

Mounting Instructions 1D – Lifting Systems TBL 1D-TBL 1.01.M.EN 01-March-2021

MOUNTING INSTRUCTIONS



1D - LIFTING SYSTEMS | TBL – BENDED LOOP





INSTALLATION AND REINFORCEMENTS

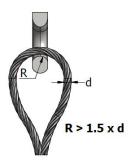


Before concreting the precast element, the bent loops are installed into the mould. To avoid movement during concrete pouring the bent loops must be tied to the mesh reinforcement. An additionally reinforcement bar must be placed above the bent sleeve with pressure contact. Both open ends of the bent loop must be tied at a distance of approximately 300 mm.

The lifting devices can be hooked on the upper end of the bent loop only after the concrete strength has reached 15 MPa. These lifting systems are suitable for use through a single cycle from production to final installation. They are not suitable for multiple use applications.

Avoid bending the steel wire rope while the precast unit is in storage. Exposed loops can be attached to standard crane hooks, but the curvature radius of the crane hook should at least be equal to the diameter of the wire rope. It is essential to check that the wire rope is in good condition, with no broken, crushed or unravelled wire. Also, do not use if there are kinks in the loop or the wire rope is badly corroded - discard in accordance with EN 13414!

Recommended radii of used lifting hook:

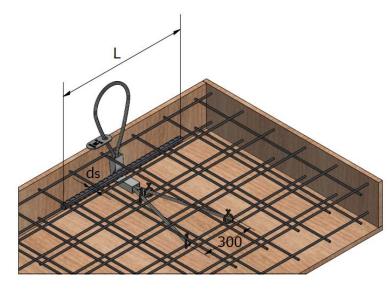


Note: Minimum radius of the crane hook for the wire loop must be R > 1.5 x d



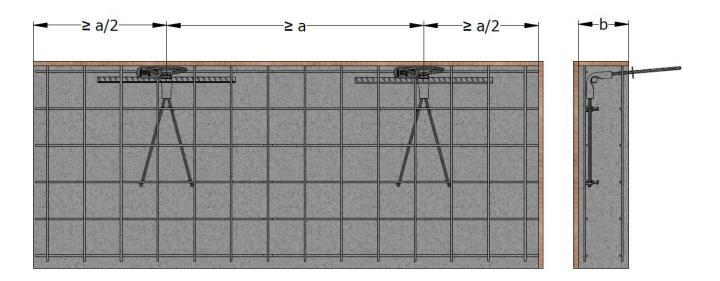
REINFORCEMENTS

For installing of bent loop, the precast concrete elements must be reinforced with a minimum mesh reinforcement. The additionally reinforcement rebar should be placed above and in pressure contact with the bent tube sleeve. During the initial lifting, the concrete strength must have minimum 15 N/mm².



| TBL | Load group | Mesh reinforcement | Additional reinforcement | |
|---------|--------------------------|-----------------------|-----------------------------|------|
| | f _{cu} > 15 MPa | | ds | L |
| | [kN] | [mm²/m] | [mm] | [mm] |
| TBL-008 | 8 | 188 | 10 | 300 |
| TBL-016 | 16 | 188 | 12 | 300 |
| TBL-024 | 24 | 188 | 14 | 300 |
| TBL-040 | 40 | 188 | 16 | 350 |

Important! Welding or other strong heat influences on the bent loop are not allowed.

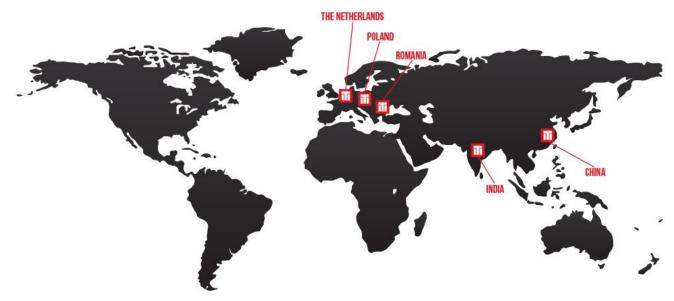


Installation dimensions are given in table below.

| TBL | Load group f _{cu} > 15 MPa | Minimum distance from edge a/2 | Minimum centre to centre distances a | Minimum concrete element thickness b |
|---------|--|---|--|--|
| | [kN] | [mm] | [mm] | [mm] |
| TBL-008 | 8 | 240 | 480 | 120 |
| TBL-016 | 16 | 240 | 480 | 120 |
| TBL-024 | 24 | 240 | 480 | 150 |
| TBL-040 | 40 | 300 | 600 | 200 |



CONTACT



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