



MAZBOOTI KI BEMISAAL BUNIYAD

FE 550 | FE 550D | FE 550SD



SHAPING THE FUTURE OF STRONGER CONSTRUCTION

ENGINEERED FOR STRENGTH. BUILT FOR GENERATIONS.

APL APOLLO TMT Bars are manufactured using advanced thermo-mechanical treatment technology to meet the evolving demands of modern construction. Designed for superior structural performance, these rebars deliver exceptional strength, enhanced ductility and long-term durability across residential, commercial and infrastructure projects.

Produced with stringent quality standards and optimized chemical composition, APL APOLLO TMT Bars provide consistent mechanical properties, excellent weldability and improved resistance against corrosion and seismic forces.

Whether it is a residential home, a high-rise tower, industrial infrastructure or a mega engineering project, APL APOLLO TMT Bars offer the reliability, safety and performance required to build structures that stand strong for generations.



BUILDING ADVANTAGES THAT MATTER

TENSILE STRENGTH

APL APOLLO TMT Bars are engineered to deliver outstanding tensile and yield strength, enabling structures to withstand higher loads with improved safety and long-term structural stability.

SUPERIOR DUCTILITY

Exceptional ductility allows the bars to absorb stress and deformation during seismic activity without compromising structural integrity. This ensures enhanced flexibility during construction while providing superior earthquake resistance.

COST EFFICIENCY

Optimized strength characteristics reduce overall steel consumption without affecting structural performance, helping lower project costs and improve construction efficiency.

EXCELLENT DUCTILITY

Uniform metallurgical properties ensure smooth welding performance while maintaining joint strength and durability across different construction applications.

CLEANER STEEL QUALITY

Manufactured with controlled levels of sulphur, phosphorus and carbon, the bars offer improved purity, greater durability and consistent performance under demanding environmental conditions.

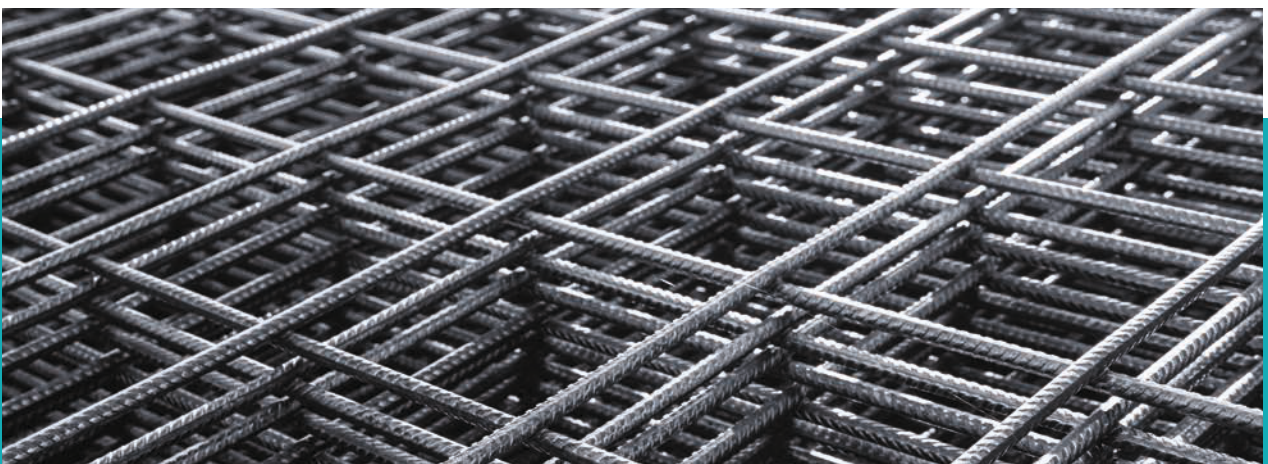
CORROSION RESISTANCE

Superior metallurgy and advanced manufacturing provide excellent resistance against moisture, humidity and aggressive environmental conditions, significantly extending the life of reinforced concrete structures.

ENGINEERED TO DELIVER LASTING PERFORMANCE

Modern construction demands reinforcement bars that offer more than just strength. APL APOLLO TMT Bars combine superior mechanical performance, enhanced ductility, corrosion resistance and advanced manufacturing technology to deliver dependable performance in every application.

