

A+ Application Areas

Consistent superior strength and high ductility are key attributes of Triam A+ Fe 550D new age rebars. These factors go much higher than the prescribed norms of IS:1786. Controlled chemical composition, by virtue of our own in-house rolled billets ensure low Carbon and high Manganese content, helping the rebars retain their optimum strength even at temperatures as high as 6000 Celsius. Additionally, controlled Sulphur and Phosphorus levels in the rebar make it corrosion resistant. Triam A+ Fe 550D can widely be used in construction of office buildings, residential complexes, warehouses, schools, dams, power plants and iconic super-structures.



A+ Advantages at a Glance

When you buy Triam A+ Fe 550D new-age rebars you can be assured that you have ticked all the right boxes when it comes to A+ quality.

PRODUCT TRUTHS	BENEFITS
100% tested captive billets	Resulting in 100% controlled chemical composition of the billet in the sequence to produce TMT.
Anti-corrosion properties	Controlled chemical composition of S% & P% leads to better corrosion control.
Better flexibility	Higher elongation percentage compared to other products lend advanced safeguarding properties against earthquakes and other natural calamities.
Superior strength	Minimum strength of 600N/mm² ensuring maximum support to structures, making it superior to other TMT bars.
Greater AR (Area of Rib) value	Resulting in a good bonding between steel and concrete.
Easy bending and re-bending	Resulting in enhanced productivity of the masons.
Fire resistance	Controlled chemical composition and advanced quenching processes help in instilling the TMT bars with resistance to extreme temperatures of 600°C – 650°C.
Earthquake resistance	The optimal combination of strength and flexibility makes Triam A+ exhibit superlative earthquake resistance.



AMIT ALLIANCE

Amit Alliance boasts of five flourishing verticals, which ensure top-of-the-line quality control, end-to-end business functions leading to industry leading operational excellence.



Amit Mines Private Limited

A specialist in reprocessing blast furnace slag, the trading of mineral ores and other mining procedures, Amit Mines aims at maximum performance excellence through continuous development by streamlining processes and innovating solutions. Excellent reputation and expertise, strict quality control and a well-defined delivery network has won us the respect of several business partners. The Company was selected by Bokaro Steel Plant of SAIL to process recovery of scrap from their slag dump for their internal use and also for consumption in our sister concerns. Amit Mines has processed 12.64 MT of slag in 2.5 years. Our business is spread along the length and breadth of the country, dealing in Manganese ore in Madhya Pradesh, scrap processing in Jharkhand along with being the primary distributor of SAIL TMT in almost the whole of West Bengal. The Company is poised to take up bigger mineral mining projects in the future.



Shivshakti Sponge Iron Limited

A flag bearer of eco-friendly procedures in manufacturing with state-of-the-art, environmentally safe electrostatic precipitators, Shivshakti Sponge Iron offers sponge iron of world-class quality. The quality of the sponge is having a huge contribution on the superior quality of downstream products being manufactured by us and is an important player in our integrated manufacturing cycle.



Amit Metaliks Limited

One of the pioneers of steel manufacturing in Eastern India, with a capacity of 1.5 lakh MT/year, Amit Metaliks manufactures high-quality billets and TMT bars maintaining efficient safety measures, cost & quality control, waste minimisation and monitoring and enhancing of the production processes. With the acquisition of an additional unit - VSP Udyog, we have become one of the largest manufacturers of TMT in the eastern India region. These distinct qualities and a manufacturing capacity of 2.5 lakh MT/year have enabled us to become the sole conversion agent for SAIL in eastern India region and we are proud to partner them in changing skylines. In view of the expertise gained, we have also tied-up with other companies in JVs and executing major downstream projects.



VSP Udyog Private Limited

The newest acquisition of Amit Alliance with spending of almost Rs. 200 crores, VSP Udyog Pvt. Ltd. boasts of a manufacturing capacity of 2.5 lakh MT/year which has been expanded by 1.25 MT/year with backward integration of billets. This vertical is primarily into manufacturing of ingots, rounds, TMT, stirrups and light structures. The inclusion of this vertical not only takes the manufacturing prowess of the company to greater heights but is also a great addition in terms of income generator. Further expansion is planned considering the current demands.



