580	1.532-1.560	<u>+</u> 5%	±3%
20	2.470	2.420-2.450	±3%	±2%
25	3.850	3.773-3.840	<u>+</u> 3%	<u>+</u> 2%
28	4.830	4.735-4.800	<u>+</u> 3%	<u>+</u> 2%
32	6.310	6.184-6.300	<u>+</u> 3%	<u>+</u> 2%
36	7.990	7.800-7.900	<u>+</u> 3%	<u>+</u> 2%
40	9.860	9.663-9.860	<u>+</u> 3%	<u>+</u> 2%

Martensite

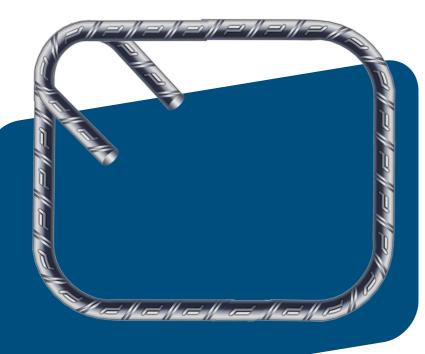
# OUR TMT RANGE











RS Virla Group offers a comprehensive range of high-quality TMT rings, manufactured using the same advanced technology as our renowned TMT bars. Our TMT rings are designed to deliver exceptional strength, durability, and precision. RS Virla TMT rings are the ideal choice for projects that require high-quality, reliable, and versatile circular steel components.

#### **Benefits of Using RS VIRLA TMT Rings:**

**Reduced Labour Costs:** Using pre-fabricated TMT rings can significantly reduce labour costs, as there's no need for on-site fabrication.

**Lower Working Capital:** By using ready-made TMT rings, you can optimise your working capital by avoiding the need for additional inventory or manufacturing processes.

**Better Quality Construction:** TMT rings are manufactured under controlled conditions, ensuring consistent quality and reducing the risk of defects.

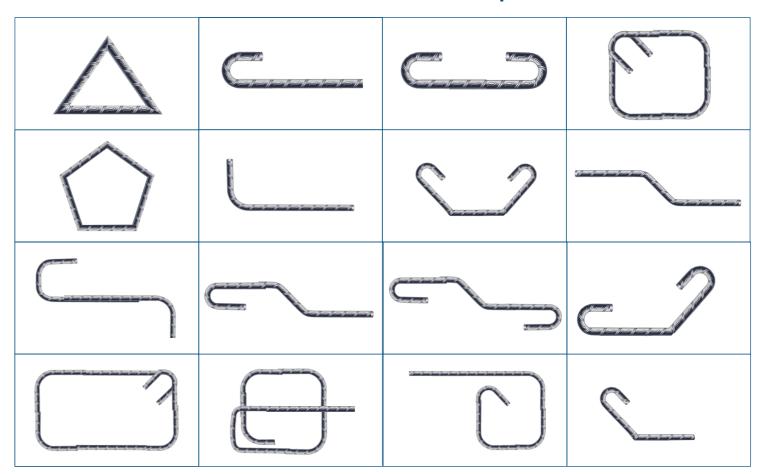
**Zero Wastage:** With precise dimensions and minimal waste, TMT rings can help optimise material usage.

**No Misplacing of Materials:** Using pre-fabricated rings eliminates the risk of misplacing materials on the construction site.

**Freedom in Design:** TMT rings can be used in various designs and configurations, offering flexibility in construction planning.

**Faster Construction Speed:** By using ready-made TMT rings, construction projects can be completed more efficiently, saving time and money.

#### **Available In All Sizes And Shapes**



			8 MM Basic			
6 X 12	6 X 13	6 X 14	6 X 15	6 X 16	6 X 18	6 X 20
7 X 12	7 X 13	7 X 14	7 X 4.5	7 X 15	6 X 16	7 X 17
7 X 20	9 X 13	9 X 14	9 X 20	9 X 21	12 X 12	

8 MM Special						
6 X 3	6 X 6	6 X 8	6 X 9	6 X 10	6 X 12	7 X 3
7 X 7	7 X 9	7 X 10	7 X 11	9 X 13	10 X 4	11 X 3
12 X 3						

- \* Standard Bundle will have 25 pieces each.
- \* Rings customization is also available.





RS Virla Flexon MS Binding Wire is a high-quality steel wire product designed for a variety of applications. RS Virla Flexon MS Binding Wire offers a reliable and efficient solution for various binding and securing applications. Its combination of strength, flexibility, and corrosion resistance

makes it a popular choice for professionals and DIY enthusiasts alike.



#### Our binding wire is widely used in

Construction: Binding reinforcement bars, tying rebar cages, and securing construction materials.

**Agriculture:** Fencing, baling, and other agricultural tasks.

Manufacturing: Packaging, bundling, and securing products.

Household: General-purpose binding and tying tasks.

# WRE COUPLER

RS Virla Group offers a range of high-quality TMT couplers designed to provide efficient and reliable connections between TMT bars. Our TMT couplers are manufactured using advanced technology to ensure superior strength, durability, and ease of use.

#### **Key Features of RS Virla TMT Couplers:**

Superior Strength: Our TMT couplers are engineered to provide the same strength and durability as welded or lapped joints.

