

सोने जैसा खरा

24K

सरिया

**MAZBOOT
NEEV KA
SAATHI**

सोने जैसा खरा

24K SARIYA

ABOUT THE BRAND - 24K

With deep understanding of the Industry and desire to enhance the future of construction Industry, 24k Sariya has been launched as a revolution in the construction industry. The product is highly technologically driven, innovative and superior in terms of strength and ductility. Its unique anti-corrosion and Earthquake resistant features set it apart from the other competitive products available in the market.

The product complies with all the Indian standard specifications laid down by Bureau of Indian standard and ISO. And living by the promise of delivering Customer delight more than just customer satisfaction, the 24k sariya is priced competitively.

THE TEAM AT 24 K

The team at 24K, is highly skilled and qualified. Having complete knowledge of technology and the procedure of manufacturing, it works to deliver ISI compliant sizes varying from 8mm till 32mm in standard 12 m length with a possibility of customisation in length. It also offers the standard grades of Fe 500, Fe 500 D, Fe 550 and Fe 550 D. The option of “D” variant provides earthquake resistance to TMT bar. There is an option of customisation in Grading as well to meet customer need in order to deliver Customer Delight. The option of customisation is not commonly practiced by other players in the market and is therefore a strong differentiator for 24k that stands for purity even in the value system of delivering quality – SoneJaisaKhara.



PRODUCT HIGHLIGHTS

Easy Bendability

Good Weldability

Greater Fatigue Capacity

Unique "X" rib design for better bonding with concrete

Greater tensile strength (30%) as compared to other commercial brands.

Suitable for both compression and tension reinforcement.

Competitive pricing due to weight accuracy and maximum strength.

Each batch carefully tested before dispatch supported with lab certificate

Covered Storage of finished goods to avoid corrosion due to rain and moisture.





PRODUCT MANUFACTURING PROCESS

24k Sariya goes under a unique, fully automated quality driven procedure to get manufactured. The machines used for manufacturing are sophisticated based on German technology and design.

THE PRODUCTION CYCLE IS A 7 STEP PROCESS

RAW MATERIAL

Bought, Lab tested, and segregated as per properties.

FURNACE

The selected raw material placed in the furnace is converted to molten metal at 1700°C. Ferrero alloys are further added to maintain composition and achieve desired quality and performance.

CASTING

Conversion to Billets - Checks are conducted of molten metal for compositions and temperature. Then it is sent for casting. Billets made are tested in terms of quality and further selected as per set parameters.

BILLETS TO ROLLING MILL

The quality approved individual hot billets are sent to Rolling Mill where they are roughed and moulded into TMT Bars of different sizes along with ribbing. (X design)

QUENCHING

These rolled TMT Bars go for quenching in the patented Theremex cooling station where the Grades depicting the strength of the Sariya are achieved through fast cooling of the surface of the rods with a fast jet of water.

COOLING BED

Sariya is cut into the desired length and sent on the cooling bed where both the tips are coloured with the brand colour and are made into bundles of desired weight.

DISPATCH

Sariyas are ready for dispatch.



FURNACE



HOT ROLLING



CASTING



QUENCHING

HERMEX

MADE BY JNM INDIA
MILLS OF JNM INDIA
LICENSOR OF HSE GERMANY

USER GUIDE- MECHANICAL PROPERTIES

GRADES- Fe 500, Fe 500 D, Fe 550 & Fe 550 D

Size: 8 mm, 10 mm, 12 mm, 16 mm, 20 mm, 25 mm & 32 mm



UTM MACHINE



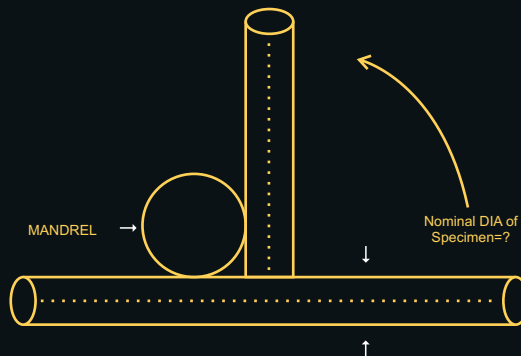
Weight Specifications

Size of Sariya (mm)	Weight per meter (Kg/M)	No. of Units	Tolerance %
8	0.395	18	+/-7
10	0.617	12	+/-7
12	0.888	8	+/-5
16	1.579	5	+/-5
20	2.466	3	+/-3
25	3.854	1	+/-3
32	6.314	1	+/-3

Mechanical Properties

	Indian standard (IS 1786-1985) Fe 500	24K Fe 500
Yield strength (N/mm)	500	540
Ultimate Tensile Strength Min (N/mm)	545	610
Elongation Min (A_g) (%)	12	18-21

BENDING INSTRUCTION AS PER IS 1786/2008




Sr. No.	Diameter of Rod	Mandrel for Fe 415	Mandrel for Fe 500
1.	08 mm	24 mm (3 →)	32 mm (4 →)
2.	10 mm	30 mm (3 →)	40 mm (4 →)
3.	12 mm	36 mm (3 →)	48 mm (4 →)
4.	16 mm	48 mm (3 →)	64 mm (4 →)
5.	20 mm	60 mm (3 →)	80 mm (4 →)
6.	25 mm	100 mm (4 →)	125 mm (5 →)
7.	28 mm	112 mm (4 →)	140 mm (5 →)
8.	32 mm	128 mm (4 →)	160 mm (5 →)

CHEMICAL PROPERTIES

Chemical Properties

	Indian standard (IS 1786-1985) Fe 500	24K Fe 500
Carbon	0.300 Max	0.170-0.250
Sulphur	0.055 Max	0.050 Max
Phosphorous	0.055 Max	0.045 Max
Sulphur + Phosphorous	0.110 Max	0.090





CARBON - Adding carbon to iron makes it stronger and tougher, if added up to a point. Beyond that point it will get stronger but less tough (i.e.) like cast iron.

SULPHUR - Sulphur is detrimental to surface quality in low carbon and low manganese steel and it promotes hot shortness in welding with the tendency increasing with increased sulphur. It is regarded as an undesirable impurity because of its embrittling effect and hot shortness.

PHOSPHORUS - It is regarded as an undesirable impurity because of its embrittling effect.

MANGANESE - Manganese increases ductility and tensile strength of steel. It is able to decrease the critical cooling rate during hardening, thus ensuring softer core and harder outer surface. This increases ductility at same time increasing hardness of steel so to use in limited ratio.

COPPER - Copper is added to steel to increase corrosion resistance. It increases strength through precipitation hardening if present in concentrations greater than 0.075%.

CHROME - Chrome Increases strength, hardness, and toughness, as well as creep resistance and strength at elevated temperatures. It improves machinability and resistance to corrosion and it intensifies the effects of other alloying elements. We maintain chrome at 0.12%.

सोने जैसा खरा

24K




सरिया

istaar - 94259 02858

JAIDEEP ISPAT & ALLOYS PVT. LTD.

Office: 103, Laxmi Tower, 576, M.G. Road Indore. **Phone:** (0731) 2549780-81, 9644555556

Email: sales24k@24ktmt.com | **Website:** www.24ktmt.com

   /24ksariya