

Instructions for Connecting Rebars to One-Side Bolted STL Couplers

- Depending on the coupler size, the number of bolts in a one-side bolted coupler ranges from 3 to 7. The bolts and their positions are arranged according to Figure (A) and are identified as Bolt No. 1 and Bolt No. 2.
- Bolt No. 2 can be identified by the blue color on its wrenching head.
- The reinforcing bar must be positioned inside the coupler in accordance with Figure (B); therefore, ensure that the rebar is in contact with the bottom of the coupler. If the longitudinal ribs of the rebar are higher than standard, reduce their height using an appropriate tool (grinding wheel) before installation. In addition, the transverse ribs of the rebar located beneath Bolts No. 1 and No. 2 must also be ground off so they do not prevent the bolts from penetrating into the core of the rebar.
- Before tightening the coupler bolts, be sure to coat both the threaded areas and the bolts themselves with grease, and use a suitable electric, pneumatic, or hydraulic wrench, or a double-handled wrench (socket wrench, etc.).
- After inserting the rebar into the coupler, start tightening Bolt No. 1 from Position 1 and continue sequentially in the direction of the arrow. For sizes 32 mm and above, the bolts must be tightened alternately and in the direction of the arrow moving outward. Bolt No. 2 is tightened at the end, after all other bolts have been secured, at Position No. 2 only. Note that this bolt must be used only in Position 2.
- Continue tightening the bolts until the wrenching head breaks off at the groove provided.
- To connect the opposing reinforcing bar, after removing the protective rubber cover, screw the bar into the coupler by hand as much as possible, then fully tighten it into the coupler up to the last thread using a special wrench (available from Sahand Company) or a pipe wrench. In this condition, all rebar threads are fully engaged inside the coupler.
- If, for any reason, the rebar threads are rusty, clean them using a wire brush. If necessary, apply grease or oil to the threads before tightening.
- To facilitate inspection and control of the connections, it is recommended to mark the couplers with red paint after securing them.
- The responsibility for adhering to this guideline and supervising the use of mechanical connections according to international building codes lies with the contractor.

