

USER INSTRUCTIONS - MODULIFT 70H

The Modulift Spreader is modular in length, and every spreader consists of 1 pair of End Units & Drop Links, with intermediate struts that can be assembled to achieve different spans. The Modulift 70H has an assembled span ranging from 3 ft to 39 ft in 1 ft increments.

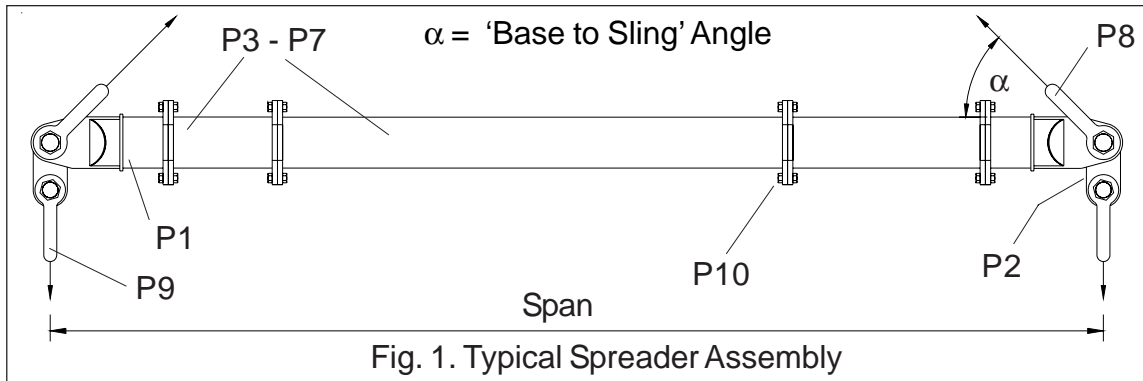
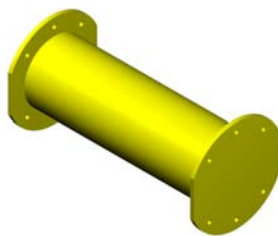


TABLE 1: Component List.

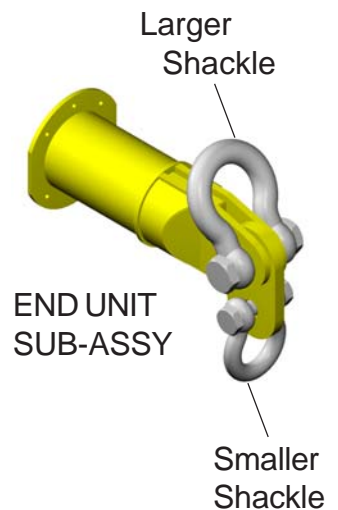
PART REF:	DESCRIPTION
P1	END UNIT
P2	DROP LINK
P3	12 ft STRUT
P4	6 ft STRUT
P5	4 ft STRUT
P6	2 ft STRUT
P7	1 ft STRUT
P8	85t SHACKLE
P9	55t SHACKLE
P10	M20x65 BOLTS, NUTS & WASHERS



STRUT



DROP LINK



Modulift 70H - Beam Specification.

- Rated at 100 tons WLL at 21 ft span. See Load Table for longer spans.
- Base to Sling Angle, α , 45 degrees or more.
- End Units and Drop Links are rated at 50 tons (100 tons combined capacity).
- **Bolt Tightening Torque: 110 Pound-Foot;** Spanner size required: 30mm.



WARNING!

