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THE LEGACY CONTINUES...

KVS FORZA BARS
CONFORMING TO Fe 550 Gr.

A TRADITION OF EXCELLENCE



With leading-edge manufacturing technologies, KVS Premier Group seeks to excel by providing the best quality products and the best possible service to the customers. The focus on continuous improvement and proficient R&D has enabled the group to stay ahead in the industry. Applauded for its tough construction, superb finishing & high durability, KVS Premier Group Construction Steel range (TMT Bars & Light Structural Steel) represents reliability and quality to customers.

KVS Premier Group is proud to be a part of the legacy that is earned over last three decades and aspires to become an epitome of excellence. Highly Respectable Jindal-Galwalia family have always been the driving force behind the company's outstanding growth story. The group also feels privileged and enjoys the blessings of the Group Chairman Mr. Mithlesh Kumar Galwalia.

Under the enterprising, dynamic & visionary leadership of Mr. Devendra Kumar Agrawal as Managing Director, ably supported by his son Mr. Arpan Jindal, Director, the group has attained new heights of excellence and recognition. With the combined force of innovation, adaptation of new technologies, the group, is consistently striving to attain its set goals of delivering assured quality, responsive service, establishing new benchmarks and achieve the pinnacle of success in the industry.



FROM THE MD'S DESK

With India moving ahead with confidence on the economic growth trajectory, secondary steel industry in the country is also growing at a matching pace. KVS Premier Group, having seen various trade cycles and having achieved many laurels during its journey spanning last thirty years, continues to stand fully committed to producing innovative products conforming to strict quality standards, so as to retain the hard earned customer satisfaction and make its humble contribution in nation building.

KVS Premier Group has always been known as a symbol of excellence and customer service. As a part of its endeavour, the group offers a wide range of more than 60 product combinations in the field of Construction, Steel and Light Structural sections to its customers to meet their total requirements under one roof. Not one to sit on the laurels of its past achievements, the group strives consistently to adopt latest technology and practice cost cutting measures so as to minimize product cost without compromising on quality and staying sensitive towards environmental conservation. With the intent to protect and promote interests of all its stakeholders, KVS Premier Group rededicates itself to the object of continued exploration of new horizons and achieving greater heights in the times to come.

DEVENDRA KUMAR AGRAWAL
(MANAGING DIRECTOR)



FROM SHIPS TO **SKYSCRAPERS**,
STEEL HAS A **KEY ROLE** TO PLAY
IN THE WORLD... **KVS PREMIER GROUP** CREATES
THE HIGH STRENGTH STEEL THAT ENCOMPASSES SUCH MAGIC



KVS FORZA BARS

KVS Premier Group offers KVS FORZA Bars (Fe550 Gr.) with unique product advantages that result in more productive and profitable Steel usage for the end user. For a strong, ductile and durable construction, reinforcement from KVS FORZA Bars (Fe550 Gr.) improve quality and life span of the concrete. It is different from the traditional bars in its method of manufacture and consequently in its combination of properties.

KVS FORZA Bars can easily be encompassed to many types of structures and components in a cost effective manner and reduce the consumption by 25-30%. The stronger bars are fully capable to meet all challenges thrown by modern construction.

In Developing Countries the use of Fe 550 Grade High Strength Steel Reinforcement Bars have now become imperative not only to save on cost of reinforcing steel, but also to contribute to its conservation.

KVS FORZA Bars is High Strength Steel, High Bond Reinforcing Steel, conforming to standards of India (IS: 1786) and other equivalent international standards hence can be used with any grade of concrete, without loss of savings.



CONFORMING TO Fe 550 Gr.

PRODUCT RANGE

We are distinguished manufacturers & suppliers of quality range of :

RIBBED BARS & PLAIN BARS (4mm to 7mm)

We offer a comprehensive range of Ribbed Bars & Plain Bars from 4mm to 7mm. These bars are known for their high Yield Strength, Smooth finish & Excellent reliability in civil components etc. Our full range is provided to our clients in varied specifications, sizes & dimensions as per the client's needs & requirements.

