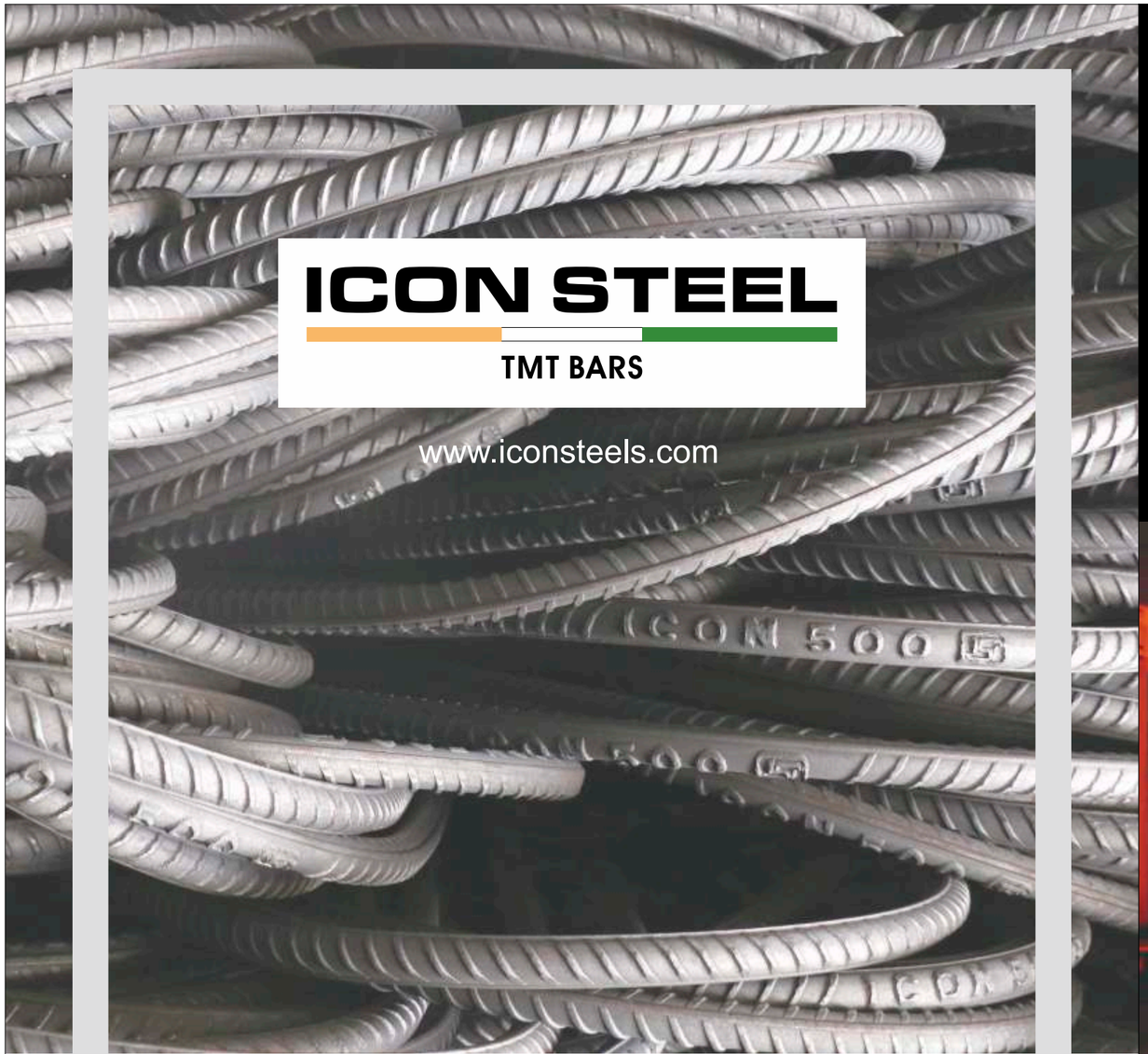


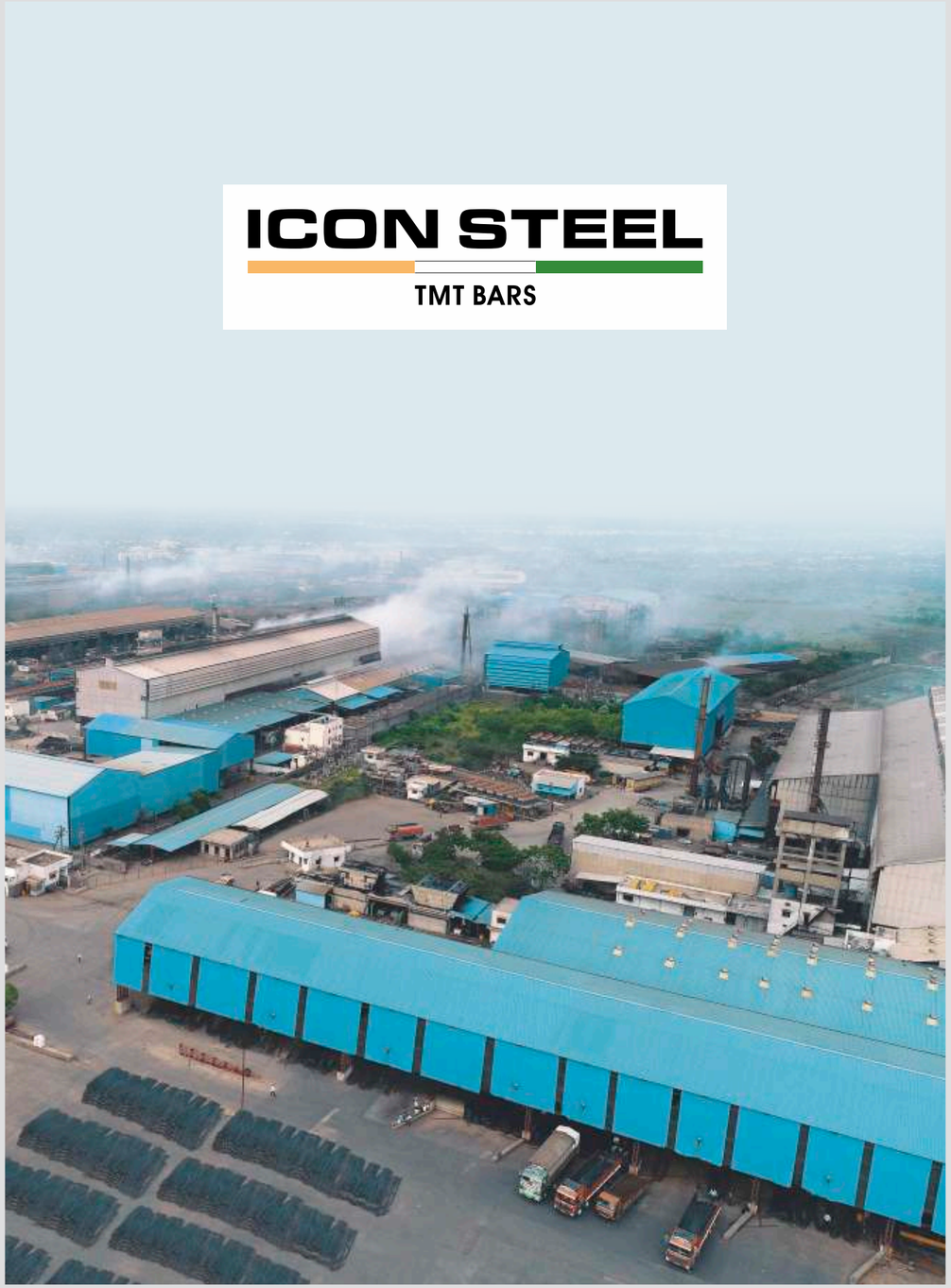
ICON STEEL
TMT BARS

F-12 Additional M.I.D.C.,
Jalna-431203 (MH)
Tel : 77981 98999,
E: info@iconsteels.com

ICON STEEL
TMT BARS

ICON STEEL

TMT BARS



WELCOME TO INDIA'S ICONIC TMT BARS

A worldwide trend for an improved product in place of the CTD Bar had set into motion. Realising the superior bonding with the concrete, strength and longevity for buildings derived from TMT Steel, we looked for and identified quality suppliers of manufacturing and process technology in Germany.

Icon Steel is brought to you by a team with decades of experience in manufacture and distribution of construction steel.

The Icon brand was launched almost a decade ago to reflect the latest standards in customer care, quality management and TMT product certification to meet the criteria of today's discerning customers.

In manufacturing, it has adopted the Thermex technology for its reliability in control of sulphur and phosphorus, resulting in steel of high yield strength and corrosion resistance. Icon Steel has quickly built up a market reputation in just a few years as a supplier of quality TMT bars in various grades.

