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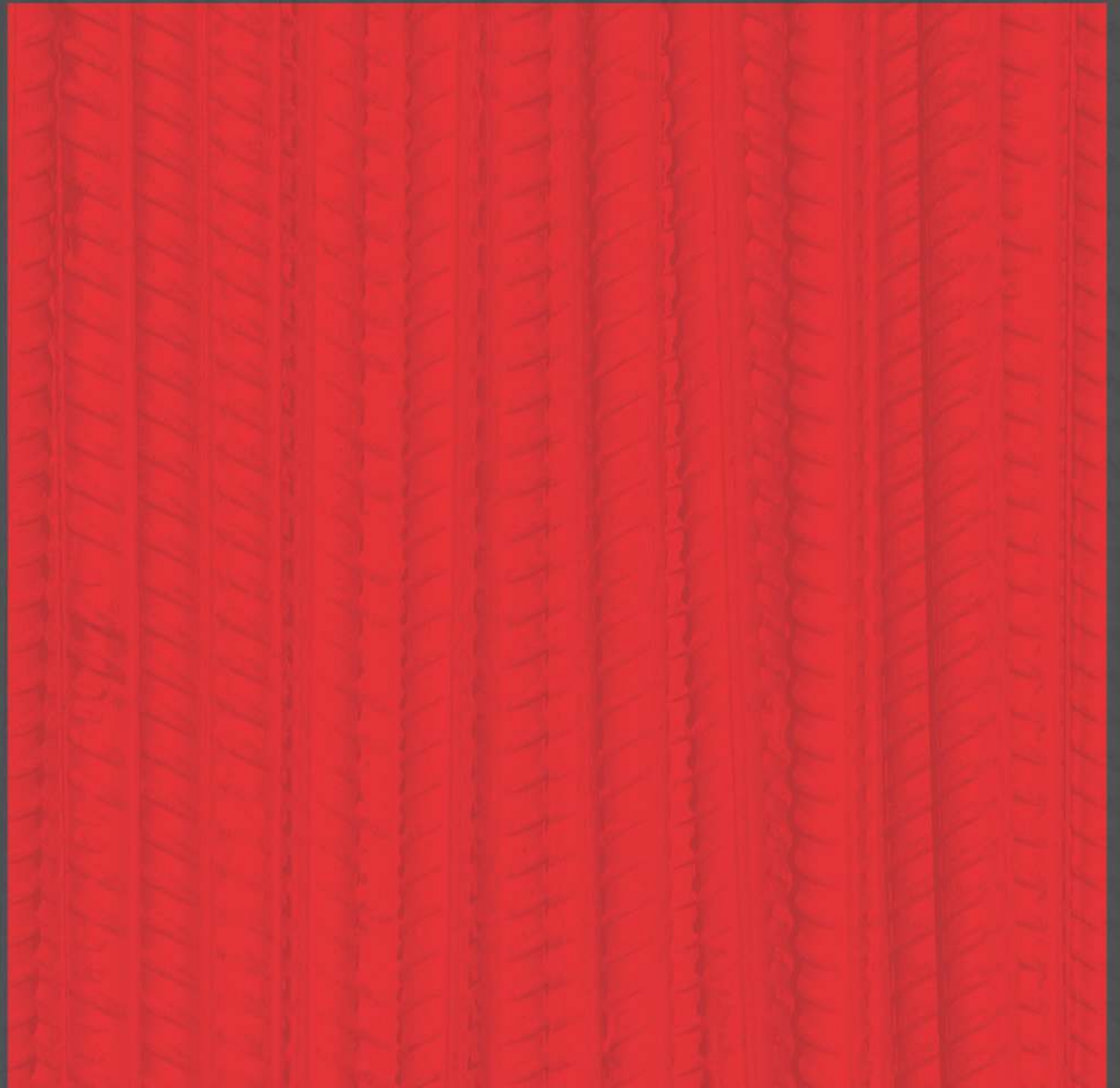
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A Revolution in Construction Industry

Sachi Easybuild has ignited a revolution in the construction industry by providing the easiest & fastest way of construction with ready to use TMT bar products like Stirrups, Cages, Cut & Bend, Mesh, Couplers & Foundation Bolts.





SACHI AGENCY is authorised distributor of **TATA TISCON** for Gujarat.

