LIFTMAX® IFTING DEVICES Modular Spreader Beams provide the ideal solution for most lifting requirements – versatile and cost-effective, the Modulift range has capacity from 2t to 5000t with spans up to 330ft/100m. The modular configuration and interchangeable components enable Modulift Spreaders to be reused over many lifts. Designed by our engineering experts and manufactured in our own specialist facilities; the Modulift range are the leading Modular Spreader Beams on the market.

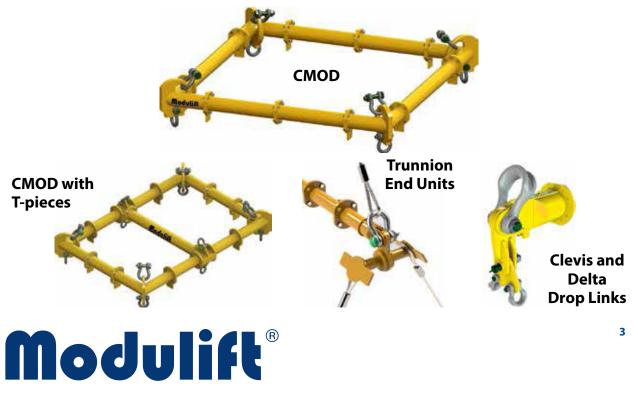
Spreader Beams up to 600t are in stock and available worldwide for distribution – please contact Modulift for an immediate quote or further details.

Every Modulift Modular Spreader Beam consists of a pair of End Units and a pair of Drop Links, with interchangeable struts that can be bolted into the assembly between the End Units to either lengthen or shorten the beam to suit the requirements of the lift, making them reusable at different spans.



# Flexibility beyond the Spreader Beam

Using our range of interchangable corner units and T-pieces, Modulift struts can be used throughout the product portfolio to achieve a variety of configurations including 3-point, 4-point, 6-point and 8-point frames. End units also offer maximum flexibility with trunnion and Clevis drop link options enabling the user to have two slings hung from each end of the beam for a variety of benefits. Call or email us for more information.

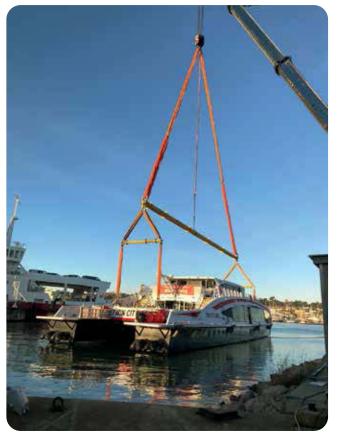


# BISHOP Liftmax<sup>®</sup> Lifting Devices

### Modulift<sup>®</sup> Spreader Bars

Modulift prides themselves on being able to offer you a complete lifting engineering service from start to finish. We are here to help you solve your lifting problems, advise on rig planning, design custom lifting equipment, or manufacture quality assured products to the highest specifications.







Heavy Off-the-Shelf Range



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*M0	OD and C	) are			

trademarks of Modulift UK Ltd

<b>QJ2</b> Up to 2t at 4ft	<b>MOD 34</b> Up to 34t at 16ft Up to 32ft at a lower capacity.	MOD 110 Up to 110 t at 37ft Up to 59ft at a lower capacity	MOD 250/300 Up to 300t at 34ft Up to 68ft at a lower capacity.	<b>MOD 400/600</b> Up to 600t at 36ft Up to 78ft at a lower capacity.			
MOD 6	<b>MOD 50</b>	<b>MOD 110H</b>	MOD 250/400	MOD 600/600			
Up to 6t at 112"	Up to 50t at 21ft	Up to 170t at 30ft	Up to 400t at 28ft	Up to 600t at 66ft			
Up to 176" at a	Up to 42ft at a	Up to 59ft at a	Up to 68ft at a	Up to 85ft at			
lower capacity.	lower capacity.	lower capacity.	lower capacity.	a lower capacity.			
<b>MOD 12</b>	<b>MOD 70</b>	<b>MOD 1105H</b>	<b>MOD 400/400</b>	<b>MOD 600/800</b>			
Up to 12t at 12ft	Up to 70t 26ft	Up to 240t at 28ft	Up to 400t at 46ft	Up to 800t at 58ft			
Up to 21ft at a	Up to 45ft at a	Up to 55ft at a	Up to 78ft at a	Up to 85ft at			
lower capacity	lower capacity.	lower capacity.	lower capacity.	a lower capacity			
<b>MOD 24</b>	<b>MOD 70H</b>	<b>MOD 250/250</b>	<b>MOD 400/500</b>	MOD 600/1000			
Up to 24t at 14ft	Up to 100t at 23ft	Up to 250t at 38ft	Up to 500t at 40ft	Up to 1000t at 50ft			
Up to 26ft at a	Up to 45ft at a	Up to 68ft at a	Up to 78ft at a	and up to 85ft at a			
lower capacity.	lower capacity.	lower capacity.	lower capacity.	lower capacity.			