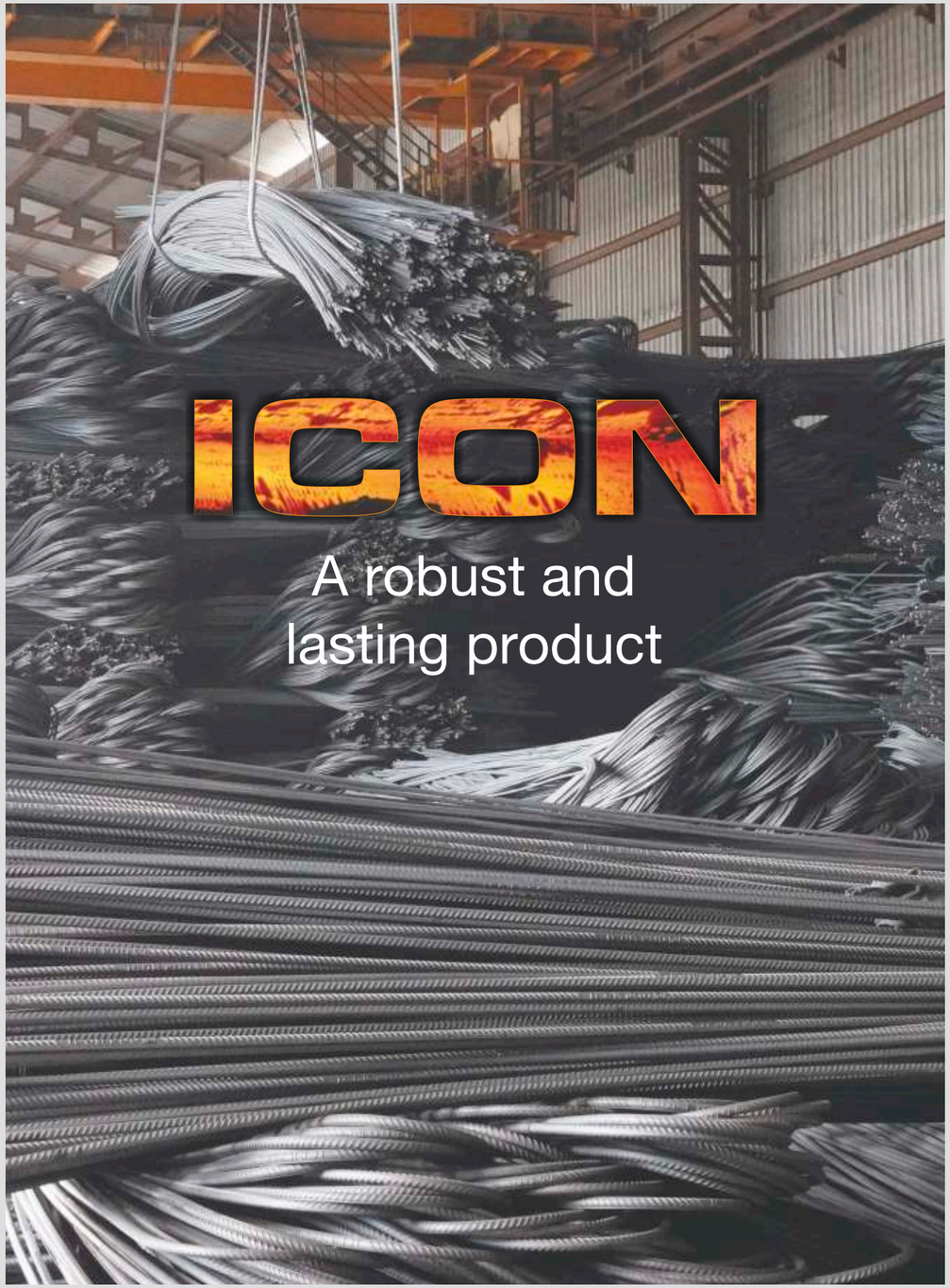
As the Indian market, including in the rural areas, have realised the strength and longevity of a civil construction depends much on the kind of steel used, and have come to know the characteristics of TMT steel over the earlier CTD bar – there has been a demand for recognised quality brands. At Icon Steel, we have successfully taken our place to fill in this gap.

Our products meet the highest quality standards in TMT Steel because of our production of high quality billets at an integrated manufacturing plant. This is backed up by a full-fledged Quality Management System.

We are not just a leading manufacturer, our role is that of a market pioneer as we interact with specifiers, construction experts, project managers, builders, contractors and homeowners to evaluate requirements and also advise them on TMT Steel use.

