

Wavy tail sockets – Angled lifts

M24 long wavy tail sockets are designed to take angled loads. The tension in the angled sling should be calculated and this load should not exceed the WLL stated on the sockets.

Where the angle of the slings exceeds 12.5° from vertical then additional sling tension reinforcement must be placed around the socket, in the case of the Rd16 SLWS16 Short waved end socket this should be an 8mm diameter U bar with an overall length of 300mm.

Whilst the socket is designed to be used with angled slings, best practice would be to avoid sling angles that exceed 45° from the vertical axis.

For reference for a two point lift the sling tension is calculated from:

$1 / (\cos (\text{sling angle from vertical}))$

10° = 1.01 x load on anchor

15° = 1.03 x load on anchor

20° = 1.06 x load on anchor

25° = 1.10 x load on anchor

30° = 1.16 x load on anchor

Please note that any additional dynamic loading must also be applied to this figure. The load on the anchors is dependent on the number of effective anchors, the number of anchors, the distribution of the anchors and the sling arrangement all have an impact on the load per anchor.

The short waved end sockets are not designed for pitching processes.