



# **MB MBT Coupler**

Type 1 & Type 2 Rebar Splicing System

#### **Overview**

MBT couplers provide a cost-effective, easy-to-install method of joining reinforcing bars, particularly when the fixed bar is already in place and space is limited.

During installation, shear bolts are tightened, embedding them securely into the rebar. The bolt heads shear off when the pre-determined tightening torque is reached, providing an instant visual check of correct installation.

#### Features

- **Tested:** Performance meets ACI 318-19 Type 1 & Type 2 splice requirements and maintains reinforcing steel continuity independent of concrete cover.
- **Easy Installation:** Form-threading bar end preparation and bar rotation are not required.
- Versatile: Suitable for static and fatigue loading. For use with A-615/A-706 Grade 60 rebar.
- Finish: Plain





## **MB MBT Coupler**

Type 1 & Type 2 Rebar Splicing System



#### Product Data - Type 2 MBT Splicing Coupler

Part Number	Bar Size (US/Metric)	Length (A)	Socket Head (B)	External Diameter (C)	Nominal Bolt Shear Torque	Tensile Strength	Number of Bolts	Bolt Thread
MBT0401T2	#4 / 13	5.50″	1⁄2"	1.32″	40 ft-lbs	18,000 lbs	6	M10
MBT0501T2	#5 / 16	6.30″	1⁄2"	1.66″	80 ft-Ibs	27,900 lbs	6	M12
MBT0601T2	#6 / 19	8.00″	1⁄2"	1.90″	80 ft-Ibs	39,600 lbs	8	M12
MBT0701T2	#7 / 22	9.80″	1⁄2"	1.90″	80 ft-Ibs	54,000 lbs	10	M12
MBT0801T2	#8 / 25	12.30″	5⁄8″	2.24"	200 ft-lbs	71,100 lbs	10	M16
MBT0901T2	#9 / 29	12.30″	5⁄8″	2.90″	200 ft-lbs	90,000 lbs	10	M16
MBT1001T2	#10 / 32	12.30″	5⁄8″	2.90″	265 ft-lbs	114,300 lbs	10	M16
MBT1101T2	#11 / 36	16.50″	3⁄4″	3.12″	385 ft-lbs	140,400 lbs	12	M20

### Product Data - Type 1 MBT Splicing Coupler

Part Number	Bar Size (US/Metric)	Length (A)	Socket Head (B)	External Diameter (C)	Nominal Bolt Shear Torque	Tensile Strength	Number of Bolts	Bolt Thread
MBT0401T1	#4 / 13	3.94″	1⁄2"	1.32″	40 ft-Ibs	15,000 lbs	4	M10
MBT0501T1	#5 / 16	4.57″	1⁄2"	1.66″	80 ft-Ibs	23,250 lbs	4	M12
MBT0601T1	#6 / 19	6.30″	1⁄2"	1.90″	80 ft-Ibs	33,000 lbs	6	M12
MBT0701T1	#7 / 22	8.00″	1⁄2"	1.90″	80 ft-Ibs	45,000 lbs	8	M12
MBT0801T1	#8 / 25	10.20″	5⁄8"	2.24"	200 ft-lbs	59,250 lbs	8	M16
MBT0901T1	#9 / 29	8.00″	5⁄8"	2.90″	200 ft-lbs	75,000 lbs	6	M16
MBT1001T1	#10 / 32	10.16″	5⁄8"	2.90″	265 ft-Ibs	95,250 lbs	8	M16
MBT1101T1	#11 / 36	14.00″	3⁄4"	3.12″	385 ft-Ibs	117,000 lbs	10	M20



Structural Connections Rebar Splicing



# **MB MBT Coupler**

### Installation Guide

MBT Couplers must be correctly installed to ensure that the full working capacity is achieved. All the bolts must be tightened until the heads shear off or specified torgue is reached. Installation should be entrusted to a qualified and experienced persons. Normal handling precautions should be taken to avoid physical injury.



1. Place Coupler Over First Bar Place coupler over the end of the bar until center stop is reached. Finger tighten the lock shear bolts onto the bar. Check the alignment and make any necessary adjustments.



#### 2. Place Second Bar

Place other bar into the coupler until center stop is reached. Finger tighten the remaining lock shear bolts. Check the alignment and make any adjustments.



#### 3. Tighten with Pneumatic Impact Wrench

Lock shear bolts should be tightened using a 1" drive pneumatic impact wrench. The air supply should provide 100psig operating pressure and 185 cfm of delivered air. For torque requirements under 80 ft-lbs, a smaller impact wrench may be used.



**4. Start Tightening from Center** Starting from the center and working towards one end of the coupler, partly tighten all of the lock shear bolts using the impact wrench.



### 5. Tighten Until Bolt Heads Shear Off

Following the same sequence as in step 4, fully tighten all the lock shear bolts until the bolt heads shear off.



6. Repeat Steps 4 & 5 for Other Half

Complete steps 4 and 5 for the other half of the coupler.