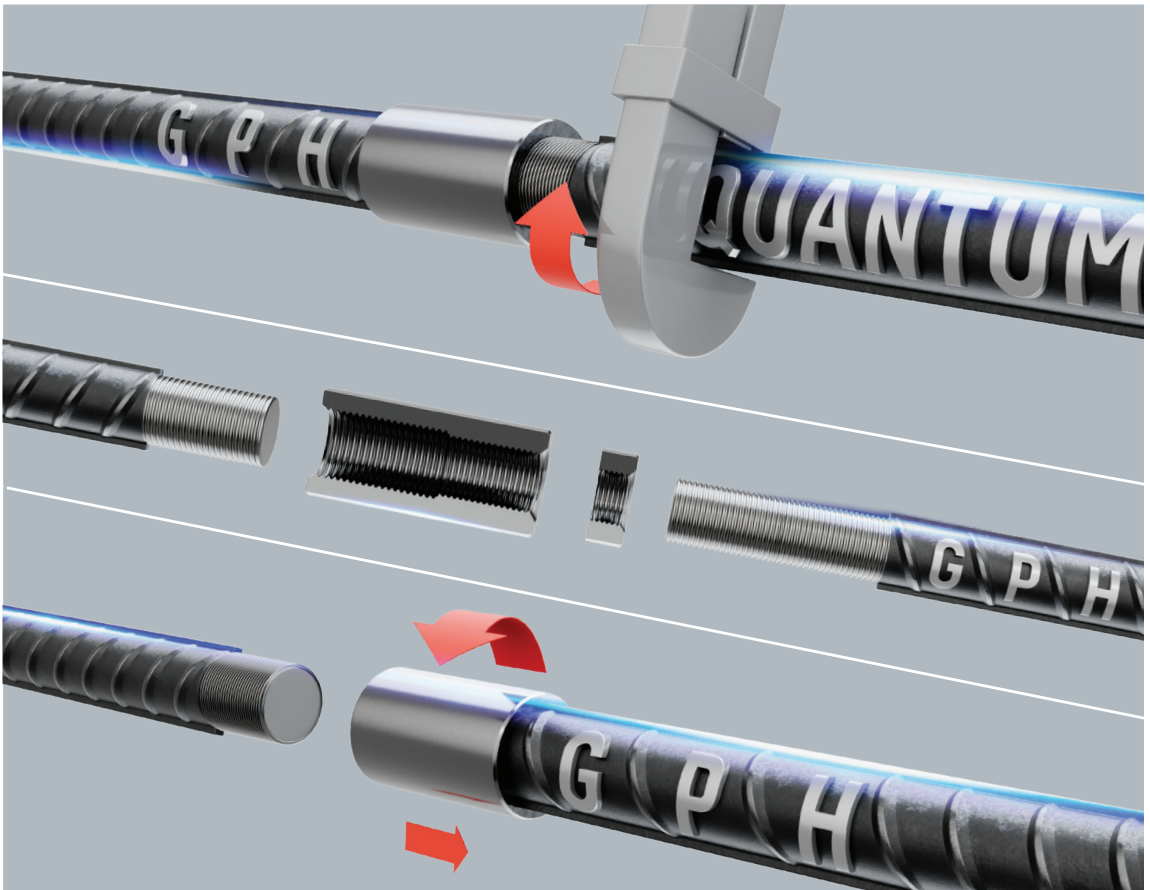


GPH Leviat Coupler

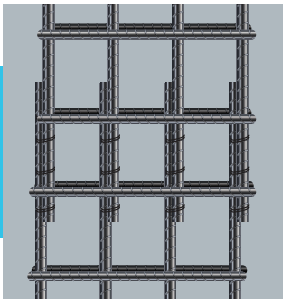
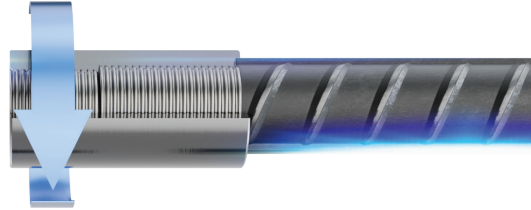
for Reinforcing Concrete



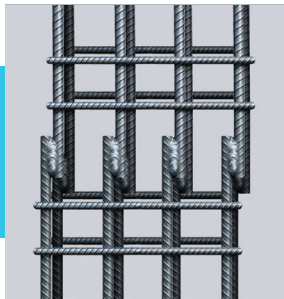
Couplers are fully complied for using as per BNBC, ACI 318, BS 8110, NZS 3101, EN 1992-1-1 and satisfy the requirements set by ISO 15835, IS 16172, NF 35-020.