As a brand, we also propagate and encourage on-site practices that handle materials properly, curb wastage or damage, and the use of appropriate techniques and accessories (e.g. factory made stirrups). It demonstrates our commitment to the best results for our customers.

ICON



QUALITY IS A MATTER OF CULTURE

Icon Steel's products bear the IS:1786 and IS:13920 mark of the standards bureau. Each customer – whether individual and institutional – is assured of a robust and lasting product.

Our products are thoroughly tested for Chemical as well as Physical parameters. The latest software tools are in use to keep pace with the state-of-the-art. We have specialised Quality training for our personnel as part of our Quality System and this has built a culture of quality in the organisation.

- A fully fledged testing and inspection facility is devolved to check both Chemical and Physical parameters of our products.
- Develop and design products which meet the customer requirements.
- We update our services with latest digital technologies.
- Timely internal quality audits conducted to refine process in case of loopholes.
- Ensuring the all our staff / team and fully trained and understand their role providing quality products and good customer services.
- We develop organizational excellence and quality awareness through innovative process improvements, training, measurements and development of customer and employee satisfaction programs.
- Maintenance of records.

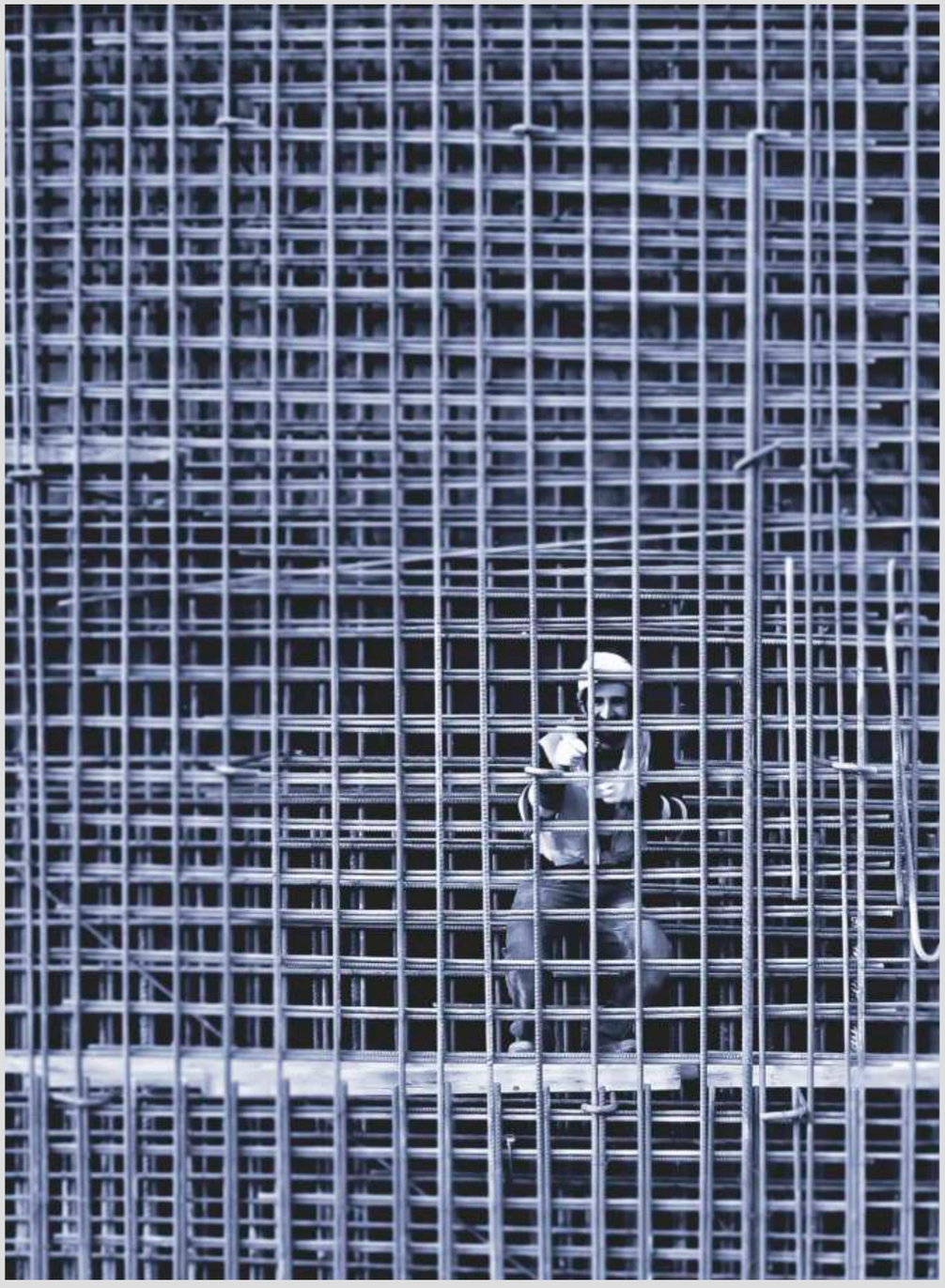
INTEGRATED MANUFACTURING

PROMPT CUSTOMER ASSISTANCE

EXCEPTIONALLY DURABLE TMT BAR

TRUSTED PROTECTION

ADVANCED QUALITY MANGMENT



ICON 500

A construction is said to be strong if it can bear a high tensile load. The steel you use has to form an excellent bond with the concrete. Our bars are designed to have a wider contact and a stronger grip – the result is a superior bond strength of our Fe 500 grade.

Our rigorous manufacturing environment and equipment ensures accuracy of the steel composition, which is the basis for our reputation for quality among residential, commercial, infrastructural and industrial projects.

ICON 500D

Several districts are known to be quake prone, and it is well known that quakes can be devastating or cause quite extensive damage. Icon offers a product particularly suited to handling a quake shock.

Its chemical composition is so chosen that it can elongate about 18% and even up to 25% during such an event. This gives enough signal and time for evacuation in the case of a severe quake. What's more, engineers appreciate that the project can consume less steel, and so there is a saving as well.