Takshvi Infra Private Limited

This business vertical is into construction of power plants, roads, bridges, commercial complexes and industrial parks. The design excellence and technical knowhow have won us esteemed clients like SAIL, and we were awarded the entire internal road construction project for Durgapur Steel Plant (DSP), along with prestigious projects for large conglomerates like NTPC, NSPCL, among others. The unrelenting quest for peak operational excellence through quick turn-around time, value engineering and inventive concepts has enabled Takshvi Infra to make a significant contribution to major infrastructural developments in eastern India and won us our client's confidence and trust.



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Images are for reference only.



T&C apply.



Lifelong Bari Strong



A+ STRENGTH A+ FLEXIBILITY A+ GRIP



The Future is Now

With rapid urbanisation, forthcoming infrastructure projects and a growing population base, India is poised to be the world's 3rd largest construction market by 2025. While flagship programmes of the government, like 'Smart Cities', 'Housing for all', 'Make in India', 'Atal Mission for Urban Rejuvenation and Transformation' (AMRUT) and 'Bharatmala Pariyojana' are fueling future growth, the country's ever-changing skyline necessitates the rules to be continuously rewritten.

Armed with the latest, new-age rebar technology - Triam A+ Fe 550D is all set to lay a solid future foundation on which success stories will be built.

Future Ready

With ISO:9001, 14001 & 45001 certifications

Owing its origin to Amit Metaliks Ltd., the pioneers of the metallurgical sector for almost 2 decades and Eastern India's only conversation agent of Steel Authority of India (SAIL), Triam A+ Fe 550D owes its superior manufacturing quality to a one-of-its-kind plant in the eastern region of India, with excellent facilities like steel melting shop, ladle refining furnace and rolling mill. Our manufacturing capacity which was previously 4 lakh MT/year has been expanded to 5.25 lakh MT/year, making us one of the largest manufacturers of TMT in Eastern India.



TM



All the Way

Triam A+ Fe 550D is no ordinary TMT rebar. The finest manufacturing process, quality checks at every stage, and a scientifically time-tested rib pattern that leads to better bonding and tolerance distribution, making Triam A+ Fe 550D the ultimate star among rebars.

Every time you hold an ISI certified Triam A+ Fe 550D new-age construction rebar in your hand, you feel the unmistakable presence of A+ quality in every square inch of metal.

- A+ Physical Strength
- A+ Bonding Strength
- A+ Weldability
- A+ Bendability
- A+ High Dimension Tolerance
- A+ Corrosion Resistance
- A+ Fire Resistance
- A+ Earthquake Resistance

Give your home the Triam A+ Fe 550D promise of A+ Strength, A+ Flexibility and A+ Grip, and make it last beyond a lifetime.

A+ Physical Properties

Triam A+ Fe 550D new-age construction rebars achieve a unique combination of strength and ductility through the superlative manufacturing process. Due to proper quenching, self-tampering, atmospheric cooling, and controlled carbon equivalent percentages, Triam A+ Fe 550D has increased flexibility and strength. The higher ductility of Triam A+ Fe 550D facilitates the distribution of load in well-designed statically non-determinant structures. It facilitates the distribution of load and provides the best solution for structures prone to earthquakes owing to its high dissipation of energy.

Triam A+ Fe 550D further conforms to all parameters of IS:1786:2008 as well as Para 5.3 of IS:13920:2016 for all seismic zones. In the case of yield strength for Triam A+ Fe 550D, the standard specification stipulates a minimum of 550 N/mm². For the same product, the minimum value of elongation according to IS:1786:2008 is 14.5 % but we provide a value of 17%. Undoubtedly the superior indices of strength and ductility are a guarantee of higher levels of safety for ages. TS/YS ratio and total elongation percentage are important properties in rebars that reflect the ability to handle the pressure of earthquakes.

PHYSICAL PROPERTIES	IS: 1786:2008 Fe 550D	Triam A+ Fe 550D
0.2% Proof Stress : N/mm ² (Min)	550	550+
Tensile Strength : N/mm ² (Min)	600	600+
Elongation (%)	14.5	17+
Elongation of Max. Force (%)	5	7+
TS / YS Ratio	1.08	1.15
Bend	4D-5D	3D-4D
Rebend	6D-7D	5D-6D

A+ Chemical Properties

Triam A+ Fe 550D new-age rebars conform to Fe 550D, IS:1786:2008 specification. Their carbon levels are lower than the specifications, which result in its excellent ductility, high bending capability, better corrosion resistance and a superior welding strength.