With a strong background of the most consistent distributor of TATA TISCON for over 20 years, Sachi Agency has come a long way. From the time it was set up to today, it has brought about a revolution in the industry by offering one of the most innovative form of TMT bars. Sachi Agency firmly stays grounded on its basic principle to offer the best quality at the best price to its clients.

In order to eliminate routine construction challenges of executing precise cutting, bending and joining of the rebars to create the needed rebar shapes, Sachi Agency introduced its associate company – Sachi Steel Solutions Private Limited (SSPL) in 2012.

SSPL caters to one of the most innovative product under the brand name Sachi Easy Build. SSPL supplies Easy-to-build ready products as per the BBS which include, Cut & Bend products, Stirrups, Columns, Beams, Pile Cages, Mesh & Footing Cages.



All Products of Tata Tiscon

- FE 500D / 600
- CRS Rebar
- Galvanized Rebars
- Epoxy Coating Rebars



Ready to Use Customised TMT Bars Solution with state of art manufacturing facility



Customised Rebar Solutions

Customised solutions for all your construction needs related to rebars.

Being one of the few companies in India to adapt to latest global construction practices, SSPL's team caters to the diversified clientele from large-scale infrastructure projects, extensive industrial units to commercial and housing projects. Sachi Easybuild's hassle-free and precise cut and bends enable quality building development without delays.

Sprawling over 70,000 sq. yd. of area, the SSPL industrial shed conducts its precise cut and bend shapes through a host of machines from Italy, China and India. This fully automated facility comprises of Shear Line machines, Automatic Benders (Robo master), Stirrup Benders, Spiral Benders, Manual Benders, Overhead Cranes, Mobile Cranes and Forging - Threading Machine for Couplers; which makes SSPL the largest Cut and Bend manufacturing facility in Gujarat.

Sachi Easybuild currently caters to clients approximately 4500mt cut and bend products per month and aims to double it in 3 years.

Mesh Capacity 1000 mt per month.





Why Sachi EASYBUILD ?



0% Wastage.



Ready as per BBS.



