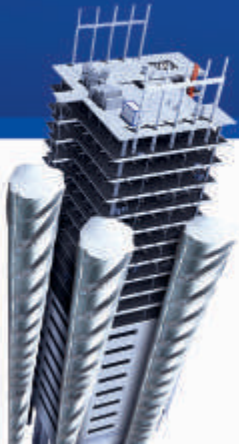


ANTI CORROSION
— COMPLETE PROTECTOR —



AMMAN-TRY
CRS TMT BARS



IS : 2830

IS : 1786



Sustain
In All Water



AMMAN-TRY
CRS TMT BARS

Corrosion:

Corrosion is an enemy of steel and concrete building structures. This is a natural phenomenon and can not be stopped. It causes deterioration of R.C.C structures and creates economical loss to every one in the universe.

Reason for corrosion:

- Wherever there is humidity corrosion sets steadily and destroys damaging houses, bridges and any construction that same used with ordinary steel.
- Corrosion of the reinforcement bars occurs when neutralization takes place with atmospheric carbon dioxide.
- When chlorides from outsides reaches steel conversion of iron to iron oxide which leads to corrosion.
- pH value of water used for concrete was less than 8.50%. The oxygen in air in presence of moisture starts attacking the surface of reinforced bars.



Corrosion Resistance:

After conducting various researches for fighting corrosion, we identified the cost effective steel with a composition that enhances corrosion resistance properties, reducing the rate of corrosion.

CRS Process Chart:

Copper Addition

Addition of copper will plug the pores in the rust

Chromium Addition

By adding chromium (Cr) in to steel, increases the passivity of anions. Another advantage is we are making the steel slightly Ferrite thus pitting resistance is increased. Chromium also increases the passivity and will form an invisible layer.

Phosphorus:

Phosphorus acts as inhibitor. This will reduce the anodic reaction.

Process:

These CRS Bars are manufactured through TMT procedure.

Advantages:

- CRS Bars reduces the rate of corrosion from the time of construction and thus lengthening the life of structure.
- AMMAN-TRY CRS are manufactured using judicious selection of corrosion resistant elements and tested at Structural Engineering Research Centre, Chennai.
- CRS (TMT) bars most suited for reinforcement concrete in salty area and sea shore area.

Longer Duration
of Building Life.



Technical Data

ISI				AMMAN TRY	
Section	Min.Wt. (Kg/Mtr.)	Normal Wt. (Kg/Mtr.)	Max Wt. (Kg/Mtr.)	Bar Weight (Kg / 40 Feet) Min - Max	No.of Bars/Bundle
06 mm	0.206	0.222	0.238	2.512 - 2.707	20
08 mm	0.367	0.395	0.423	4.645 - 4.877	10
10 mm	0.574	0.617	0.660	7.084 - 7.525	7
12 mm	0.843	0.888	0.932	10.412 - 10.980	5
16 mm	1.500	1.579	1.658	18.288 - 19.270	3
20 mm	2.393	2.467	2.541	29.175 - 30.000	2
25 mm	3.739	3.855	3.971	45.720 - 47.000	1

Chemical Composition

Elements	Min%	Max%
CARBON	0.15	0.18
MANGANESE	0.45	0.60
SULPHUR	0.030	0.045
PHOSPHORUS	0.030	0.055
CHROMIUM	0.15	0.25
COPPER	0.30	0.35
SILICON	0.15	0.25

Mechanical Properties

Property	Fe-500
Yield / 0.2% Proof Strength (Min)	500 N/mm ²
Ultimate Tensile Strength	Minimum 8% above measured yield / proof strength, however not less than 545 N/mm ²
Elongation	12.0 % min
Bend Test	Satisfies bend test around a mandrel (thro 180°) of 4d for dia upto and including 20mm and 5d for over 20mm dia.
Re Bend Test	Satisfies Rebend test around a mandrel of 5d for dia upto and including 10mm and 7d for over 10mm dia through 45° bend and 22.5° reverse bend.

CRS Bars gives

90 years

life with just

additional cost 5% of ordinary TMT Bars



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