

# MODULIFT SPREADER SERIES HANDY GUIDE

working between the hook and the load

Modulift are the leading supplier of Spreader Beams, Lifting Beams, **Spreader Frames** and other below-the-hook heavy lifting equipment.



## What Size Spreader Beam Do I Need?

### LGH Handy Guide will help

First... select the span you require, then select the WLL you need for that span.

Please see tables below to select your beam

### **Applied Technical Standards**

- AS 4991: Lifting Devices
- BS EN 13155: Cranes Safety Non-fixed Load Lifting Attachments
- BS EN 1993-1-1: Eurocode 3: Design of Steel Structures Part 1-1: General Rules and Rules for Buildings
- BS2573: Rules for the Design of Cranes: Part 1: Spec. for classification, stress calcs & design criteria for structures
- ASME B30.20 for Below-the-Hook Lifting Devices
- ASME BTH-1: Design of Below-the-Hook Lifting Devices
- DNV Design Approval: Modulift Spreader Beam Standard Range

### **Proof Load Factors**

We adhere to the recommendations in the DNV Standard and DNV - GL ST-0378 – as per the formula below. The only times where we deviate from this is if a customer specifically asks for something different.

WLL ≤ 10T: 2 x WLL 10T < WLL ≤ 160T: (WLL x 1.04) + 9.6T WLL > 160T: 1.1 x WLL

### Grade 8.8 Bolts

Standard fasteners for connecting the components in Modulift spreader beams are grade 8.8 bolts, grade 8 nuts and form B washers. The function of the fasteners is to securely fasten the components together to form a single beam. In use, due to the 'pin-ended strut' design, the spreader beam itself is under a purely compressive load when the load is applied, and therefore the fasteners are themselves not subjected to tensile or other loads.



# Modulift Spreader Beam Guide

		Bottom Shackle S	Size	Top Shackle Size				
Modulift Spreader Series	WLL	Max Pin Diameter	Recommended Jaw Width	WLL	Max Pin Diameter	Recommended Jaw Width		
Mod 6	3.25t	19mm	27mm	4.75t	22mm	31mm		
Mod 12	6.5t	25mm	36mm	8.5t	28mm	43mm		
Mod 24	12t	35mm	51mm	17t	42mm	60mm		
Mod 34	17t	42mm	60mm	25t	50mm	74mm		
Mod 50	25t	50mm	74mm	35t	57mm	83mm		
Mod 70	35t	57mm	83mm	55t	70mm	105mm		
Mod 70H	55t	70mm	105mm	85t	83mm	127mm		
Mod 110	55t	70mm	105mm	85t	83mm	127mm		
Mod 110H	85t	83mm	127mm	120t	95mm	147mm		
Mod 110SH	120t	95mm	147mm	150t	95mm	147mm		
Mod 250/250	125t	80mm	137mm	200t	105mm	158mm		
Mod 250/300	150t	95mm	147mm	200t	105mm	158mm		
Mod 250/400	200t	105mm	158mm	300t	134mm	195mm		
Mod 400/400	200t	105mm	158mm	300t	134mm	195mm		
Mod 400/500	250t	120mm	179mm	300t	134mm	195mm		
Mod 400/600	300t	134mm	195mm	400t	160mm	231mm		
Mod 600/400	200t	105mm	158mm	300t	134mm	195mm		
Mod 600/600	300t	134mm	195mm	400t	160mm	231mm		
Mod 600/800	400t	160mm	231mm	500t	180mm	263mm		
Mod 600/1000	500t	180mm	263mm	t00ð	200mm	289mm		

For more help and information on hiring contact us $\bigcirc$  03704 247 247 $\bigotimes$  enquiries@lgh.co.uk $\bigotimes$  www.lgh.co.uk

# **The Standard Range**

Load v Span Chart - Modulift Spreader Beam Standard Range



#### What size shackle do I need?



Spreader	Strut												End	Drop	
System	0.1m	0.2m	0.25m	0.3m	0.5m	0.6m	0.75m	1.0m	1.5m	2.0m	3.0m	4.0m	6.0m	unit	link
MOD 6	1	1		1		1		4						2	2
MOD 12			1		1		1	1	3					2	2
MOD 24					1			1		3				2	2
MOD 34					1			1		4				2	2
MOD 50					1			2		1		2		2	2
MOD 70/70H					1			1		2		2		2	2
MOD 110/110H					1			1		2		3		2	2
MOD 110SH					1			1		1		3		2	2
MOD 250-250 / 250-300 / 250-400					1			1		2	1		2	2	2
MOD 400-400 / 400-500 / 400-600					1			1		1	1		3	2	2
MOD 600-600 / 600-800 / 600-1000					1			1		1	1		3	2	2

### Components per Set

\* Please note: Custom length Struts are available on request

# The Heavy Range

Load v Span Chart - Modulift Spreader Beam Heavy Range

What size shackle do I need?



### Weight per Set (kgs)

\* Weight based on heaviest spreader in series using configuration recommended in user instructions



#### Maintenance & Inspection Procedure

Each time a Modulift spreader beam is used regular checks need to be carried out and are specified on our user instruction sheets. In addition to these we also strongly recommend that all spreader beam components are thoroughly examined at intervals not exceeding six months by a competent person with relevant experience, knowledge and training. A written record of such examinations should be kept.

If a component or components are subject to exceptional circumstances, (i.e overloading) then a thorough examination should be carried out regardless of the period from last examination to ensure that the component(s) are still safe for use.