ICON STEEL 500 CRS

500 CRS from Icon Steel is specially developed for greater corrosion resistance and longevity. It has higher workability and is recommended for seismically sensitive areas. Icon Steel manufactures 500 CRS from corrosion-resistant billets.

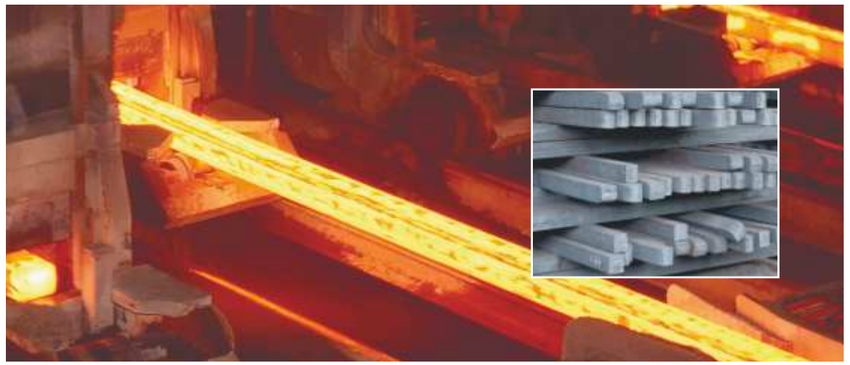
These billets which have Cu, P and Cr in proper balance are processed through the continuous casting process (Concast). The bars undergo quenching and self-tempering process (TMT) using a German technology.

Corrosion Resistance : If your structure is in a humid, coastal or wet area, then corrosion is an acute threat to it. The very air, with its salinity and the salt in the water and in the soil weaken buildings. In recent decades, even the toxic content of the industrial emissions cause corrosion. Construction costs make us expect longer service from buildings but to meet this expectation, they must be built corrosion-resistant.

BINDING WIRES

When you are using quality Icon Steel TMT bars, you also want to hold them precisely in position. This is managed by maintaining a structural cage, with the use of Icon binding wire for knotting at intersections. Instead of making these knots with any crude material, you can procure it from Icon Steel, because the binding wire serves the purpose of keeping the bars in place.

You can choose a suitable diameter from Icon binding wire for your application as per the steel bar diameter.



Integrated manufacturing

Advanced quality management

Exceptionally durable TMT Bar

Manufacturing Overview

Realising early that an integrated approach to manufacturing is essential to ensuring accurate chemical composition of the steel, Icon Steel also invested in the Thermex process for quenching and tempering and allied with HSE for technological support.

Complemented by an advanced testing lab, and an efficient quality inspection team carrying out multiple rigorous checks – it has carved a reputation for consistent quality and producing specialised compositions such as Fe 500 D, and products for coastal regions.

To exercise a tight control on impurities like sulphur and phosphorus to very exact degrees calls for a lot of vigil at every stage of manufacture from raw material onwards. It also calls for establishing a culture of quality among all members of the team, and Icon Steel has striven to achieve such an ethos across the rank and file of the company.