Comparison of KVS FORZA Bars Fe 550 Gr. with Fe 415 Gr. TMT Bars

BIS Specification Grade of IS : 1786 (85)	Unit	6mm IS:1786 Fe 415	5mm IS:1786 KVS Forza	7mm IS:1786 Fe 415	6mm IS:1786 KVS Forza	8mm IS:1786 Fe 415	7mm IS:1786 KVS Forza
Size	mm	6	5	7	6	8	7
Actual Size	min mm	6	5	7	6	8	6.91
Area	mm ²	28.26	19.63	38.47	28.26	50.24	37.48
Weight	gm/mtr	222	154	302	222	395	295
Length in Kg. Wt.	mtr/kg	4.5	6.5	3.3	4.5	2.53	3.39
Eqvl. Wt.	mtr/kg	10	6.9	10	7.3	10	7.5
Proof Stress	N/mm ² min	415	550	415	550	415	550
Breaking Load	Kg	13500	12000	18500	16800	24000	23000
Tensile Strength	N/mm ² min	485	585	485	585	485	585
Savings in Steel	% age		30.6		26.5		25.4

KVS FORZA BARS FEATURES

- 8mm Re bar can be totally eliminated and can be substituted by 7mm FORZA Bars.
- The above replacement can be adopted at any stage of the project even if the designs are prepared with Fe 415 since only direct substitution is needed.
- The above can be adopted irrespective of the area of usage, grade of concrete, thickness of member.

SAVING IN STEEL CONSUMPTION

Based on proof or yield strength of steel.

1 MT of FORZA Bars replaces 1.33 MT of 8 mm Re bar Fe 415.

BENEFITS OF HIGH STRENGTH FORZA BARS

Fe 550 GRADE STEEL REINFORCEMENT BARS

SAVING DUE TO HIGHER STRENGTH & SMALLER DIA

FORZA Bars have higher proof strength than the minimum requirement of 550 N/sq.mm resulting in large saving upto 30% over the Fe 415 grade steel with a proof strength of 415 N/sq.mm., saving are also occurring due to smaller dia of make. High Strength FORZA Bars (Fe 550 Grade) are made by a process of cold rolling from mild steel coils and are available in 4mm to 7mm. This range of sizes will not only causes structurally superior components in addition to savings in steel consumption, in comparison to the Fe 415 Grade bars which come in a minimum dia of 8mm. Due to the diameters and High Strength, FORZA Bars (Fe550 Grade) get more closely placed and thus leads to smaller and more evenly distributed bending as well as shrinkage cracks in structural components.

UNIQUE RIB PATTERNS

The ribs pattern being used in FORZA Bars is first of its kind in India and has multiple advantages attached to it. The unique rib pattern results in higher area of ribs value and provides greater ribbed on comparison to a normal TMT bar. This ensures unmatched bonding between concrete mixture and the steel bar resulting in extra durable long lasting support for your construction. Usage of FORZA Bars with its unique RIBS also results in substantial saving in your cost of construction.

DIRECT SUBSTITUTION

FORZA Bars (Fe550) 7mm can easily and directly be replaced with a normal Fe 415 8mm TMT, without making any changes in the structure design, saving the architects / engineers from any additional work. Thus a double benefit of cost and effort saving. FORZA Bars of 6 / 6.8 mm often used as secondary reinforcement.

ADVANTAGE OF MANUFACTURING PROCESS

FORZA Bars (Fe 550) as mentioned is being manufactured by cold rolling process, which provides a lot of advantages to the end product. Our product comprises of smoother is also increased over hot rolled products.

ECONOMY

Since FORZA Bar is available in smaller diameters and has far superior strength and bond properties to even Fe 415 grade steel, it can be efficiently be used to achieve maximum economy.

The saving in steel is in the order of upto 30% over Fe 415 grade steel. Thus results in cost savings of upto 20%.

RECOMMENDED ENGINEERING APPLICATIONS

1. RINGS / FRAMES
2. RCC FOUNDATIONS
3. RCC SLABS
4. RCC BEAMS
5. RCC ROADS
6. RCC PAVING / FLOORING
7. PRE CAST COMPONENTS



SAVINGS
@
KVS
FORZA
B A R S



CUT & BENT REINFORCEMENT STEEL

We have always believed that our interests are best served by putting our client's interest first. Supply of any quantity of Pre-Cut & Bent steel reinforcement to the required size for the bar bending schedules. By using our experience gained over many years and knowledge of the market, we are today providing timely, efficient, cost effective & above all quality products & services to the construction industry. Combining all the positive attributes to reduce construction cycle time & ensure quality, KVS FORZA Bars are customized to your every need right from the blue-print stage. For you it means, steel that bends to your requirements.