Why Rebar Couplers?

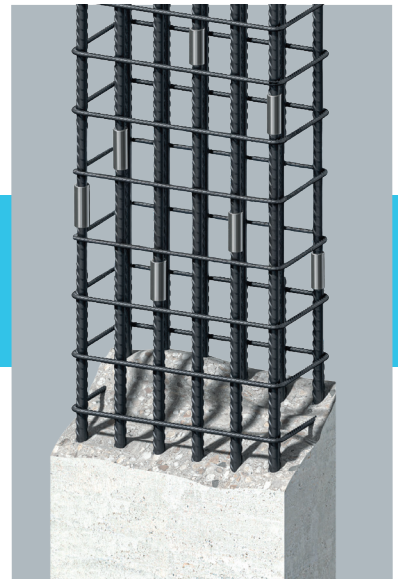
- Joins steel rebars without lapping & welding
- Saves rebar length & reduce congestion in concrete
- Maintains the structure in both tension and compression
- Quick and reliable installation
- GPH ispat offers a better solution with mechanical splices or coupler (Type-2) from Leviat (www.leviat.com)



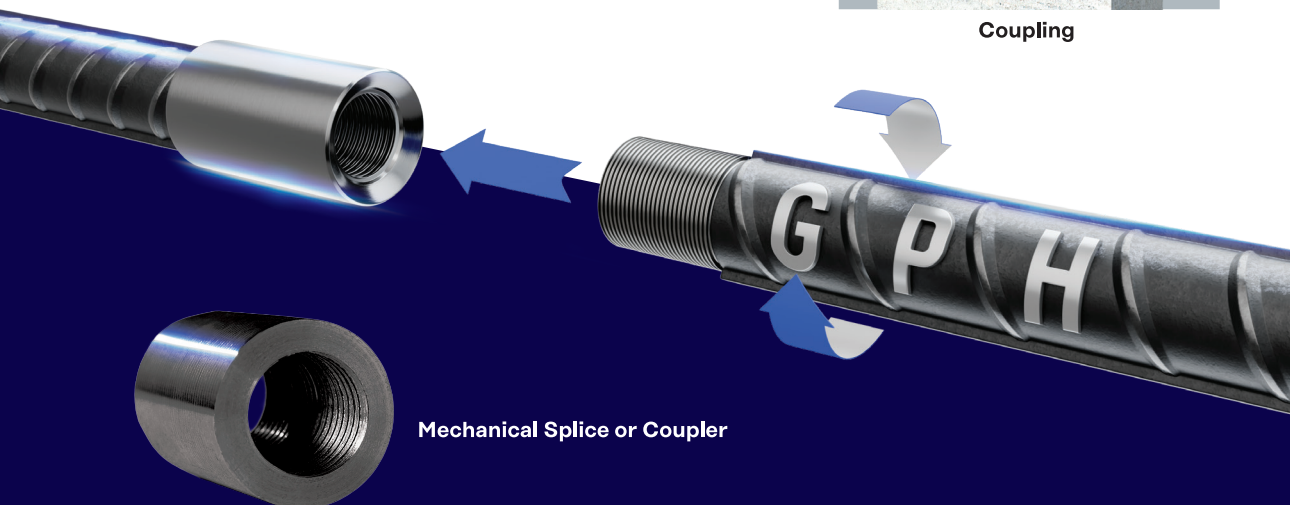
Lapping



Welding



Coupling



Mechanical Splice or Coupler

Lapping vs Coupler Connection

Which one is the best?



Lapping Splices

Involves overlapping rebar secured with wire

Load path continuity is sub-optimal

Load transfer depends on concrete

Requires extra steel for lapping, increasing the steel consumption and project cost

Increases rebar congestion

High wastage



Mechanical Splice or Coupler

Utilizes threaded couplers to join rebars together

Accurate load path ensures full strength in tension and compression

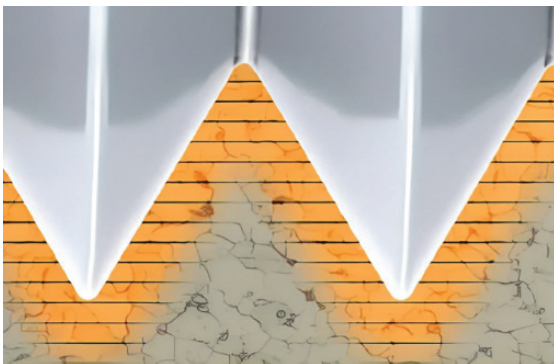
Great load transfer that does not depend on the concrete