Technology

Icon Steel has adopted technology from the world's top steelmaking nation, Germany to ensure its TMT bars are much superior as steel products than CTD bars. This decision has helped it win the trust of construction technologists as following a global standard for making quality TMT bars.

Fe500 with better elongation

By means of German technology, Icon Steel manufactures Gr.Fe500 steel which has emerged as the preferred replacement for Fe415 in construction because of superior elongation property – over 14.5% !

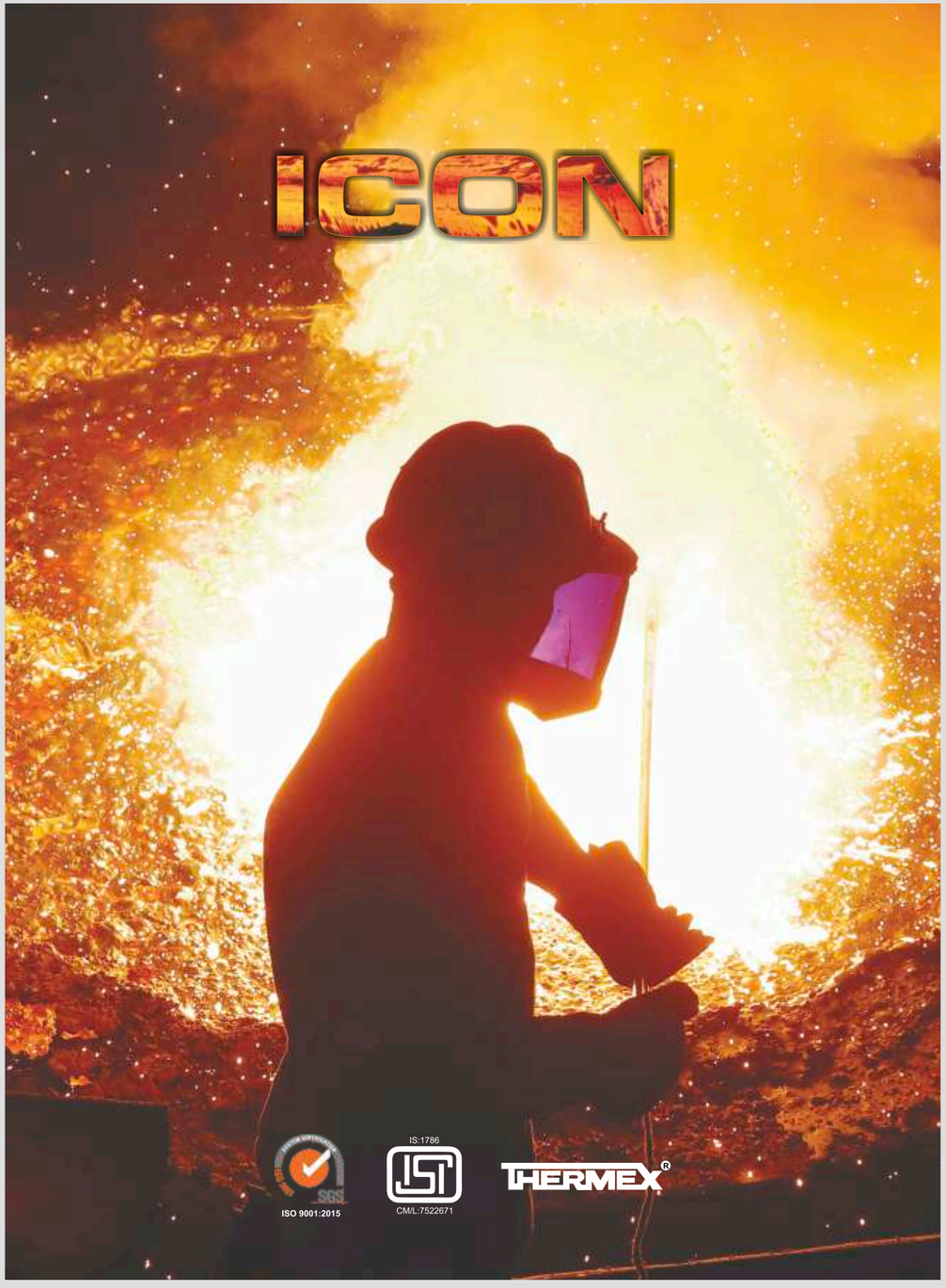
Steel Tempering process for unique composition

How does the Icon Steel bar acquire its unique properties on the surface and at the core? The secret is that the chemical composition is achieved accurately through the two phases of cooling which impart the bar its unique property, where there is a difference between the peripheral layer and the core of the bar. First, by means of intensive cooling in the Thermex Water Cooling system, the surface is hardened forming a martensite zone. However, the core is cooled slowly over a longer period in the open air, so a ferrite-pearlite structure at the core gives the steel better bendability which makes it a stronger steel in your construction.

