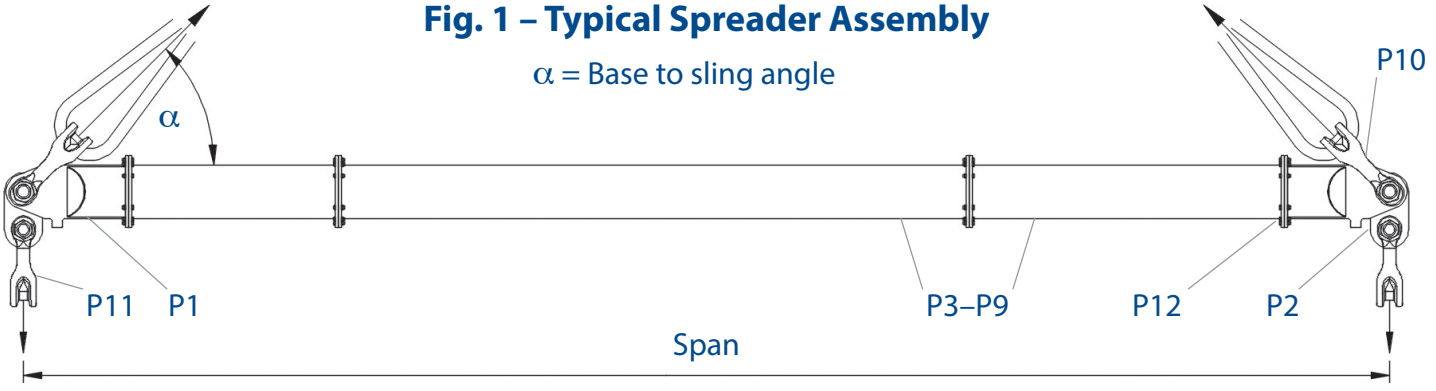
User Instructions
MOD 400/600

Modulift®
working between the hook and the load

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 400/600 has an assembled span ranging from 6ft to 78ft in 1ft increments.

Fig. 1 – Typical Spreader Assembly



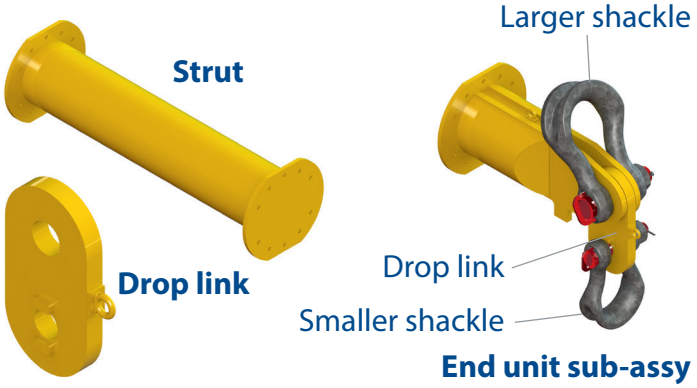


Table 1 – Component List

Part Ref.	Description	Weight/item
P1	End Unit	1261 lbs
P2	Drop Link	331 lbs
P3	20ft Strut	3049 lbs
P4	10ft Strut	1744 lbs
P5	5ft Strut	1094 lbs
P6	4ft Strut	963 lbs
P7	3ft Strut	832 lbs
P8	2ft Strut	701 lbs
P9	1ft Strut	571 lbs
P10	400t Wide Body Shackle	1279 lbs
P11	300t Wide Body Shackle	794 lbs
P12	M24 x 90 Grade 8.8 HT Bolts*, Nuts & Washers	

MOD 400/600 Beam Specification

- Rated at 600 tonnes SWL at 36ft 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 300 tonnes WLL each (600 tonnes combined capacity).
- **Bolt tightening torque: 184 Pound-Foot**. Spanner size required: 36mm.
- Recommended additional equipment: Torque Wrench, Podger Spanner and Ring Spanner.

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

⚠ 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.