#### **Standard Off-the-Shelf Range**

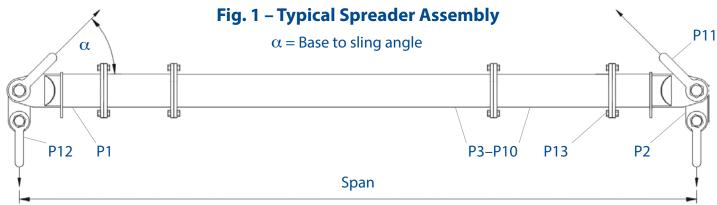
lifting.com

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# User Instructions MOD 110



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 110 has an assembled span ranging from 6ft to 59ft in 1ft increments..





- Rated at 110 tonnes SWL at 37ft span
- (60° BSA). See Load Table for SWL at longer spans.
  'Base to Sling' angle, α, 45 degrees or more.

# Table 1 - Component List

Table 1 – Component List									
Description	Weight/item								
End Unit	379 lbs								
Drop Link	99 lbs								
20ft Strut	1170 lbs								
12ft Strut	750 lbs								
10ft Strut	650 lbs								
8ft Strut	540 lbs								
6ft Strut	440 lbs								
4ft Strut	345 lbs								
2ft Strut	230 lbs								
1ft Strut	185 lbs								
85t Shackle	137 lbs								
55t Shackle	87 lbs								
M20 x 65 Grade 8.8 HT Bolts	s, Nuts & Washers								
	Description End Unit Drop Link 20ft Strut 12ft Strut 10ft Strut 8ft Strut 6ft Strut 4ft Strut 2ft Strut 1ft Strut 85t Shackle								

- End Units & Drop Links are rated at 55 tonnes WLL each (110 tonnes combined capacity).
- Bolt tightening torque: 110 Pound-Foot. Spanner size required: 30mm.
- 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 '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.

# User Instructions MOD 110

### **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, 6 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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### Table 2 – Load v Span