**Savings of
labour cost & time.**



**100% accuracy
as per IS.**



**On-time
delivery.**



**Less working
capital.**



**Minimum
inventory
& space.**

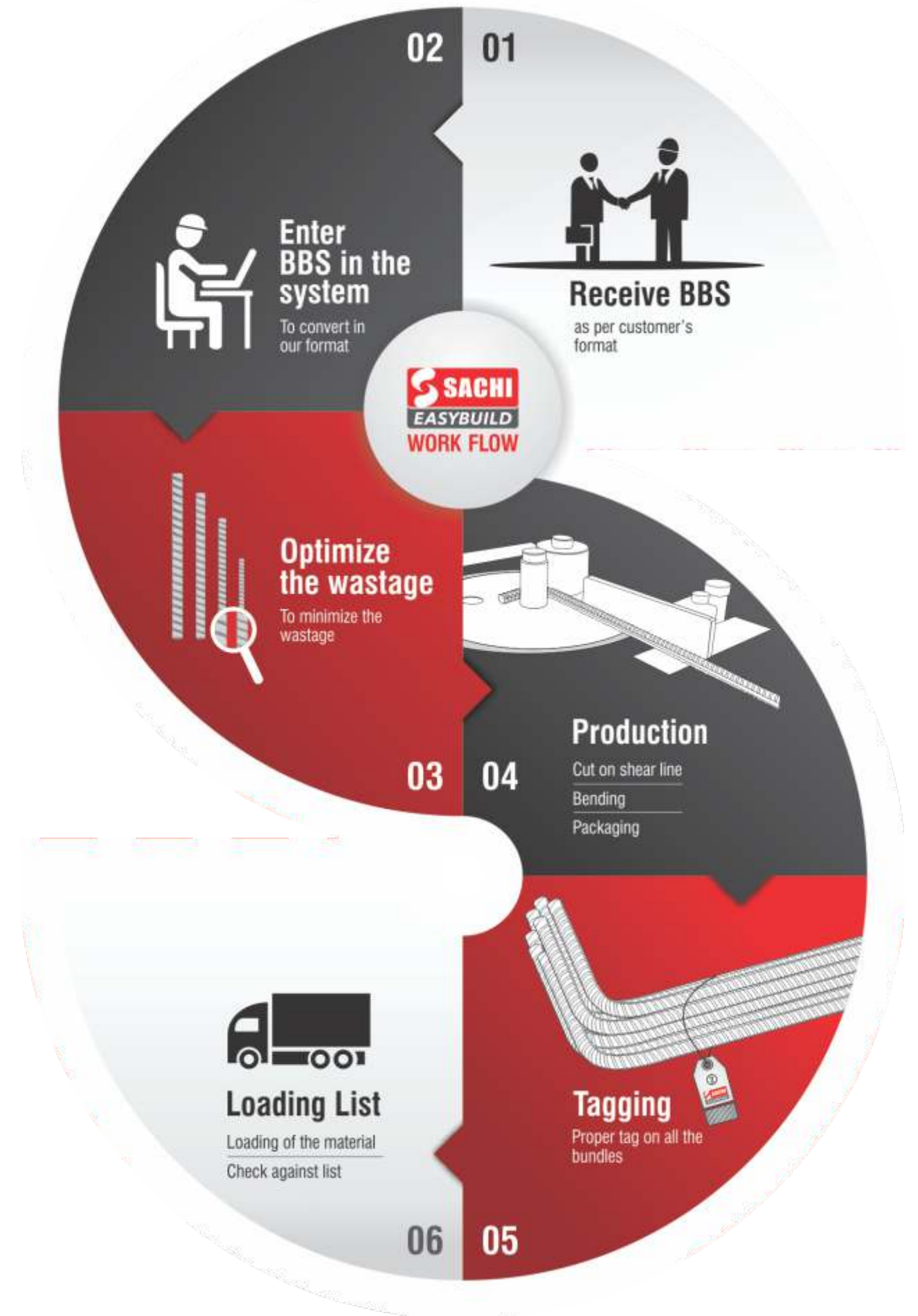


**Lesser dependency
on labour.**



How Sachi Easybuild Works?

As a responsible corporate, **we have always strived to improve the quality of worklife for the industry** as well as pioneered innovative model to shape industry for the better.



Save construction cost by using customised Sachi Easybuild.



Manufacturing Facility

Sachi Easy build facility is spread across 70,000 square yard area with 60,000 sq. ft. utilised area with an expansion capacity of upto 6,00,000 sq. ft.

Sachi Easybuild currently caters to clients with 150 mt cut and bend products per day and aims to double it every 3 years.

Couplers

Sachi Easybuild is a downstream rebar service, aimed at easing and simplifying current construction practices in India. It caters to every type of reinforcement requirement and redefines the concepts of time and inventory management at site.

SSPL has launched world class couplers for reinforcement bars. These are designed to be used with rebars to avoid lapping and accelerate the speed of construction, increase productivity and simplify design details.



Current practices in lapping

Lapping of rebars is the most common method of reinforcing bar joints but is not always the most appropriate. The process includes overlapping two bars for a certain lap length and tying them together with the help of binding wires, as a result the overlapped length of rebars is wasted and it leads to greater congestion within the concrete because of the increased amount of rebar used. Also, the task of holding and tying the rebar together is labour intensive and time consuming.



What are couplers?

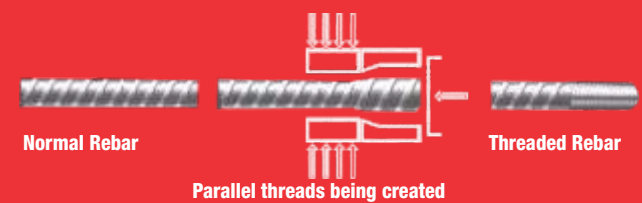
Couplers are hollow mechanical members used to join reinforcement bars. These are threaded on the inside and are fixed on to the two rebars which are to be joined to form a mechanical joint.

The threading process:

Sachi Easybuild couplers are designed in a manner so that their properties are at par with rebars.

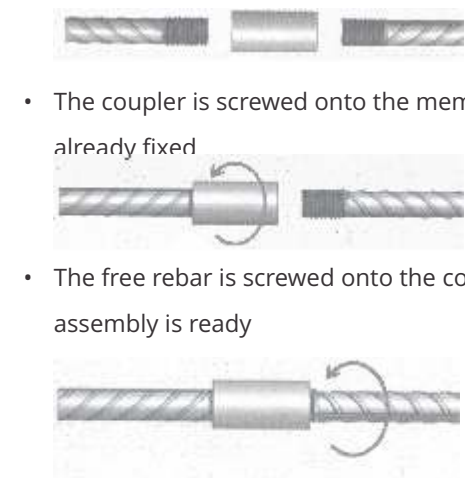
Before Joining:

- The rebar to be joined are supplied with parallel threads cut onto the ends to be joined.
- Prior to thread cutting, the ends are cold forged to the required length and diameter to ensure correctness of fit.