CHEMICAL PROPERTIES	IS: 1786:2008 Fe 550D	Triam A+ Fe 550D
Carbon (%) Max	0.25	0.20
Sulphur (%) Max	0.040	0.040
Phosphorous (%) Max	0.040	0.040
Sulphur & Phosphorous (%) Max	0.075	0 . 0 7 5

A+ Dimensional Tolerance

Triam A+ Fe 550D is manufactured keeping it within the standard range of sectional weight with negative tolerance according to IS:1786:2008. This ensures higher meterage per unit weight for Triam A+ Fe 550D as compared to ordinary rebars.

A+ Seismic Resistance

Several studies were conducted on concrete beam, column and joints reinforced with Triam A+ Fe 550D to evaluate its performance under repeated reversed loading with large deformations as would be encountered during an earthquake. The energy dissipation was found to be almost same for each cycle, indicating uniformly maintained ductility. The tests revealed superior seismic resistance properties for Triam A+ Fe 550D.

A+ Corrosion Resistance

Triam A+ Fe 550D is produced using Thermex Technology from HSE, Germany. Therefore, there are no torsional residual stresses in the rebar, which results in superior corrosion-resistant characteristics compared to traditional cold twisted bars. On account of its composite and uniform microstructure, Triam A+ Fe 550D has comparatively better corrosion-resistant properties compared to other TMT bars, while being embedded in concrete.

A+ Product Specifications

Range: Triam A+ Fe 550D new-age rebars are available in the following sizes- 8, 10, 12, 16, 20, 25, 28, 32, 36, & 40mm.

Application : Triam A+ Fe 550D new-age rebars are available for both, residential and project applications. The residential segment is catered through the company's extensive dealer/distributor network and you may contact any of our sales offices or distributors for details of the authorised dealer closest to you. For project applications, you are requested to get in touch with any of our sales offices.

Size (mm)	Specified wt. (kg/m)	Allowable Tolerance %
8	0.395	± 7
10	0.617	± 7
12	0.888	± 5
16	1.580	± 5
20	2.470	± 3
25	3.850	± 3
28	4.830	± 3
32	6.310	± 3
36	7.990	± 3
40	9.860	± 3

A+ Product Packaging

Each Triam A+ Fe 550D new-age rebar is supplied in fixed length of 12mts to ensure standard processing and thereby causing less wastage during construction. Triam A+ Fe 550D is supplied section-wise in convenient pre-packed bundles having fixed number of pieces per bundle.

A+ Quality Checks

Based on extensive customer experience surveys conducted on other TMT brands, and considering their subsequent feedback, we have developed this product inducing rigorous quality checks at each stage of the manufacturing process. Initiating at raw materials receipt stage, continuing through the blending and preparation processes, to steel making and refining, followed by tapping and casting in the continuous billet caster, quality checks are uncompromising and stringent. This ensures the raw material billets for making Triam A+ bars are free of all defects, and meet superior quality standards. For example, spectrometer testing of materials is cross checked by conventional wet methods of chemical testing.

In line with steel making, TMT bar manufacture processes are also stringently monitored on their quality with the aid of electronics using TQM principles ensuring that quality is uniform, unique, and superior with respect to the chemical, physical and metallographic properties.

In the final stage, every single rebar is put through a rigorous testing procedure to meet and sustain the high standard surpassing the BIS requirements.

The company's top-of-the-line laboratories, advanced equipment and an array of state-of-the-art techniques are applied to verify each bar's precise mechanical properties by highly qualified and experienced professionals through a series of meticulously conducted mechanical tests such as 0.2 % Proof Stress Test / Yield Strength Test, Tensile Strength Test, Total Elongation % Test, Bending Test, Re-bending Test, among others using the Universal Testing Machine (UTM) with extensometer on samples of the finished products, guaranteeing their compliance beyond the relevant Indian standards and superior to competitors.

Another specialised equipment used primarily in the steelmaking process is the metallurgical microscope. It checks for defects in metal surfaces to determine the crystal grain boundaries in metal alloys and ensures that optimal composition is achieved for each re-bar ensuring their structural superiority and high quality.

As per our QAP, a quality re-check is conducted again in the dispatch yard before it is subsequently shipped to the customers.