Production Capacity

While our manufacturing started with a product new to the market at the time, its acceptance and success have grown the demand considerably. TMT Steel is today a de facto standard especially in the housing sector as well, and there has been an ongoing boom in housing, including governmental initiatives.

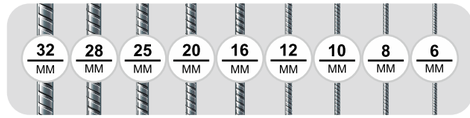
As our reputation for a quality product has spread across territories, we have been stepping up our production with planned expansion of manufacturing and testing facilities.



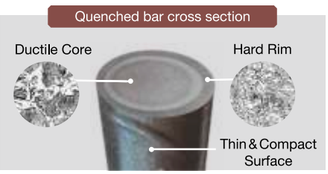
HIGH STANDARDS
BIS -1786: 2008 SPECIFICATIONS

Fe 500/ Fe 500D/ Fe 550/ Fe 550D/
600 grade/ CRS grades,
ISO9001/ ISO 14001/ OHSAS 18001/ TS-16949

ICON bars are available in the following sizes



Bar Quenching Process



Chemical Properties

Element (%max)	IS 1786:2008		ICON 500
	Grade Fe 415	Grade Fe 500	
Carbon	0.30	0.30	0.16-0.25
Sulphur	0.060	0.055	0.05
Phosphorus (P)	0.060	0.055	0.05
S & P	0.11	0.105	0.1
Manganese			0.6

Mechanical Properties

Properties	IS 1786:2008		ICON 500
	Grade Fe 415	Grade Fe 500	
Yield Strength/ 0.2% Proof Strenth(Min.,N/mm2)	415	500	520-565
UTS, Ultimate Tensile Strength (Min., N/mm2)	485	545	630-730
% Elongation	14.5	12	16-25
UTS/YS Ratio	1.10	1.08	1.15-1.25

ICON 500 Bar sizes and weight tolerance chart

Size of Bar (mm)	Cross-Sectional area (mm2)	Weight per Meter (Kg/m)			ICON 500
		I.S. Lower Limit	I.S. Standard Limit	I.S. Upper Limit	
8	50.3	0.367	0.395	0.423	0.380-0.405
10	78.6	0.574	0.617	0.660	0.580-0.620
12	113.1	0.844	0.888	0.932	0.850-0.900
16	201.2	1.501	1.580	1.659	1.520-1.600
20	314.3	2.396	2.470	2.544	2.421-2.519
25	491.1	3.735	3.850	3.966	3.773-3.927
28	616.0	4.685	4.830	4.975	4.782-4.878
32	804.6	6.121	6.310	6.499	6.247-6.373

WHY PREFER ICON STEEL IN YOUR CONSTRUCTION

Bendability:
The unique structure of bars makes bending of bars easier and boosts the pace of work at the construction sites.

Uniform Rib Pattern:
Uniform parallel rib pattern for ultimate bonding with cement which satisfied all International standards.