The assembling process

- The two rebars to be joined are supplied with their ends threaded along with the relevant coupler
- The coupler is screwed onto the member which is already fixed
- The free rebar is screwed onto the coupler and the assembly is ready



Benefits of using couplers

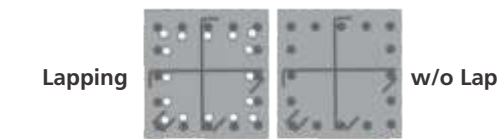
Reducing Rebar Usage

- Lap lengths of the order of 40-50x Diameter, which cannot add any value structurally, are avoided
- Usage of binding wires and difficult handling is avoided



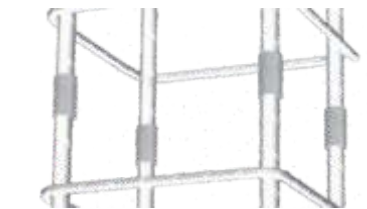
Reducing congestion

- Smooth flow of concrete during pouring and hence, sound structural integrity
- Ideal steel cement ratio ensures optimum steel in structural member cross section



Higher structural integrity

- Mechanical joints are less dependent on the concrete for load transfer
- Faster construction, reduced handling and faster assembly ensures quicker installations



Easier future extensions

- It can be installed as provisions for future extensions
- A coupler eliminates the undesired look of extended rebars and the huge amount of concrete braking required during extension



Applications

- Column lap replacement
- Raft foundations
- Wall to slab connection
- Beam to column connection
- Precast elements
- Future extension/additions

Chemical composition of couplers

%C	%Mn	%P	%S	%Si	%Cr	%A1
0.40/0.45	0.70/0.90	0.040Max.	0.040Max.	0.05/0.35	Nil	0.02Min.

AVAILABILITY

Available in diameters from 16mm to 40mm. Reducer coupler are also available in above range.

Sachi Welded Wire Mesh

Manufacturing process and components

Sachi Welded Wire Mesh is an ideal prefabrication solution that helps the customer to raise productivity levels in construction. Sachi closely works with customer to know their requirements and delivers customized solutions for the project considering the vital factors like time, inventory, reduction of wastage and manpower

management. Using Sachi Welded Wire Mesh not only enables efficient process of construction but the project also gets competitive edge with reduction in cost due to efficient speed of construction.



Cold Drawing

Wire rods made of Low Carbon Steel of grades SAE (1008, 1010, 1012) with carbon content less than 0.15% are cold drawn to achieve required tensile strength.



Ribbed Profile

Ribbing

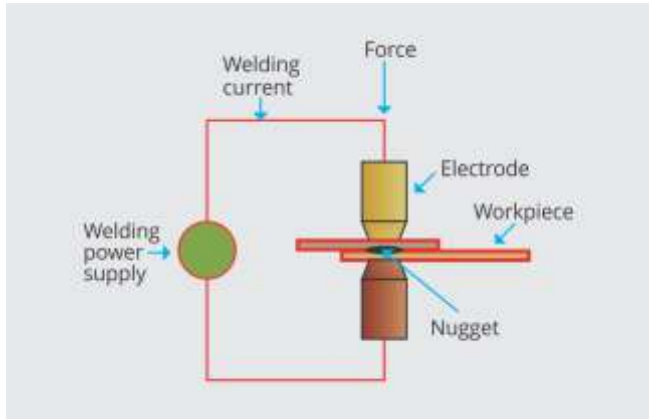
While cold rolling helps in increasing the tensile strength, the ribbing guarantees the perfect bond with concrete. Ribbing gives the wire the visual and mechanical properties similar to a rebar. Crack widths in concrete elements are controlled to the minimum because force is well distributed through bond effect of ribbed wire as compared to plain wire.