Less quantity of steel required, reducing material costs

Avoids rebar congestion

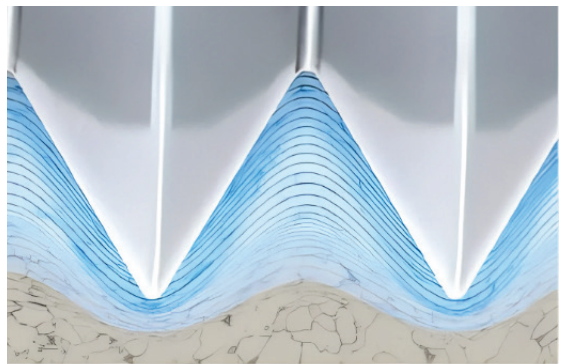
Simplified design allows easy installation and ensures minimal wastage

Cut Thread vs Roll Thread



Cut Threading - can become brittle and develop weak areas

- Threads are made by cutting material away
- This can generate tiny cracks & sharp notch
- Over time, these weak spots can grow and make the thread brittle



Roll Threading - becomes stronger and smoother

- Threads are formed by pressing the material, not by removing it
- Creates smooth burn shed roots and flanks, free from slice imperfection
- The compressed surface is stronger and becomes more durable over time

Cut Threading	Particulars	Roll Threading
Threads are cut into the rebar using a cutting tool, which removes material to form the thread profile.	Process	Threads are formed by rolling the rebar between two dies, which displaces the material to create the thread shape.
No grain flow along the threading direction, potentially weakening the strength.	Grain Structure	Aligns the grain structure along with loading direction of thread tip, enhancing strength.
Lower strength compared to Rolled thread.	Strength	Enhances Tensile & Shear load bearing capacity and resilient to fatigue load.

GPH ispat offers 5 types of rebar couplers

Moment JoinTec JT

Moment Reducer JT

Moment Terminator JT

Ancon MBT

MOMENT Grout Coupler

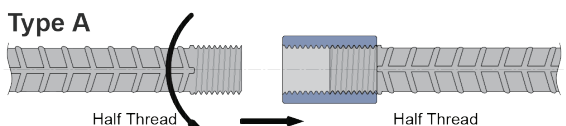
1. Moment JoinTec JT

- It offers the most comprehensive solution for a wide range of applications, delivering strength of up to 700 MPa along with excellent impact toughness to resist blast and earthquake loads.

1.1 Types (A/B/C)

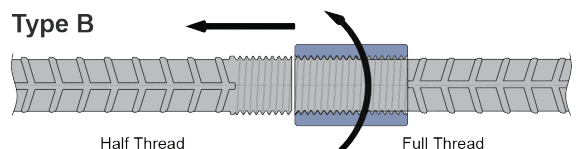
Type A

- Two half threads form a complete joint



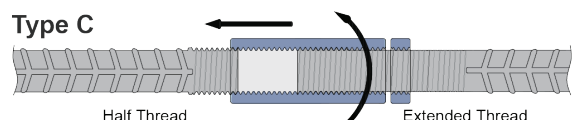
Type B

- One half thread and one full thread form a complete joint
- Allowing a coupler to be fully screwed onto one of the bars



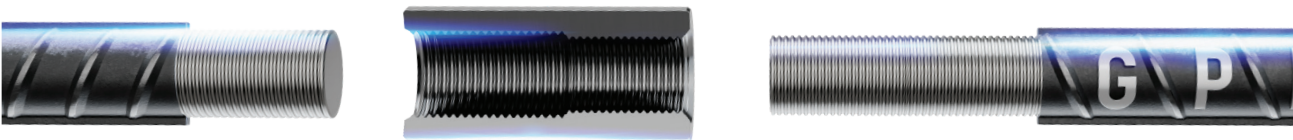
Type C

- One half thread and one full thread with additional lock nut
- Lock nut eliminates need to turn the bar fully