AVAILABLE IN 4mm to 7mm SIZES IN CUT AND BENT.

QUANTITY SAVINGS CHART

SAVINGS IN STEEL CONSUMPTION

BASED ON PROOF OR YIELD STRENGTH OF STEEL

1 MT of 7mm FORZA Bars replaces 1.33 MT of 8mm (Rebar Fe 415).

Slabs	FORZA Bars	TMT Bars
Based on proof or yield strength		
	1 MT	1.325 MT
Slab Thickness	Based on Min. Area of Steel, Min. Dia available and Max. spacing permitted	
100mm	1 MT	1.57 MT
120mm	1 MT	1.47 MT

Substitution Chart Based on Strength Considerations	
TMT Rebar Fe 415	FORZA Bar Fe 550
8mm @ spacing Smm	7mm @ spacing Smm

CONVERSION TO FORZA BARS STIRRUPS

Substitution Chart for Distribution Steel in slabs	
FROM ORIGINAL DESIGN WITH	CONVERT TO
8mm TMT Bar (Fe 415)	8mm FORZA Bar with no change in spacing

Conversion to FORZA Bars Stirrups			
CONVERT FROM		CONVERT TO FORZA BARS	
Grade of Steel N/sq. mm	Dia & spacing of stirrups	Based on restricted characteristic strength of 415 N/sq. mm	Based on actual proof strength of Fe 550
Fe 415	8mm @ 5mm c/c	7mm @ 0.77 5mm c/c	7mm @ 5mm c/c

Conversion to Column Ties		
FROM ORIGINAL DESIGN WITH	CONVERT TO	REMARKS
8mm Rebar Fe 415	7mm FORZA Bars with no change in spacing	This conversion ensures atleast same strength as with original design

SAVINGS
IN LABOUR COST UPTO
20%

SAVINGS
IN STEEL COST UPTO
25%

COST
SAVINGS UPTO
25%



KVS FORZA BAR PROPERTIES

CHEMICAL PROPERTIES

Test	IS : 1786, Fe 550 Gr.	KVS FORZA Bar Fe550 Gr.
Carbon (Max.)	0.30%	0.13%
Sulphur (Max.)	0.055%	0.035%
Phosphorus (Max.)	0.050%	0.050%
Sulphur + Phosphorus (Max.)	0.100%	0.085%

MECHANICAL PROPERTIES

Test	IS : 1786, Fe 550 Gr.	KVS FORZA Bar Fe550 Gr.
Yield Stress / Proof Stress (N/mm ²)	>550	575
Tensile Strength (N/mm ²)	>585	640
Elongation (Min.)	10%	12%

IN-HOUSE LABORATORY AND QUALITY CONTROL

- Well equipped Chemical Laboratory for Wet Analysis with Strohlien Apparatus Oven, Hardness Tester, Electronic Balances etc.
- Spectrometers Model GDS 500A, Leco Make, USA with 22 elements.
- UTM of 40 Tons Capacity to check Mechanical properties.
- Impact & Bend Testing Machine.
- Team of specialized and qualified technicians to ensure utmost conformity of the product to laid down stringent parameters.

EXCELLENCE ENDORSED

KVS Premier Group is endeavoring in manufacturing KVS FORZA Bars as per BIS Specification 1786:2008.

OUR VALUED CUSTOMERS :

- LARSEN & TOUBRO, NOIDA
- HERO REALTY LIMITED, HARIDWAR
- PARAS BUILDTECH, GURGAON
- ASSOTECH BUILDER, NOIDA
- STELLAR VENTURE, NOIDA
- MAHAGUN REAL ESTATE BUILDER, NOIDA
- 3C REAL ESTATE DEVELOPER, NOIDA
- K WORLD (REAL ESTATE), NOIDA
- SHREE GROUP (REAL ESTATE), NOIDA
- FUSION HOMES, NOIDA
- ANTHEM INFRASTRUCTURE, NOIDA
- AHLUWALIA CONTRACTS (INDIA) LTD., GURGAON
- K R PULP & PAPER, SHAHJAHANPUR
- RICHA INDUSTRIES, FARIDABAD
- TULIP TOWER, BAREILLY



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YOUR **SEARCH**
ENDS **HERE**