IS 1566- Hard drawn steel wire fabric for concrete reinforcement with steel complying to IS 432-2

IS 1566

Hard drawn steel wire fabric for concrete reinforcement with steel complying to IS 432-2

Electric Welding



Physical Property	Min Value	Unit
UTS	570	N/mm2
Proof Stress (0.2%)	480	N/mm2

Sachi applies a semi-automatic and very precise welding machinery to produce welded wire mesh in steel. The machine delivers the welds at calculated junctions from a chamber which in the case of mesh is the points of intersection of horizontal and vertical aligned steel wires. A Weld is created with usage of electrical resistance generating ample amount of heat.

Post welding process, another parallel wires are forwarded and the same welding process continues in the machine. After attaining the desired length of welded mesh, the process is paused and mesh is cut in required dimensions.

Flat Welded Wire Mesh

Sachi provides a range of Flat Welded Wire Mesh in wire diameters ranging from 4mm to 12mm. The mesh is provided in customized sizes for various applications, maximum size upto 2.4m x 12m.



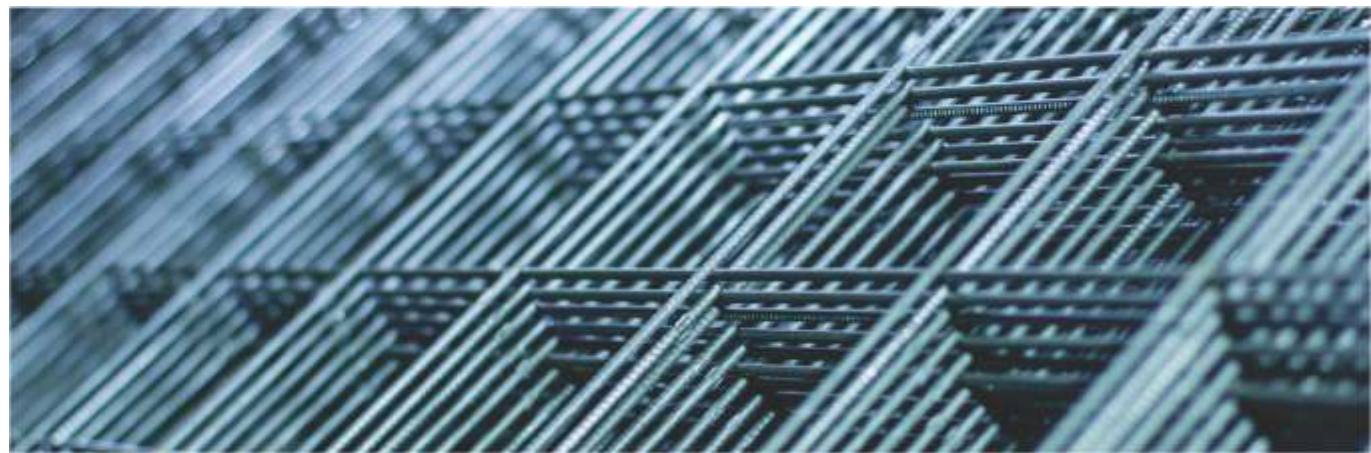
Welded Wire Mesh has been adopted across the world for vertical as well as horizontal reinforcement.



Applications of Flat Welded Wire Mesh

Horizontal Reinforcement

The Flat Welded Wire Mesh is used in horizontal reinforcements like floor slabs

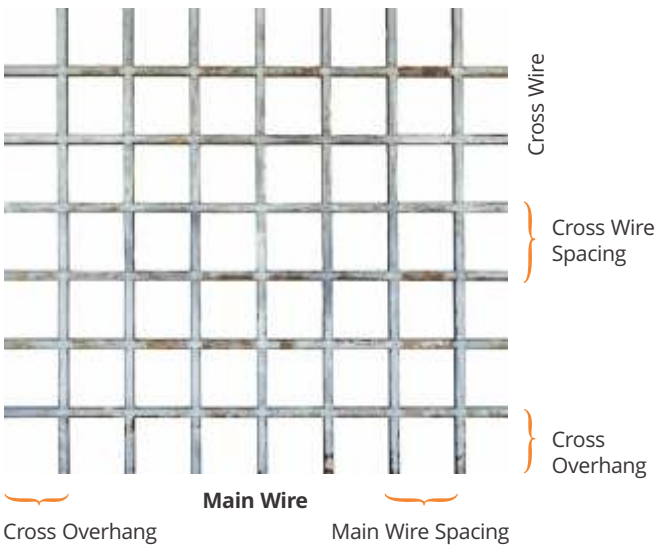


Vertical Reinforcement

When used in vertical reinforcement and precast structures, Flat Mesh would replace Brick and Mortar