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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 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 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.

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Should you find your equipment is no longer of use, please dispose of in a responsible manner. Please contact Modulift if you need further guidance

Table 2 – Load v Span

Span (ft)	Base to Sling Angle (BSA) α 45° SWL metric tons (tonnes)	45° Min.top sling length (ft in)	60° SWL metric tons (tonnes)	60° Min.top sling length (ft in)	70° SWL metric tons (tonnes)	70° Min.top sling length (ft in)	Recommended Configuration EU - End Unit (3ft)						
6	449	2′1″	600	3′11″	600	6′8″	EU	EU					
8	449	3′7″	600	5′11″	600	9′7″	EU	2	EU				
10	449	5′0″	600	7′11″	600	12′6″	EU	4	EU				
12	449	6′5″	600	9′11″	600	15′5″	EU	5	1	EU			
14	449	7′10″	600	11′11″	600	18′5″	EU	5	3	EU			
16	449	9′2″	600	13′11″	600	21′4″	EU	5	5	EU			
18	449	10′7″	600	15′11″	600	24′2″	EU	10	2	EU			
20	449	12′0″	600	17′11″	600	27′1″	EU	10	4	EU			
22	449	13′6″	600	19′11″	600	30′1″	EU	1	10	5	EU		
24	449	14′11″	600	21′11″	600	33′0″	EU	3	10	5	EU		
26	445	16′4″	600	23′11″	600	35′11″	EU	5	10	5	EU		
28	427	17′8″	600	25′11″	600	38′10″	EU	2	10	10	EU		
30	408	19′1″	600	27′11″	600	41′10″	EU	4	10	10	EU		
32	393	20′6″	600	29′11″	600	44′8″	EU	5	20	1	EU		
34	372	21′11″	600	31′11″	600	47′7″	EU	5	20	3	EU		
36	351	23′5″	600	33′11″	600	50′6″	EU	10	20	EU	EU		
38	327	24′10″	569	35′11″	600	53′6″	EU	10	20	2	EU		
40	304	26′2″	530	37′11″	600	56′5″	EU	10	20	4	EU		
42	280	27′7″	488	39′11″	600	59′4″	EU	1	10	20	5	EU	
44	258	29′0″	450	41′11″	600	62′2″	EU	3	10	20	5	EU	
46	240	30′5″	419	43′11″	600	65′1″	EU	10	20	10	EU		
48	218	31′10″	381	45′11″	600	68′1″	EU	10	20	10	2	EU	
50	201	33′4″	352	47′11″	562	71′0″	EU	20	20	4	EU		
52	183	34′8″	320	49′11″	511	73′11″	EU	1	20	20	5	EU	
54	166	36′1″	291	51′11″	465	76′10″	EU	3	20	20	5	EU	
56	150	37′6″	264	53′11″	422	79′10″	EU	5	20	20	5	EU	
58	137	38′11″	241	55′11″	386	82′8″	EU	2	10	20	20	EU	
60	123	40′4″	218	57′11″	349	85′7″	EU	4	10	20	20	EU	
62	110	41′8″	195	59′11″	314	88′6″	EU	1	10	20	20	5	EU
64	99	43′2″	176	61′11″	283	91′6″	EU	3	10	20	20	5	EU
66	90	44′7″	160	63′11″	258	94′5″	EU	10	20	20	10	EU	
68	82	46′0″	147	65′11″	237	97′4″	EU	20	20	20	2	EU	
70	74	47′5″	133	67′11″	214	100′2″	EU	20	20	20	4	EU	
72	66	48′10″	119	69′11″	193	103′2″	EU	1	20	20	20	5	EU
74	59	50′2″	107	71′11″	174	106′1″	EU	3	20	20	20	5	EU
76	53	51′7″	97	73′11″	159	109′0″	EU	20	20	20	10	EU	
78	47	53′1″	87	75′11″	142	111′11″	EU	20	20	20	10	2	EU

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.