



Couplers For Reinforcement Bars

Accelerate Speed. Increase Productivity



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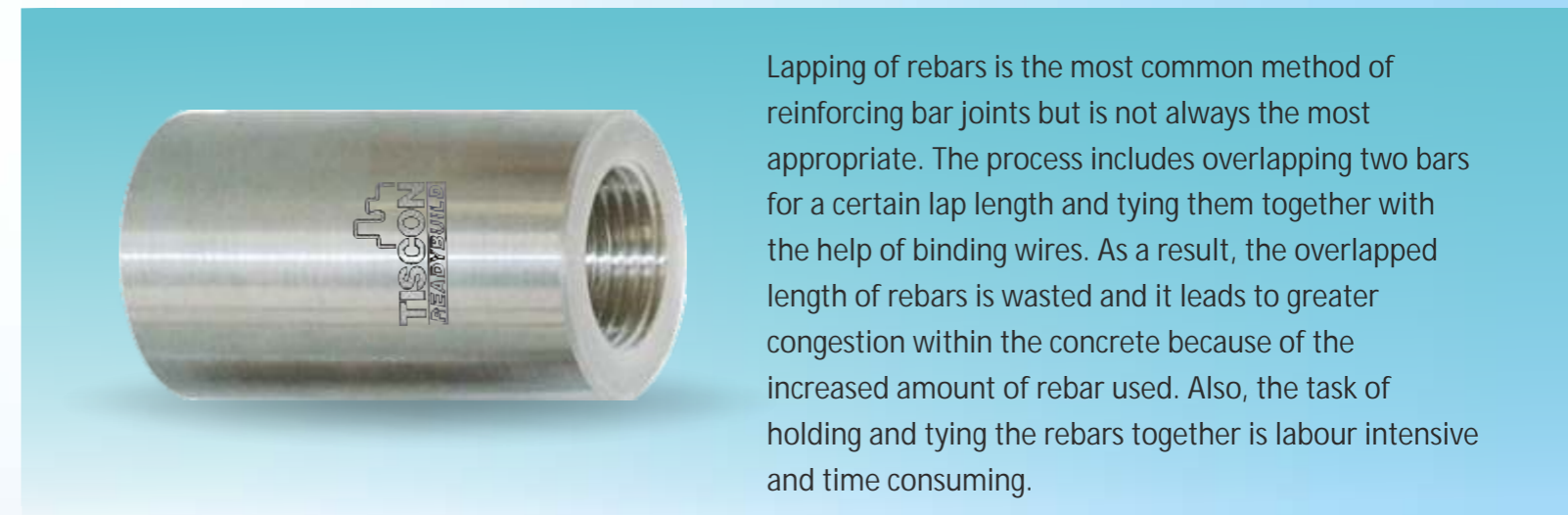
PREFACE

Tiscon Readybuild is a downstream rebar service from Tata Tiscon, aimed at easing and simplifying current construction practices in India. It caters to every kind of reinforcement requirement and redefines the concepts of time and inventory management at site. The following value-added services are offered by Tiscon Readybuild :

Cut and Bend: Customization of rebars in required shapes and sizes, by cutting and bending them as needed, in accordance with the bar bending specifications

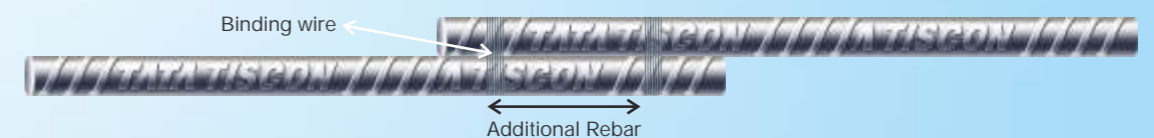
Couplers: The traditional method of joining two rebars is by 'lapping' and joining by wire. Tiscon Readybuild couplers offer the safest and most user-friendly method of joining two rebars, completely omitting the tedious practice of 'lapping'

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 rebars together is labour intensive and time consuming.

Lapping of two rebars





SOLVING THE PROBLEM with couplers

When it comes to innovative construction solutions, Tata Tiscon has always been among the first to deliver. In another first for an Indian steel producer, Tata Tiscon has launched world-class Couplers, for Reinforcement Bars. These are designed to be used with Tata Tiscon rebars, to avoid lapping and to accelerate the speed of construction, increase productivity and simplify design details.