Base to Sling Angle (BSA)  $\alpha$ 

	4	5°	6	0°	7	0°								
Span							Recommended Configuration EU - End Unit (3ft)							
(ft)	SWL metric	Min.top sling	SWL metric	Min.top sling	SWL metric	Min.top sling								
	tons	length	tons	length	tons	length								
	(tonnes)	(ft in)	(tonnes)	(ft in)	(tonnes)	(ft in)								
6	110	3′1″	110	4′10″	110	7′7″	EU	EU						
7	110	3'10"	110	5′10″	110	9′1″	EU	1	EU					
8	110	4′6″	110	6′10″	110	10′6″	EU	2	EU					
9	110	5'2"	110	7'10"	110	12'0"	EU	2	1	EU				
10	110	5′11″	110	8′10″	110	13′6″	EU	4	EU					
11	110	6'7"	110	9′10″	110	14'11"	EU	4	1	EU				
12	110	7′4″	110	10'10"	110	16′5″	EU	6	EU					
13	110	8'0"	110	11'10"	110	17'10"	EU	6	1	EU				
14	110	8'8"	110	12'10"	110	19′4″	EU	6	2	EU				
15	110	9'5"	110	13'10"	110	20'10"	EU	2	6	1	EU			
16	110	10'1"	110	14'10"	110	22'2"	EU	6	4	EU				
17	110	10'11"	110	15'10"	110	23'8"	EU	1	6	4	EU			
18	110	11'7"	110	16'10"	110	25'1"	EU	12	EU					
19	110	12'4"	110	17'10"	110	26'7"	EU	12	1	EU				
20	110	13'0"	110	18'10"	110	28'1"	EU	12	2	EU	<b>E</b> 11			
21	110	13'8"	110	19'10"	110	29'6"	EU	2	12	1	EU			
22	110	14'5"	110	20'10"	110	31'0"	EU	12	4	EU	<b>F</b> 11			
23	110	15'1"	110	21'10"	110	32'6"	EU	4	12	1	EU			
24	110	15'10"	110	22'10"	110	33'11"	EU	12	6	EU	<b>EU</b>			
25	110	16'6"	110	23'10"	110	35'5"	EU	6	12	1	EU			
26	110	17'2"	110	24'10"	110	36'10"	EU	6	12	2	EU	EU		
27	110	17'11"	110	25'10"	110	38'4"	EU	6	12	2	1 EU	EU		
28 29	110	18'7" 19'4"	110	26'10"	110	39'10" 41'2"	EU	6	12 12	4		EU		
30	108 103	20'0"	110 110	27′ 10″ 28′ 10″	110 110	41 Z 42'8"	EU EU	6 12	12	4 EU	1	EU		
31	96	20'0	110	20 10 29'10"	110	42 0	EU	12	12	1	EU			
32	90	20 10	110	30'10"	110	44 2	EU	12	12	2	EU			
33	84	21'0	110	31'10"	110	47'1"	EU	2	12	12	1	EU		
34	80	22'11"	110	32'10"	110	48'6"	EU	12	12	4	EU	LU		
35	74	23'7"	110	33'10"	110	50'0"	EU	4	12	12	1	EU		
36	70	24'4"	110	34'10"	110	51'6"	EU	6	12	12	EU	LU		
37	65	25'0"	110	35'10"	110	52'11"	EU	6	12	12	1	EU		
38	60	25'8"	106	36'10"	110	54'5"	EU	6	12	12	2	EU		
39	56	26'5"	98	37'10"	110	55'10"	EU	2	12	12	6	1	EU	
40	52	27'1"	92	38'10"	110	57'4"	EU	6	12	12	4	EU		
41	48	27'10"	85	39'10"	110	58'10"	EU	6	12	12	4	1	EU	
42	46	28'6"	81	40'10"	110	60'2"	EU	12	12	12	EU			
43	43	29'2"	75	41'10"	110	61′8″	EU	12	12	12	1	EU		
44	40	29'11"	70	42'10"	110	63'2"	EU	12	12	12	2	EU		
45	37	30'8"	65	43'10"	105	64'7"	EU	2	12	12	12	1	EU	
46	35	31′5″	62	44'10"	99	66′1″	EU	4	12	12	12	EU		
47	32	32′1″	57	45′10″	92	67′6″	EU	4	12	12	12	1	EU	
48	30	32'10"	54	46'10"	87	69′0″	EU	12	12	12	6	EU		
49	28	33'6"	50	47'10"	81	70′6″	EU	6	12	12	12	1	EU	
50	26	34'2"	47	48'10"	76	71′11″	EU	6	12	12	12	2	EU	
51	24	34'11"	44	49'10"	71	73′5″	EU	6	12	12	12	2	1	EU
52	23	35'7"	41	50′10″	67	74'11"	EU	6	12	12	12	4	EU	
53	21	36'4"	38	51′10″	62	76′4″	EU	6	12	12	12	4	1	EU
54	20	37′0″	37	52'10"	59	77'10"	EU	12	12	12	12	EU		
55	19	37'8″	34	53′10″	55	79′2″	EU	12	12	12	12	1	EU	
56	17	38′5″	32	54'10"	52	80′ 8″	EU	12	12	12	12	2	EU	
57	16	39′1″	30	55′10″	48	82′2″	EU	12	12	12	12	2	1	EU
58	15	39′10″	28	56'10"	46	83'7"	EU	12	12	12	12	4	EU	
59	14	40′7″	26	57′10″	42	85′1″	EU	12	12	12	12	4	1	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: 6.
- Assemble longer struts in the centre of the spreader configuration.
- Sling angle is crucial to safe use of spreader.

