2018

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User Instructions

MOD 50

Modulift®

working between the hook and the load

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The Modulift Spreader is modular in lenght. Every spreader consists of 1 pair of End Units & Drop Links, with intermediate struts that can be bolted into the assembly to achieve different spans. The MOD 50 has an assembled span ranging from 1 meters to 13m in 0.5m increments.

Fig. 1 – Typical Spreader Assembly

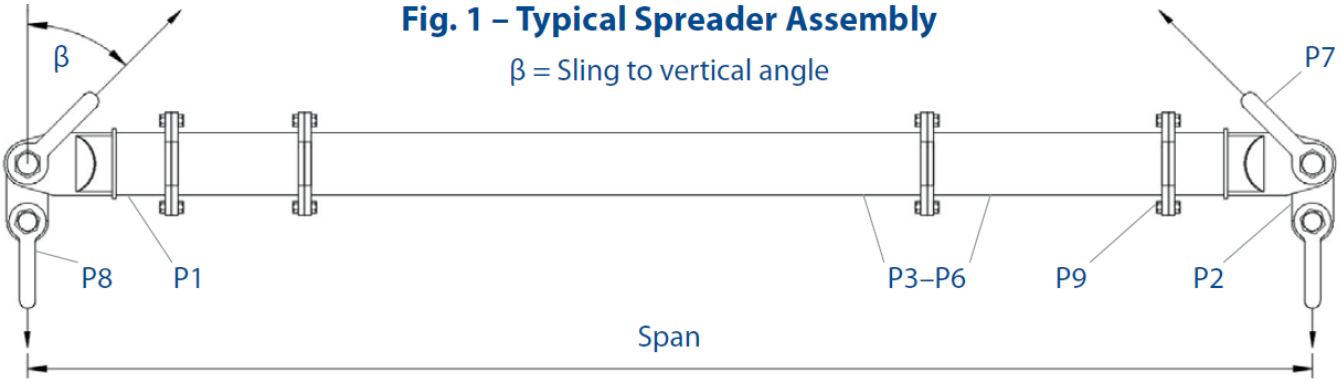


Table 1 – Component List

Part Ref.	Description	Weight/item
P1	End Unit	38kg
P2	Drop Link	11kg
P3	4.0m Strut	140kg
P4	2.0m Strut	82kg
P5	1.0m Strut	53kg
P6	0.5m Strut	38kg
P7	35t Shackle	20kg
P8	25t Shackle	14kg
P9	M20 x 65, Grade 8.8, HT Bolts, Nuts & Washers	

MOD 50

- Rated at 50 tonnes SWL at 8 metres span (30° STV). See load Table for SWL at longer spans.
- 'Sling to Vertical' angle, β, 45 degrees or less.
- End Units & Drop Links are rated at 25 tonnes WLL each (50 tonnes combined capacity).
- Bolt tightening torgue: 150Nm. Spanner size required: 30mm.
- Recommended additional equipment: Torgue Wrench, Podger Spanner and Ring Spanner.

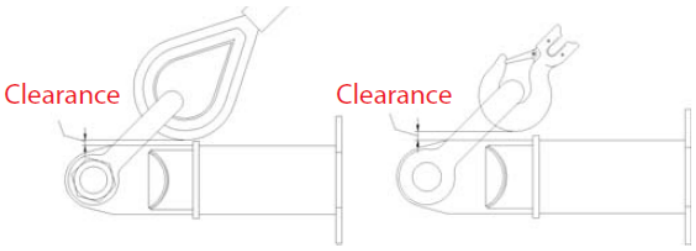
WARNING!

- 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 the "Lifting Operations and Lifting Equipment Regulations 1998' (LOLER).
- 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.