Structure of a Flat Welded Wire Mesh



Benefits

Early completion of Project due to easy installation and easier delivery planning	Savings in steel by using diameter closer to design area
Saving on labour charges-No marking, spacing and cutting of bars	Savings In steel due to lower lap length
No scrap generation at site as cutting of bars on site is reduced or eliminated	Reduction of joints hence reduction in binding wire consumption
Simple reconciliation at site of construction. Lower chances of theft	Reduced site congestion



Sachi Welded Wire Mesh enables Technology and Compliance



Modern Formwork Technology for Monolithic Structures

Use of formwork technologies like Mivan, Tunnel, Aluminum other system formwork enabling monolithic construction etc. are supported by the Flat Welded Wire Mesh. Welded Wire Mesh can be used in precast panels like panels and walls.

Government Regulations

Real Estate (Regulation and Development) Act(RERA) seeks to impose regulations on the promoter and ensure that construction is completed on time.

Mass Housing Projects directed by Ministry of Housing and Urban Poverty Alleviation, Public Private People Participation (PPPP) housing projects etc. have low timelines and hence use of Welded Wire Fabric enhances the speed and efficiency of construction in these cases.

Consistency and Accuracy

Smaller diameter wires and closer spacing of wires provide more uniform stress distribution and more effective crack control in slabs and walls as compared to larger diameter steel bars.

The wide range of wire diameters and spacing between wires available with us makes it possible to supply Welded Wire Fabric which almost matches the exact cross sectional steel area required.

The automated process of spacing and dimensional control reduces human errors in placing of steel reinforcement and increases accuracy in the fabrication of the mesh. The possibility of displacement of steel bars prior to and during concreting is much reduced.

Quality Control in production and specifications is the assurance of conformity to specifications. Test Certificate is delivered with each batch of order for more confidence in the material as well as workmanship of Integrated Steel Plant.

The dependence on human labour is reduced thus minimizing errors, reworks and delays. Various projects in India has already adopted this technology to reduce cost and speed up the project timelines.

Fully Automated

Process of Spacing and Electric Welding which guarantees quality and accuracy

Timely Delivery

Ensures timely completion of project and minimum delay

Customization

According to your project and structures gives high robustness and more savings


Wire Mesh Specification




- Wire diameter available at an interval of 1 mm as well as customised intervals
 - Spacing available as per table as well as customised
- Weld mesh available in Wire and Re-bars
 - Also available in Epoxy Coating, PVC Coating, Powder Coating, Galvanized Hot Dip

