# Why buy 7 Star 500D grade TMT bars?

Be it strength, ductility or customisation, our latest offering, 7 Star 500D grade TMT bar, shines at every parameter.

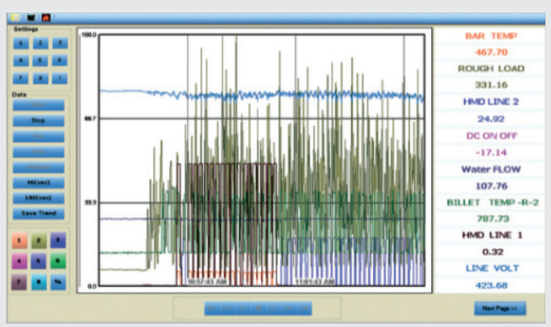
Get ready for a dazzling display of strength and durability.

## The strength of the best global technology

Created using one of the world's most trusted TMT manufacturing technology, TEMPCORE, 7 Star 500D TMT bars draw their strength from the computer-controlled in-line process of hardening and tempering during hot rolling.

- Authorized by Centre De Recherches Mettallurgiques (CRM), Belgium to use their prestigious TEMPCORE process
- Technical assistance from HEEP&P (Human Engineering for Environmental Products and Production), Germany
- Certified by Bureau of Indian Standards (BIS) to manufacture Steel Re-bars as per IS: 1786/1985
- Other global quality certifications like ISO 9001

Computer-controlled in-line TMT process of hardening and tempering




## Unmatched performance

- Higher bond strength
- Higher weldability, ductility and bend-ability
- Higher tensile strength
- Higher corrosion and seismic resistance

## The 7 Star advantage

- 75+ YEARS OF EXPERTISE
- PROCESS TECHNOLOGY FROM TEMPCORE, BELGIUM
- EXTRA STRENGTH
- AVAILABLE IN CUSTOMISED LENGTHS
- CERTIFIED BY BIS
- ISO 9001 GLOBAL QUALITY CERTIFICATIONS
- AVAILABLE IN 500, 500D, 550D & 600 grade

## 7 Star Steel TMT bars

### Mechanical properties

| Grade | 7 Star 500 | 7 Star 500D | 7 Star 550D |
|---|---|---|---|
| Yield Stress/ Proof Stress Min. (N/sq mm) | 540 | 540 | 570 |
| Tensile Strength Min. (N/ sq mm) | 585 | 585 | 610 |
| Elongation Min. | 12% | 16% | 14.5% |

### Chemical properties

| Composition | 7 Star 500 | 7 Star 500D | 7 Star 550D |
|---|---|---|---|
| Carbon (Max.) | 0.30% | 0.25% | 0.25% |
| Sulphur (Max.) | 0.055% | 0.040% | 0.040% |
| Phosphorus (Max.) | 0.055% | 0.040% | 0.040% |
| Sulphur + Phosphorus (Max.) | 0.105% | 0.075% | 0.075% |

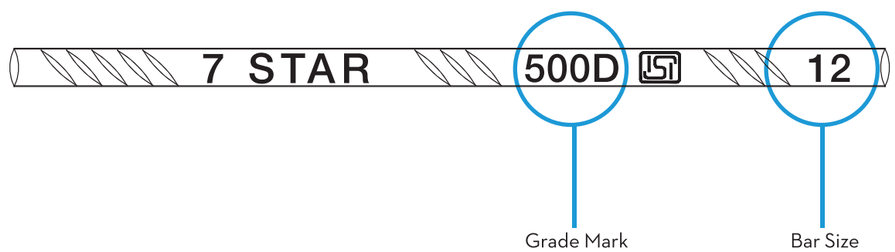
### Substantial savings

in steel consumption while using 7 Star bars instead of other steel bars*

| | | |
|---|---|---|
| Fe-415 | 1000 KG | |
| Fe-500 | 840 KG | |
| 7 Star 500 | 802 KG | |
| 7 Star 550D | 765 KG | |

*Estimated values based on the study conducted by Nanyang Technological University, Singapore, on 'Savings of using Fe-600 grade Steel re-bars' and a study by German Institute of Reinforcing Steel

### TMT bar guide*




*Typical TMT bar design. Grade mark will alter for the 500, 550D and 600 grade bars.