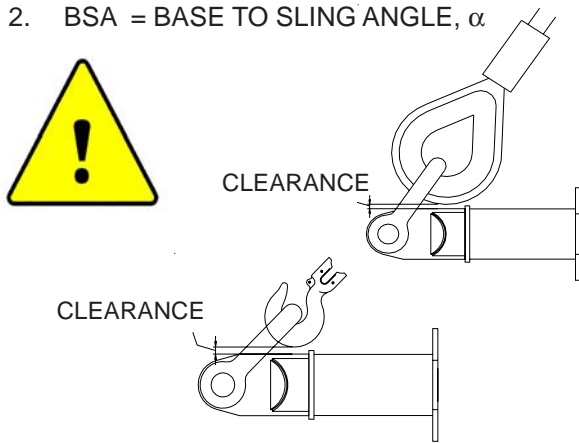
- Personnel using this system should be suitably trained, competent and have a clear understanding of Safe Slings procedures.
- The use of Modulift equipment must be in accordance with the procedures laid down in 'ASME B30.20 - 1999 Section 20 - 1.6'.
- NEVER EXCEED STATED WLL - ADHERE TO WLL IN TABLE 2, FOR PARTICULAR SLING ANGLE USED.
- THE 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.

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TABLE 2: Load v Span.

45° BSA			Recommended Configuration. EU - End Unit (1.5ft)				60° BSA			45° BSA			Recommended Configuration. EU - End Unit (1.5ft)				60° BSA						
Span/ ft	WLL/ T	Min Sling Length/ft	EU	EU			Span/ ft	WLL/ T	Min Sling Length/ft	Span/ ft	WLL/ T	Min Sling Length/ft	EU				Span/ ft	WLL/ T	Min Sling Length/ft				
3	100	2.25	EU	EU			3	100	3	22	93	15.75	EU	6	12	1	EU			22	100	22	
4	100	3	EU	1	EU		4	100	4	23	87	16.25	EU	6	12	2	EU			23	100	23	
5	100	3.75	EU	2	EU		5	100	5	24	73	17	EU	6	12	2	1	EU		24	100	24	
6	100	4.5	EU	2	1	EU	6	100	6	25	65	17.75	EU	6	12	4	EU			25	100	25	
7	100	5	EU	4	EU		7	100	7	26	60	18.5	EU	6	12	4	1	EU		26	100	26	
8	100	5.75	EU	4	1	EU	8	100	8	27	56	19	EU	12	12	EU				27	97	27	
9	100	6.5	EU	6	EU		9	100	9	28	52	20	EU	12	12	1	EU			28	90	28	
10	100	7.25	EU	6	1	EU	10	100	10	29	48	20.5	EU	12	12	2	EU			29	83	29	
11	100	8	EU	6	2	EU	11	100	11	30	44	21.25	EU	2	12	12	1	EU		30	76	30	
12	100	8.5	EU	1	6	2	EU	12	100	12	41	22	EU	12	12	4	EU			31	71	31	
13	100	9.25	EU	6	4	EU		13	100	13	32	38	22.75	EU	4	12	12	1	EU		32	66	32
14	100	10	EU	1	6	4	EU	14	100	14	33	36	23.5	EU	12	12	6	EU		33	62	33	
15	100	10.75	EU	12	EU			15	100	15	34	34	24.25	EU	6	12	12	1	EU		34	59	34
16	100	11.5	EU	1	12	EU		16	100	16	35	32	25	EU	6	12	12	2	EU		35	55	35
17	100	12	EU	2	12	EU		17	100	17	36	30	25.5	EU	6	12	12	2	1	EU	36	52	36
18	100	12.75	EU	2	12	1	EU	18	100	18	37	28	26.25	EU	6	12	12	4	EU		37	48	37
19	100	13.5	EU	4	12	EU		19	100	19	38	26	27	EU	6	12	12	4	1	EU	38	45	38
20	100	14.25	EU	4	12	1	EU	20	100	20	39	24	27.75	EU	6	12	12	4	2	EU	39	42	39
21	100	15	EU	6	12	EU		21	100	21													

Fig. 2. BSA = BASE TO SLING ANGLE, α



The operator must ensure that there is a clearance between the sling end fitting and the end unit as shown in Fig. 2.

- 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

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

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 torque as shown overleaf, 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 slings 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 & 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 not undertake a lift without correct use of appropriate top slings.
- 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.
- Do not twist any slings.