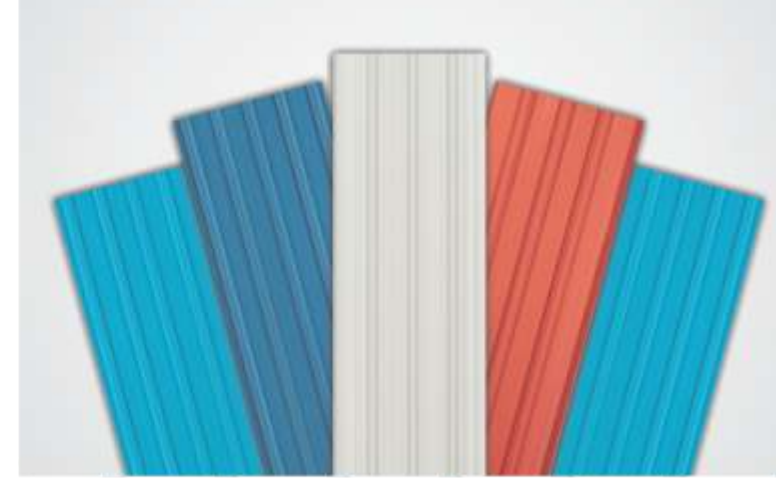
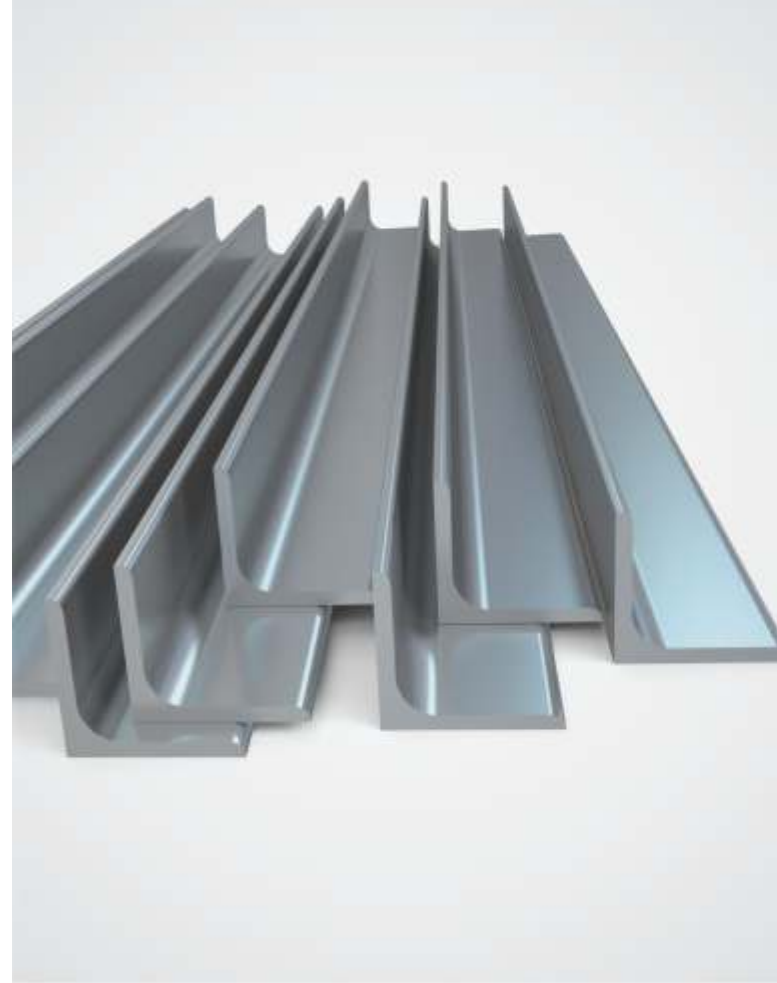
SQUARE WELDED MESH (SM)							
	Wire Spacing		Area Mass per				Mass per Area
	Main	Cross	Main	Cross	Kg Per	Total	kg/m2
	mm	mm	mm2/kg	mm2/kg	Mtr.	No	
4X4	50	50	253	253	0.099	40	3.95
4X4	100	100	126	126	0.099	20	1.98
4X4	150	150	84	84	0.099	13	1.32
4X4	200	200	63	63	0.099	10	0.99
5X5	50	50	394	394	0.154	40	6.17
5X5	100	100	197	197	0.154	20	3.09
5X5	150	150	131	131	0.154	13	2.06
5X5	200	200	98	98	0.154	10	1.54
6 x 6	100	100	283	283	0.222	20	4.44
6 x 6	150	150	189	189	0.222	13	2.96
6 x 6	200	200	141	141	0.222	10	2.22
7 x 7	100	100	385	385	0.302	20	6.05
7 x 7	150	150	257	257	0.302	13	4.03
7 x 7	200	200	193	193	0.302	10	3.02
8 X 8	100	100	503	503	0.395	20	7.90
8 X 8	150	150	335	335	0.395	13	5.27
8 X 8	200	200	251	251	0.395	10	3.95
9 x 9	100	100	636	636	0.500	20	10.00
9 x 9	150	150	424	424	0.500	13	6.67
9 x 9	200	200	318	318	0.500	10	5.00
10 X 10	100	100	786	786	0.617	20	12.35
10 X 10	150	150	524	524	0.617	13	8.23
10 X 10	200	200	393	393	0.617	10	6.17
11 X 11	100	100	951	951	0.747	20	14.94
11 X 11	150	150	634	634	0.747	13	9.96
11 X 11	200	200	475	475	0.747	10	7.47
12 X 12	100	100	1131	1131	0.889	20	17.78
12 X 12	150	150	754	754	0.889	13	11.85
12 X 12	200	200	566	566	0.889	10	8.89