**Efficiency:** TMT couplers significantly reduce construction time compared to traditional methods.

Quality: Our couplers are manufactured under strict quality control measures to ensure consistent performance.

**Cost-Effective:** TMT couplers can be a more cost-effective solution compared to welding or lapping. **Safety:** TMT couplers eliminate the safety hazards associated with welding, such as hot work permits and fire hazards.

#### **Applications of RS Virla Couplers:**

Construction: Reinforced concrete structures, such as columns, beams, and slabs.

Infrastructure: Bridges, tunnels, and other large-scale projects.

Industrial Applications: Machinery components, equipment frames, and other industrial structures.

By using RS Virla couplers, construction professionals can benefit from faster construction times, improved quality, and enhanced safety.



### WHY RS VIRLA IS BEST FOR

# DEALERS, ARCHITECTS & CONTRACTORS?

At RS VIRLA, we understand that the strength of our TMT bars is only as strong as the relationships we build. For our valued dealers, we're committed to creating a transparent and efficient supply chain that empowers you to optimize operations and meet the demands of your customers with confidence. Our goal is to ensure that every link in the chain is solid, reliable, and supportive of your business growth.

Architects and contractors are the true heroes of the construction industry, and we're here to support your vision. We offer comprehensive technical data, guidelines, and recommendations to help you integrate our TMT bars seamlessly into your designs. From optimal sizing and placement to innovative co-design services and technical partnerships, we're dedicated to pushing the boundaries of traditional architecture together. Whether it's refining structural elements or developing groundbreaking solutions, we stand by your side, providing the tools and expertise you need to bring your projects to life.

## A MESSAGE FROM OUR CEO



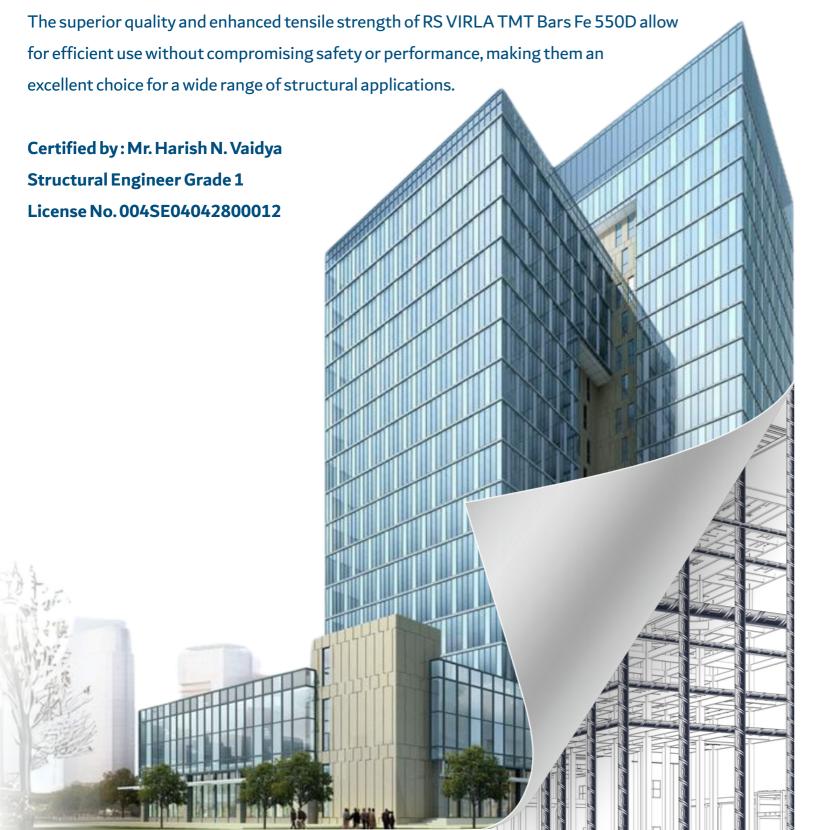


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## THE ARCHITECT'S PREFERRED TMT

Mr. Harish N. Vaidya, has certified that the utilisation of RS VIRLA TMT Bars Fe 550D in construction projects has been proven to significantly reduce TMT consumption by up to 20%. This reduction not only helps in lowering overall construction costs but also maintains the maximum structural strength required for high-quality, durable constructions.





## OUR ENDEAVOR A



TO BE A LEADING PROVIDER OF HIGH-QUALITY STEEL SOLUTIONS, EMPOWERING OUR CUSTOMERS TO BUILD A STRONGER, SAFER, AND MORE SUSTAINABLE FUTURE.



TO BE A GLOBAL LEADER IN THE STEEL INDUSTRY, RECOGNIZED FOR INNOVATION, QUALITY, AND CUSTOMER SATISFACTION.



### OUR VALUES



RS VIRLA IS GUIDED BY A COMMITMENT TO INTEGRITY,
INNOVATION, QUALITY, CUSTOMER FOCUS, SUSTAINABILITY,
AND TEAMWORK. THESE VALUES UNDERPIN OUR
OPERATIONS AND DRIVE OUR PURSUIT OF EXCELLENCE.

