JINDAL INFINITY
STAINLESS STEEL REBARS

JSL
JINDAL STAINLESS

THE PERFECT BLEND OF
STRENGTH, DURABILITY, & CORROSION RESISTANCE.

A LEGACY BUILT ON
SAFETY & TRUST

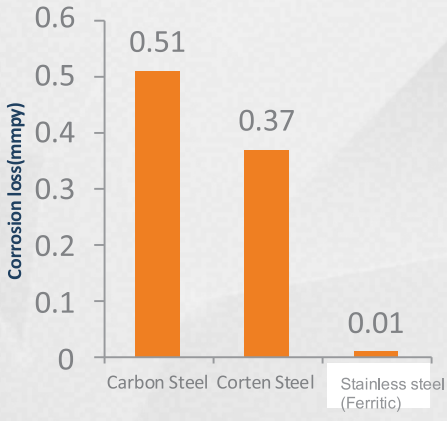
Founded by Shri O. P. Jindal in 1970, Jindal Stainless Limited is one of the largest stainless steel conglomerates in India. We have an Annual crude steel capacity of 3MTPA and operate 16+ manufacturing and processing facilities across India and abroad.

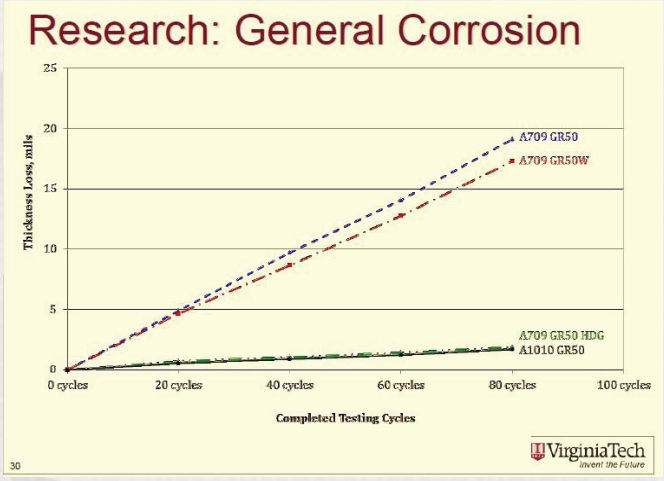
JINDAL INFINITY
STAINLESS STEEL REBARS

UNIQUE SELLING PROPOSITION

- Excellent Corrosion resistance (Self Healing properties; no coating required)
- Significantly higher PREN* value due to their chromium-rich composition (≥10.5% Cr). In comparison, TMT contains 0%, resulting in lower corrosion resistance

STAINLESS STEEL – CORROSION RESISTANT PROPERTIES





***Corrosion Performance of Various Steels as per Test SAE J2334 consisting of alternating wet/dry cycles with salt for 8 weeks**

*Notes: PREN = %Cr + 3.3%Mo + 16%N | PREN= Pitting Resistance Equivalent Number

JINDAL INFINITY STAINLESS STEEL REBARS
COMPETITIVE BENEFITS

★ MATERIAL PERFORMANCE COMPARISON

Property	Stainless Steel Rebar	Conventional Rebar
Material Type	Ferritic Stainless Steel	Carbon Steel
Chromium Content (%Cr)	11.0–13.5%	Nil
PREN (Pitting Resistance Number)	~ 12%	< 1%
Corrosion Resistance	Excellent	Low
Critical Chloride Threshold value	Upto 4x higher	Low
Resistance to carbonation IC (air pollutants like PM2.5)	High	Low
Fire resistance	Higher	Normal
Maintenance Need	Negligible	High repair & retrofitting over time
Durability	Choice for design life 75 to 100+ years	Choice for short term design life
Carbon Content	~0.03%	~0.2%
Weldability	Good	Normal
Bond Strength	Equivalent	Equivalent

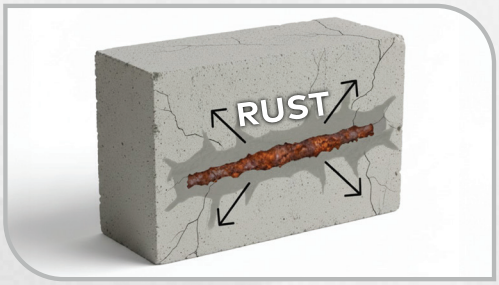
★ CORROSION RESISTANT TO POLLUTION

Resists carbonation-induced corrosion caused by PM2.5 & PM10 pollutants, maintaining long-term structural integrity in urban atmospheres.

★ HIGHER CHLORIDE RESISTANCE

Critical chloride threshold value up to 4X higher*, enabling durable performance in chloride-rich and moist environments

Water and Salts Penetrate



Steel Rusts & Expands

Concrete Cracks & Spalls

Jindal Infinity Rebars DO NOT rust, swell, or crack concrete

★ SEISMIC SAFETY

TS/YS ratio > 1.15 and elongation > 14.5% (as per IS:13920), improving absorption of seismic forces and improving resilience during earthquakes.

★ EXTENDED SERVICE LIFE (75–100 YEARS)

Stainless Steel Rebars have a 2X longer design life as per research*

★ SUPERIOR FIRE RESISTANCE

Higher fire resistance as compared to Carbon Steel. Retains its mechanical strength even at elevated temperatures.

★ COST-EFFECTIVE (WITH LOWER LIFECYCLE COST)

It is 100% recyclable and a sustainable material. The total cost of ownership is lower due to extended durability, reduced maintenance, and longer replacement intervals.

★ WELDABILITY & FABRICATION EASE

Low carbon content (~0.03%) ensures easier welding and fabrication with minimal thermal cracking risk.

★ LOWER MAINTENANCE & REPAIR COSTS

Prevents corrosion-induced spalling and cracking, reducing downtime, rehabilitation work, and lifecycle repair expenses.

★ REDUCED CONCRETE COVER REQUIREMENT

Concrete cover can be reduced by 5–10 mm as per IRC:112, enabling lighter sections and more compact columns, without compromising on durability or strength.

*Terms & Conditions Apply

MECHANICAL & CHEMICAL
SPECIFICATIONS

Mechanical Properties of High Strength Deformed Stainless Steel Bars and Wires as per IS 16651:2017:

S. No.	Properties	SS 500	SS 550	SS 600	SS 650
1	0.2 percent proof stress (Rp0.2), Min, N/mm²	500	550	600	650
2	Percentage elongation after fracture (A_5), Min, on gauge length 5.65√A	16	14.5	10	10
3	Tensile strength (Rm), Min, N/mm²	10% more than the actual 0.2 percent proof stress but not less than 565 MPa	10% more than the actual 0.2 percent proof stress but not less than 600 MPa	10% more than the actual 0.2 percent proof stress but not less than 660 MPa	10% more than the actual 0.2 percent proof stress but not less than 715 MPa
4	Percentage total elongation at Maximum force (Agt), Min, on gauge length 5.65√A	5	5	5	5

Chemical Composition of Stainless Steel Rebars Grade G (410 L)

Chemical	C	Ni	Mn	Si	P	S	Cr	N
Min %							11	-
Max %	0.03	0.6	1	1	0.04	0.03	13.5	-

Above Values are as per IS 16651:2017

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