Wire Mesh Specification

RECTANGULAR WELDED MESH (RM)							
	Wire Spacing		Area Mass per				Mass per Area
	Main	Cross	Main	Cross	Kg Per	Total	
	mm	mm	mm2/kg	mm2/kg	Mtr.	No	kg/m2
4X4	50	100	253	126	0.099	30	2.96
4X4	50	150	253	84	0.099	27	2.63
4X4	50	200	253	63	0.099	25	2.47
4x4	100	150	126	84	0.099	17	1.65
4x4	150	200	84	63	0.099	12	1.15
5X5	50	100	394	197	0.154	30	4.63
5X5	50	150	394	131	0.154	27	4.12
5X5	50	200	394	98	0.154	25	3.86
5X5	100	150	197	131	0.154	17	2.57
5X5	150	200	131	98	0.154	12	1.80
6 x 6	100	150	283	189	0.222	17	3.70
6 x 6	100	200	283	141	0.222	15	3.33
6 x 6	150	200	189	141	0.222	12	2.59
7 x 7	100	150	385	257	0.222	17	3.70
7 x 7	100	200	385	193	0.222	15	3.33
7 x 7	150	200	257	193	0.222	12	2.59
8 x 8	100	150	503	335	0.395	17	6.58
8 x 8	100	200	503	251	0.395	15	5.93
8 x 8	150	200	335	251	0.395	12	4.61
9 x 9	100	150	636	424	0.500	17	8.33
9 x 9	100	200	636	318	0.500	15	7.50
9 x 9	150	200	424	318	0.500	12	5.83
10 x 10	100	150	786	524	0.617	17	10.29
10 x 10	100	200	786	393	0.617	15	9.26
10 x 10	150	200	524	393	0.617	12	7.20
11 X 11	100	150	951	634	0.747	17	12.45
11 X 11	100	200	951	475	0.747	15	11.20
11 X 11	150	200	634	475	0.747	12	8.71
12 x 12	100	150	1131	754	0.889	17	14.81
12 x 12	100	200	1131	566	0.889	15	13.33
12 x 12	150	200	754	566	0.889	12	10.37

Wire Mesh Specification

RECTANGULAR REDUCER WELDED WIRE MESH (RRM)									
	Wire Spacing		Wire Diameter		Area Mass per				Mass Wt.
	Main	Cross	Main	Cross	Main	Cross	No of Main Bar	No of Cross Bar	
	mm	mm	mm	mm	mm2/kg	mm2/kg			kg/mtr
6 X 7	100	200	6	7	283	193	10	5	3.73
7 X 7	100	200	7	7	385	193	10	5	4.54
9 X 8	100	200	9	8	636	251	10	5	6.98
10 X 8	100	200	10	8	786	251	10	5	8.15
11 X 8	100	200	11	8	951	251	10	5	9.44
12 X 8	100	200	12	8	1131	251	10	5	10.86
12 X 11	100	200	12	11	1131	475	10	5	12.62
12 X 10	100	200	12	10	1131	393	10	5	11.98
12 X 9	100	200	12	9	1131	318	10	5	11.39
12 X 7	100	200	12	7	1131	192	10	5	10.40
11 X 10	100	200	11	10	950	393	10	5	10.56
11 X 9	100	200	11	9	950	318	10	5	9.97
11 X 7	100	200	11	7	950	192	10	5	8.98
11 X 6	100	200	11	6	950	141	10	5	8.58
10 X 9	100	200	10	9	785	318	10	5	8.67
10 X 7	100	200	10	7	785	192	10	5	7.69
10 X 6	100	200	10	6	785	141	10	5	7.28
9 X 7	100	200	9	7	636	192	10	5	6.51
9 X 6	100	200	9	6	636	141	10	5	6.11
8 X 7	100	200	8	7	503	192	10	5	5.46
8 X 6	100	200	8	6	503	141	10	5	5.06
7 X 6	100	200	7	6	385	141	10	5	4.14



Supplier of Iron & Steel Products

- **Plates**
IS-2062 - Grade A/B, E-250, E-350, E-410
High Tensile E-350 / All BQ Plates / Chequered Plates
B0 Plates - FE 350 - 410
- **Structural Steel**
Angles / Channels / Beams / Parallel Beams / Joist
NBP - UC - UB Beam
HR / CR / GP / GC / Coils / Sheets
- **Round Bars**
IS-2062 - EN-8/9
- **Hollow Tubes - Structura**