Table 2 – Load v Span

Span (m)	Sling To Vertical Angle (STV) β 45° SWL (t)	45° Min.top sling length (m)	30° SWL (t)	30° Min.top sling length (m)	20° SWL (t)	20° Min.top sling length (m)	Recommended Configuration EU - End Unit (0.5m)						
1.0	50	0.5	50	0.8	50	1.3	EU	EU					
1.5	50	0.9	50	1.3	50	2.0	EU	0.5	EU				
2.0	50	1.2	50	1.8	50	2.7	EU	1	EU				
2.5	50	1.6	50	2.3	50	3.5	EU	1	0.5	EU			
3.0	50	1.9	50	2.8	50	4.2	EU	2	EU				
3.5	50	2.3	50	3.3	50	4.9	EU	2	0.5	EU			
4.0	50	2.7	50	3.8	50	5.7	EU	2	1	EU			
4.5	50	3.0	50	4.3	50	6.4	EU	0.5	2	1	EU		
5.0	50	3.4	50	4.8	50	7.1	EU	2	2	EU			
5.5	50	3.7	50	5.3	50	7.9	EU	2	2	0.5	EU		
6.0	50	4.1	50	5.8	50	8.6	EU	2	2	1	EU		
6.5	44	4.4	50	6.3	50	9.3	EU	0.5	2	2	1	EU	
7.0	39	4.8	50	6.8	50	10.1	EU	2	2	2	EU		
7.5	34	5.1	50	7.3	50	10.8	EU	0.5	2	2	2	EU	
8.0	30	5.5	50	7.8	50	11.5	EU	2	2	2	1	EU	
8.5	26	5.8	46	8.3	50	12.3	EU	0.5	1	4	2	EU	
9.0	24	6.2	42	8.8	50	13.0	EU	4	4	EU			
9.5	21	6.5	37	9.3	50	13.7	EU	4	4	0.5	EU		
10.0	19	6.9	34	9.8	50	14.4	EU	4	4	1	EU		
10.5	17	7.2	30	10.3	48	15.2	EU	1	4	4	0.5	EU	
11.0	15	7.6	26	10.8	43	15.9	EU	2	4	4	EU		
11.5	14	8.0	24	11.3	39	16.6	EU	4	4	2	0.5	EU	
12.0	12	8.3	22	11.8	35	17.4	EU	4	4	2	1	EU	
12.5	11	8.7	19	12.3	31	18.1	EU	4	4	2	1	0.5	EU
13.0	10	9.0	18	12.8	28	18.8	EU	4	4	2	2	EU	

⚠ WARNING!



- 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: 5.
- Assemble longer struts in the centre of the spreader configuration.
- Sling angle is crucial to safe use of spreader.

ASSEMBLY PROCEDURE

1. Check the ID plates on each Modulift component to ensure the correct size is used.
2. Lay out the Struts and End Units in the correct configuration (see table 2), laid on flats to prevent rolling.
3. Check that all pairs of flanges are clear from debris, sand etc. before connection.
4. Bolt the components together using bolts, nuts & washers provided. Tighten the bolts to a torgue as showoverleaf, 6 bolts per connection*
5. Place drop link inside the jaw of an end unit, with the larger hole of drop link lined up with the End Unit hole.
6. Place a top sling onto the body of a top shackle, and put jaw of top shackle over the end unit jaw.
7. Put top shackle pin through shackle, end unit jaw and drop link, and repeat for other spreader beam end.
8. Attach free ends of top sling to crane hook.
9. Attach lower slings and shackles to lower holes of drop links, and attach them to the load to be lifted.
10. The assembled spreader beam and lifting rig must be thoroughly checked by a competent person prior to lifting

DO's and DON'TS

- Do ensure to load the spreader through the drop links only. i.e. adhere to Fig.1.
- Do ensure enough clearance between spreader and the load to prevent the load hitting the spreader. Any collision could cause failure of the spreader.
- Do nut undertake a lift without correct use of appropiate top slings.
- 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 then 6 degrees from vertical.
- Do not twist any slings unnecessarily.

*The number and grade of bolts is critical for the safe use of the spreader particularly at longer spans.