As provisioned in IS 16172:2014, mechanical coupling options can be safely used to join two rebars.

WHAT ARE COUPLERS?

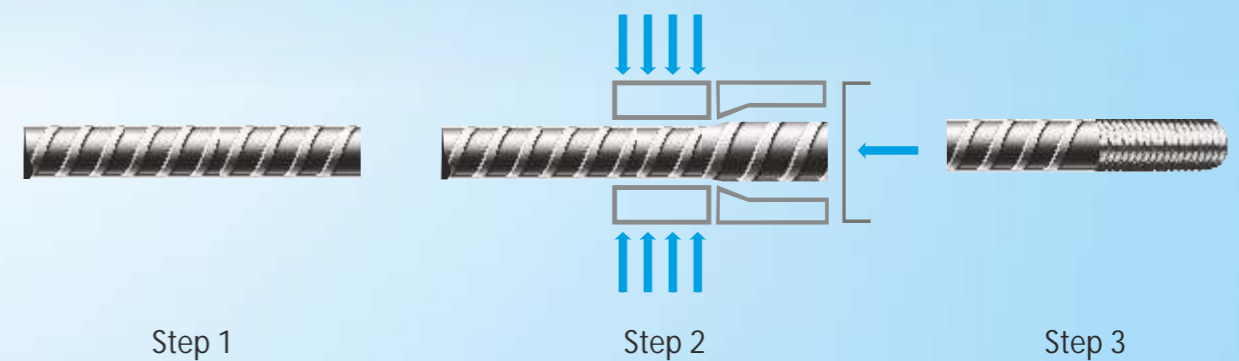
Couplers are hollow mechanical members used to join reinforcement bars. These are threaded on the inside and are fixed on to the two rebars which are to be joined to form a mechanical joint.



The Process:

Tiscon Readybuild Couplers are designed in a manner so that their properties are at par with Tata Tiscon rebars. Before joining :

- The rebars 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

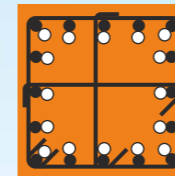
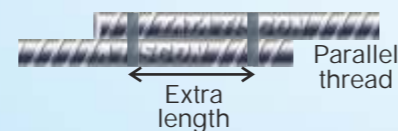




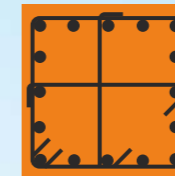
MAKE THE CONNECTION with a world of benefits

Reduced 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



Lapping



w/o Lap

Reduced 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

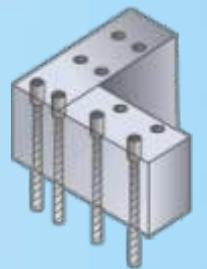


Faster Construction:

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 breaking required during extension



Chemical composition of Couplers

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

Our Couplers are in compliance to En8D grade and hence chemistry is as per its specifications.

Availability

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





APPLICATION AREAS

1. Column-lap replacement
2. Raft foundations
3. Wall to slab connection
4. Beam to column connection
5. Precast elements
6. Future extensions/additions

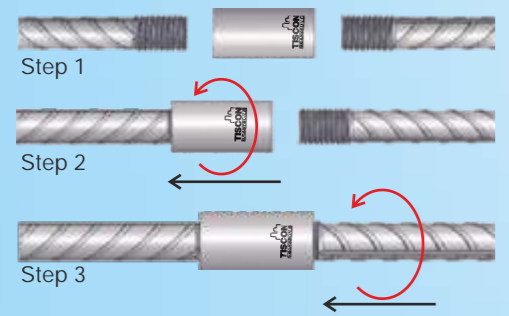


1. Column-lap replacement



3. Wall to slab connection

THE ASSEMBLING PROCESS



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

WORLD-CLASS STANDARDS

Tiscon Readybuild Couplers also comply to international specifications such as EN 1992 and BS 8110.

- All couplers provided by Tata Tiscon are supplied with certificates :
- Parent Material Test Certificate
 - To ensure quality of the parent material being used
 - Physical Dimension Test certificate
 - To ensure manufacture as per our design
 - Sample Pull Test from the lot
 - To ensure physical properties of the coupler joint



Network of Tiscon Readybuild Service Centres

Tiscon Readybuild Centre Office addresses