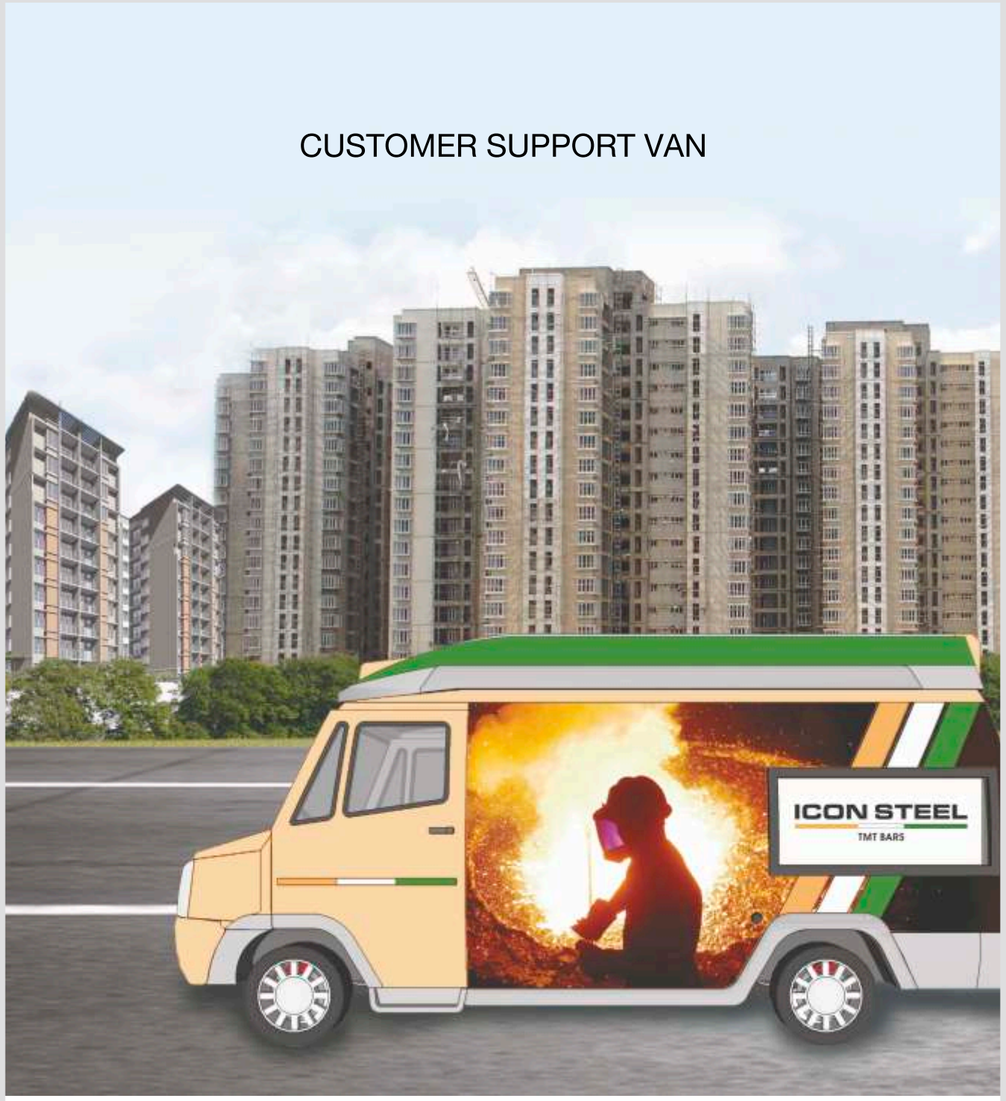
Corrosion Resistance:
Controlled water-cooling prevents the formation of coarse carbides: the main cause for steel bar corrosion. Precision machining of rib pattern also eliminates torsional residual stress. Together, this creates superior corrosion resistant capabilities and enhances the life cycle of the bars.

Weldability:
Icon steel bars have a carbon content of less than 0.25%. As a result, no pre-heating is required and wastage due to welding can be reduced considerably.

Earthquake Resistance:
Tests have conclusively revealed equivalent energy dissipation during repeated tress cycles. Due to high elongation and strength this property facilitates minimum damage to the structure and can minimize casualties caused due to earthquakes.

Fire Resistance:
The high thermal stability of Icon steel bars and the presence of tempered Martensitic-ring on the outer surface imparts higher capacity to retain strength at elevated temperatures of 400 -600oC.

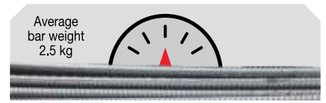
CUSTOMER SUPPORT VAN



The van is well-equipped to provide real time testing and assessment of materials. It is common knowledge that people spend ample time and energy in choosing the right TV, fridge or other products but completely overlook the choice of steel bars that will be used to build their homes. Considering, home buying happens to a lifetime investment, this negligence can prove costly and deadly to many, a few years down the line. Icon Steel intends to change this attitude for good.

ICON STEEL
TMT BARS

6MM BAR SMALL GENIUS OF INDIA

ICON 6mm Bar	Other 6mm Bar
 Made by high-quality billets	 Made by gully or scrap plates
 Pure steel used with known chemistry	 Total impure steel used chemistry not known so the risk of brittleness & surface defects throughout bar length
 Uniform shape strength & elongation throughout 6mm TMT bar length	 Not uniform shape strength & elongation throughout the length of the bar
 TMT process is done on the bar	 No any process on bar so weak in strength
 Due to uniform rib pattern bond strength between 6mm TMT bars & concrete is high	 No ribs on surface of bars so weak bond between bars & concrete
 Accurate standard weight throughout bar length	 The Weight of 6mm bar is on higher side results loss of customer