The Modulift Spreader is modular in length, and every spreader consists of 1 pair of End Units and Drop Links, with intermediate struts that can be bolted into the assembly to achieve different spans. MOD 400/400 has an assembled span ranging from 6ft to 78ft in 1ft increments.

**WARNING!**

- Personnel using this system should be suitably trained, competent and have a clear understanding of Safe Slinging procedures.
- The use of Modulift equipment must be in accordance with the procedures laid down in ‘ASME B30.20 - 2013’.
- Never exceed stated SWL – Adhere to SWL in Table 2 for particular sling angle used.
- The top sling length is critical to the safe use of the spreader – Adhere to Table 2.
- Ensure Drop Links hang down, and smaller shackles are connected to bottom hole of Drop Link.
- Do not under any circumstances hang load(s) from the tube or flanges – the spreader is designed for axial compression, not bending.

**MOD 400/400 Beam Specification**

- Rated at 400 tonnes SWL at 46ft span (60° BSA). See Load Table for SWL at longer spans.
- ‘Base to Sling’ angle, α, 45 degrees or more.
- End Units & Drop Links are rated at 200 tonnes WLL each (400 tonnes combined capacity).
- **Bolt tightening torque: 184 Pound-Foot.** Spanner size required: 36mm.
- Recommended additional equipment: Torque Wrench, Podger Spanner and Ring Spanner.

**Table 1 – Component List**

<table>
<thead>
<tr>
<th>Part Ref.</th>
<th>Description</th>
<th>Weight/item</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>End Unit</td>
<td>996 lbs</td>
</tr>
<tr>
<td>P2</td>
<td>Drop Link</td>
<td>331 lbs</td>
</tr>
<tr>
<td>P3</td>
<td>20ft Strut</td>
<td>3049 lbs</td>
</tr>
<tr>
<td>P4</td>
<td>10ft Strut</td>
<td>1744 lbs</td>
</tr>
<tr>
<td>P5</td>
<td>5ft Strut</td>
<td>1094 lbs</td>
</tr>
<tr>
<td>P6</td>
<td>4ft Strut</td>
<td>963 lbs</td>
</tr>
<tr>
<td>P7</td>
<td>3ft Strut</td>
<td>832 lbs</td>
</tr>
<tr>
<td>P8</td>
<td>2ft Strut</td>
<td>701 lbs</td>
</tr>
<tr>
<td>P9</td>
<td>1ft Strut</td>
<td>571 lbs</td>
</tr>
<tr>
<td>P10</td>
<td>300t Wide Body Shackle</td>
<td>794 lbs</td>
</tr>
<tr>
<td>P11</td>
<td>200t Wide Body Shackle</td>
<td>452 lbs</td>
</tr>
<tr>
<td>P12</td>
<td>M24 x 90 Grade 8.8 HT Bolts*, Nuts &amp; Washers</td>
<td></td>
</tr>
</tbody>
</table>

*For Cat. B use ‘SAE Grade 8’ minimum or equivalent for 70ft and longer

**Fig. 1 – Typical Spreader Assembly**

α = Base to sling angle
Assembly Procedure

- Check the ID plates on each Modulift component to ensure the correct size is used.
- Lay out the Struts and End Units in the correct configuration (see Table 2), laid on flats to prevent rolling.
- Check that all pairs of flanges are clear from debris, sand etc. before connection.
- Bolt the components together using bolts, nuts & washers provided. Tighten the bolts to a torque as shown overleaf, 10 bolts per connection. The number and grade of bolts is critical for the safe use of the spreader particularly at longer spans.
- Place drop link inside the jaw of an end unit, with the larger hole of drop link lined up with the End Unit hole.
- Place a top sling onto the body of a top shackle, and put jaw through fitting and the end unit jaw and drop link, and repeat for other spreader beam end.
- Attach free ends of top slings to crane hook.
- Attach lower slings and shackles to lower holes of drop links, make sure there is a clearance between the sling end fitting and the end unit or flanges.
- Put top shackle pin through shackle, end unit jaw and drop link, and repeat for other spreader beam end.
- The assembled spreader beam and lifting rig must be thoroughly checked by a competent person prior to lifting.

Do’s & Don’ts

- Do ensure to load the spreader through the drop links only, i.e. adhere to Fig. 1.
- Do keep the loaded spreader clear of obstacles – any contact could cause beam failure.
- Do ensure correct use of appropriate top slings, do not twist any slings unnecessarily.
- Do not hang any load from the spreader tube or flanges.
- Do not exceed stated SWL for that particular span – adhere to Table 2.
- Do not rig the lower slings more than 6 degrees from vertical.
- When moving or positioning long struts or assemblies use tag lines to control movement.
- Individual components can be heavy and extreme care must be taken if manual handling.

Recommended top sling types:

Textile slings, wire rope slings with soft eyes and chain slings with small end fittings. If thimble eyes are used with wire rope slings, make sure sling angle is 60 degrees or more. Other types exist but not all are suitable due to end fitting size, particularly larger capacity chain hook and thimble eyes.

Note: Lengthening the slings can give greater clearance. Refer to Modulift supplier if in doubt.

WARNING!

- The rigger must ensure that there is a clearance between the sling end fitting and the end unit as shown opposite.
- Max number of struts allowed in spreader assembly: 5
- Assemble longer struts in the centre of the spreader configuration.
- Sling angle is crucial to safe use of spreader.