Their optimized microstructure helps improve load-bearing capacity while maintaining structural flexibility, making them an ideal reinforcement solution for residential, commercial and infrastructure developments.



BIGGER SAVINGS. GREATER PERFORMANCE.

APL APOLLO TMT Bars are designed to maximize structural efficiency while minimizing overall steel consumption. Their superior strength enables engineers to optimize reinforcement requirements without compromising safety or durability.

Reduced congestion within reinforced concrete members facilitates faster construction, easier concrete placement and lower transportation and labour costs, resulting in significant project savings.

ADVANTAGES:

■ Lower steel consumption	■ Lower transport costs
■ Greater on-site savings	■ Reduced labour costs
■ Speedy construction	

AVAILABLE GRADES – FE 550 | FE 550D | FE 550SD

AVAILABLE SIZES		
8 mm	16 mm	32 mm
10 mm	20 mm	
12 mm	25 mm	



ENHANCED DUCTILITY

APL APOLLO TMT Bars are designed to deliver exceptional ductility, enabling reinforced structures to absorb seismic energy more effectively during earthquakes and dynamic loading conditions.

Their optimized metallurgical composition and controlled thermo-mechanical processing provide an ideal balance between strength and ductility, ensuring superior crack resistance, improved weldability and enhanced structural safety.

OUTSTANDING STRENGTH

Advanced manufacturing technology creates a refined microstructure with a strong outer surface and a resilient inner core. This unique combination delivers outstanding tensile strength, improved elongation and exceptional bonding with concrete for long-lasting structural performance.

TRUSTED ACROSS EVERY MAJOR INFRASTRUCTURE SEGMENT

APL APOLLO TMT Bars have earned the confidence of engineers, architects, contractors and infrastructure developers by consistently delivering superior strength, durability and performance across a wide range of construction projects.

Applications

- High Rise Buildings
- Residential Buildings
- Industrial Structures
- Underground Structures
- Dams
- Coastal Bridges
- Nuclear Power Plants
- Defence Infrastructure
- Roads & Flyovers
- Expressways
- Airports
- Railways
- Metro Projects
- Ports



CHEMICAL & MECHANICAL PROPERTIES

CHEMICAL PROPERTIES

Element (%)	IS 1786:2008		APL Apollo SG TMT	
	Grade Fe 550	Grade Fe 550D	Grade Fe 550	Grade Fe 550D
Carbon (max)	0.30	0.25	0.16-0.23	0.16-0.22
Sulphur (max)	0.055	0.040	0.040	0.035
Phosphorus (p) (max)	0.055	0.040	0.050	0.035
S & P (max)	0.100	0.075	0.090	0.070
Manganese (min)	-	-	0.60	0.65

MECHANICAL PROPERTIES

Element (%)	IS 1786:2008		APL Apollo SG TMT	
	Grade Fe 550	Grade Fe 550D	Grade Fe 550	Grade Fe 550D
Yield Strength/0.2% Proof Strength (Min, N/mm ²)	550	550	570-620	570-620
UTS Ultimate Tensile Strength (Min, N/mm ²)	585	600	650-750	670-770
% Elongation	10	14.5	15-20	16-24
UTS/YS Ratio	1.06	1.08	1.12-1.20	1.15-1.22

WEIGHT TOLERANCE

Size of bar (mm)	Cross Sectional Area (mm ²)	IS 1786:2008			APL Apollo SG TMT	
		I.S Lower Limit	I.S. Standard Limit	I.S. Upper Limit	Per Meter Weight (Kg)	Weight/Bar
8 mm	50.3	0.367	0.395	0.423	0.375-0.405	4.68
10 mm	78.6	0.574	0.617	0.66	0.580-0.620	7.2
12 mm	113.1	0.844	0.888	0.932	0.850-0.900	10.5
16 mm	201.2	1.501	1.58	1.659	1.520-1.600	18.7
20 mm	314.3	2.396	2.47	2.544	2.421-2.519	29.53
25 mm	491.1	3.735	3.85	3.966	3.773-3.927	46.2
32 mm	804.6	6.121	6.31	6.499	6.200-6.373	75.6



Connect with us :

Mob : +91 9220506817 | Email :enquiries@sgmart.co.in