



## Coupler

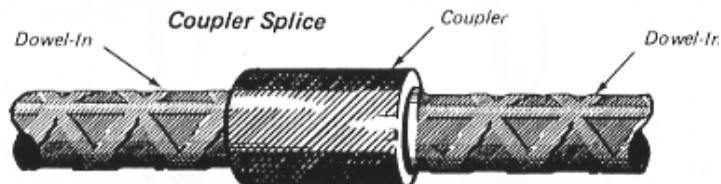
### Conical threaded couplers:

These joints use standard reinforcing steel bars on which we have tapped conical thread identical to those of the coupler. The special conical thread preserves the bar resistance. These joints require only enough clearance to enable tightening with an open end wrench.



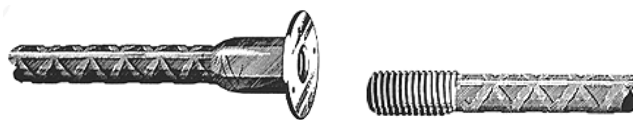
### Standard threaded couplers:

These joints use standard thread reinforced steel bars at the extremities. The internal thread removes part of the transversal area and, consequently, we cannot develop the full resistance of the bars. It is possible to use a superior caliber bar to compensate for the loss of a section.



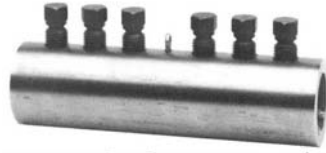
### Wrought steel couplers:

These joints are made of bars where one of the ends is finished by a wrought threaded coupler. Another bar with corresponding wrought threads is screwed to the coupler. There is no diminution of the bar section.



### Bolted up couplers:

These joints transmit the strength of the connected bars by means of threaded bolts with high resistance screwed to the steel bars on the coupler's length. When the tightening is sufficient, the bolt head detaches. This type of joint is efficient when you cannot thread the bars.



**Metal filled couplers:**

These mechanical joints use standard structural bars and a coupler that we filled with molten metal after its installation. The resistance is developed by the friction between the solidified molten metal, the grooves on the reinforcing bars and the internal grooves of the coupler. This type of joint is efficient when we cannot thread the bars.

