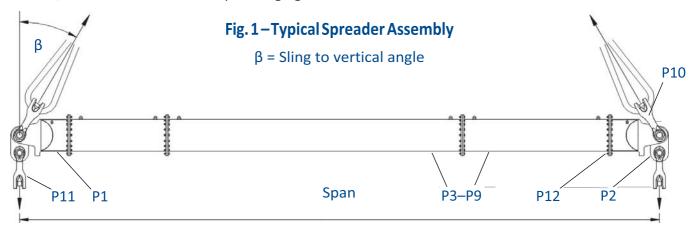


MOD 1100/2000 USER MANUAL

User Instructions MOD 1100/2000



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 1100/2000 has an assembled span ranging from 3 metres to 36 metres in 0.5m increments.





Larger shackle Table 1 – Component List

Part Ref.	Description	Weight/item					
P1	End Unit WLL 1000t	2300kg					
P2	Drop Link WLL 1000t	1000kg					
P3	6.0m Strut	4000kg					
P4	5.0m Strut	3440kg					
P5	4.0m Strut	2875kg					
P6	3.0m Strut	2315kg					
P7	2.0m Strut	1750kg					
P8	1.0m Strut	1190kg					
P9	0.5m Strut	905kg					
P10	1250t Wide Body Shackle	3700kg					
P11	1000t Wide Body	2970kg					
P12	M30 x 110 Grade 10.9 HT Bolts, Nuts & Washers						

MOD 1100/2000 Beam Specification

- Rated at 2000 tonnes WLL at 19 metres span (30° STV). See Load Table for WLL at longer spans.
- 'Sling to Vertical' angle, β, 30 degrees or less.
- End Units & Drop Links are rated at 1000 tonnes WLL each (2000 tonnes combined capacity).
- Bolt tightening torque: TBC Nm. Spanner size required: 46mm.
- Recommended additional equipment: Torque Wrench, Podger Spanner and Ring Spanner.

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 'Lifting Operations and Lifting Equipment Regulations 1998' (LOLER).
- Never exceed stated WLL Adhere to WLL 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.

User Instructions MOD 1100/2000



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, 24 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 of top shackle over the end unit jaw.
- Put top shackle pin through shackle, 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, and attach them to the load to be lifted.
- 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 WLL 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 30 degrees or less. 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.**

Table 2 - Load v Span

	Sling To Vertical Angle (STV) β											
Span	30	30° 20°			EU - End Unit (1.5m)							
(m)	WLL (t)	Min.top sling length (m)	WLL (t)	Min.top sling length (m)	To calculate the WLL at intermediate spans utilising the 0.5m strut, round up the span to the next longest span in Table 2, and use the stated WLL.							
3	2000	2	2000	3.5	EU	EU						
4	2000	3	2000	4.7	EU	1	EU					
5	2000	4	2000	5.9	EU	2	EU					
6	2000	5	2000	7.1	EU	3	EU					
7	2000	6	2000	8.3	EU	3	1	EU				
8	2000	7	2000	9.5	EU	3	2	EU				
9	2000	8	2000	10.6	EU	5	1	EU				
10	2000	9	2000	11.8	EU	5	2	EU				
11	2000	10	2000	13	EU	5	3	EU				
12	2000	11	2000	14.2	EU	5	4	EU				
13	2000	12	2000	15.4	EU	4	5	1	EU			
14	2000	13	2000	16.6	EU	4	5	2	EU			
15	2000	14	2000	17.7	EU	4	5	2	1	EU		
16	2000	15	2000	18.9	EU	4	6	2	1	EU		
17	2000	16	2000	20.1	EU	5	6	2	1	EU		
18	2000	17	2000	21.3	EU	5	6	3	1	EU		
19	2000	18	2000	22.5	EU	5	6	3	2	EU		
20	1989	19	2000	23.7	EU	5	6	4	2	EU		
21	1859	20	2000	24.8	EU	5	6	4	2	1	EU	
22	1742	21	2000	26.0	EU	5	6	4	3	1	EU	
23	1632	22	2000	27.2	EU	5	6	6	2	1	EU	
24	1521	23	2000	28.4	EU	5	6	6	3	1	EU	
25	1417	24	2000	29.6	EU	5	6	6	3	2	EU	
26	1315	25	2000	30.8	EU	5	6	6	3	2	1	EU
27	1228	26	1947	31.9	EU	5	6	6	4	2	1	EU
28	1146	27	1817	33.1	EU	5	6	6	5	2	1	EU
29	1067	28	1692	34.3	EU	5	6	6	6	2	1	EU
30	991	29	1571	35.5	EU	5	6	6	6	3	1	EU
31	920	30	1459	36.7	EU	5	6	6	6	4	1	EU
32	851	31	1349	37.9	EU	5	6	6	6	4	2	EU
33	786	32	1246	39.0	EU	5	6	6	6	4	3	EU
34	729	33	1156	40.2	EU	5	6	6	6	6	2	EU
35	672	34	1065	41.4	EU	5	6	6	6	6	3	EU
36	619	35	981	42.6	EU	5	6	6	6	6	4	EU

WARNING!

Clearance

- The rigger must ensure that there is a clearance between the sling end fitting and the end unit as shown above.
- Max number of struts allowed in spreader assembly: 6.
- Assemble longer struts in the centre of the spreader configuration.
- Sling angle is crucial to safe use of spreader.