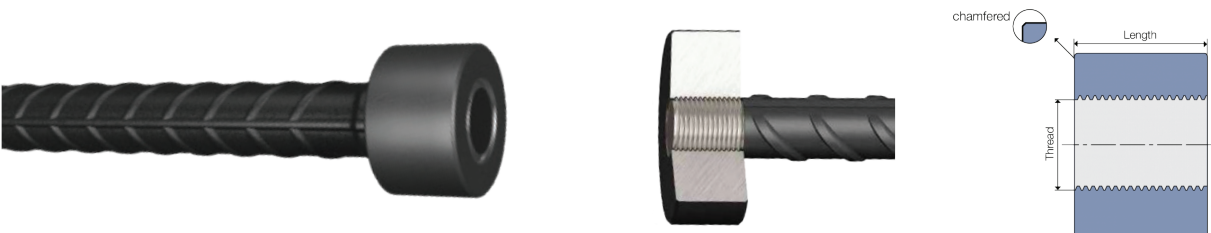
2. Moment Reducer JT

- When connecting two bars of different sizes, the Reducer JT provides a practical solution that ensures a secure and efficient connection
- Its design allows the process to be completed smoothly and in a timely manner



3. Moment Terminator JT

- Referred to as End Anchors, these couplers offer a practical substitute to hooked bars by delivering effective end anchorage in congested areas.



Available Sizes:

Coupler Type	Sizes(mm)
Moment JoinTec (JT)	12, 16, 20, 25, 28, 32, 40
Moment Reducer (RT)	20-16, 25-20, 28-25, 32-25, 32-28, 40-32
Moment Terminator (Headed Bar)	20, 25, 32
Locknut JoinTec	20, 25, 32

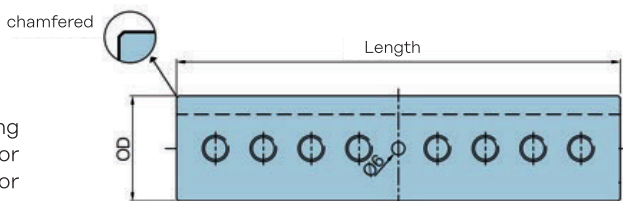
4. Ancon MBT

- The Ancon MBT couplers provide a cost-effective method of joining reinforcing bars, particularly when the fixed bar is already in place and there is insufficient space for a hydraulic swaging press.



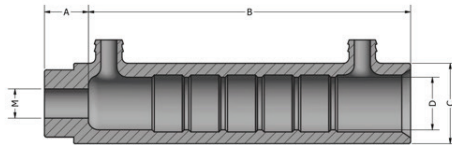
Application:

Ideal for situations where bar rotation or threading isn't possible. Suitable for imperial or metric, plain or deformed bars, they are perfect for new, retrofit, or confined space applications.



5. MOMENT Grout Coupler

- A seismic-resilient splicing solution for precast concrete
- The Half Grout Coupler connects precast elements with one threaded rebar end and one grout-filled cavity ensuring - strength, flexibility, and easy installation

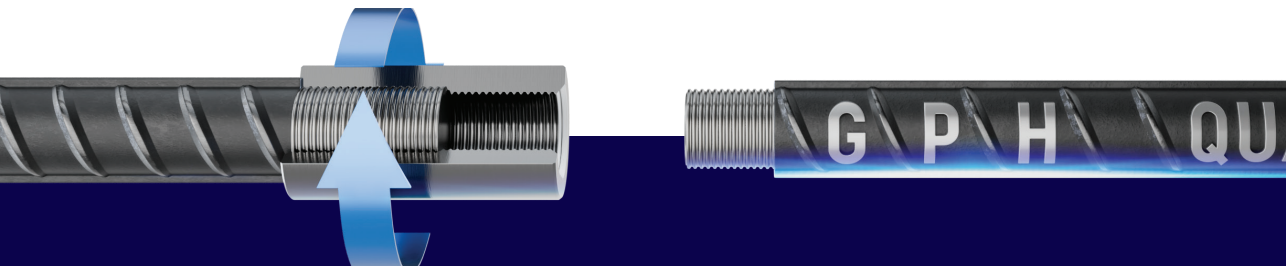


Key Features:

- One-piece design resists bar stress >700 Mpa
- Compatible with MOMENT JT threaded system
- Achieves bar break with 100 MPa proprietary grout

Applications:

Ideal for connecting precast walls, columns, and beams - horizontally or vertically.



Acknowledgement



Technical approval
TA1-F 5077 for
JoinTec Couplers



Simplified design and
construction



Reduced amount of
reinforcement required



Reduced carbon
footprint



Dedicated sales
support

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