Designing and Manufacturing Modular Spreader Beam Systems for a Cost-Effective, Safe Lift
Modulift Spreader Systems are a cost-effective and flexible option for lifting objects where there is a possibility of crushing the load. The modular concept is based on the assembly of a pair of end units, which provide the connection between the top and the bottom slings, and a combination of struts of different length bolted between the end units to achieve variable length capability. In use, the bolts do not carry any of the lifting forces but simply connect the assembly together while the geometry of the system does the work.

The Modulift Spreader System enables slings to connect to large and bulky objects in a vertical attitude. Built using a unique engineering formula, the spreaders are designed using their lightweight structure to resist the compression forces of the lifting arrangement. The design utilises one of the most basic structural engineering elements, that of a pin-ended strut. The shackles, which connect the top slings to the spreader, provide the pin and give flexibility to the geometry of the slings which prevents bending forces being generated by the lifting process and transmitted into the object being lifted.

Modulift Spreaders are optimised for weight at every size. The unique capabilities of the Modular system add to it’s benefits through easier and more manoeuvrable ground handling, easy build and storage capabilities and with a range of components to make up the spreader, gives it a multi-use feature and a cost-effective solution over a range of lifts.

The Modulift range comprises 16 systems, which provide lifting capacity for weights between 2 – 3000 tonnes and lengths from 0.2m to 45m. The system is used for the smallest maintenance work to the largest lifting jobs in many industry sectors including construction, maritime, offshore, oil & gas, industrial and aerospace industries. All utilise the modular system to enable the lifting of various loads, without the need to buy or rent new spreader beams for every different job.

With safety being of paramount importance, lifting equipment is strictly regulated to meet with all safety and design regulations and each Modulift Spreader Series has been proof load tested in the Modulift compression test lift. To be able to proof load test to the maximum safe working load and span the test rig has the capability to test up to 3000 tons.
The Modulift Product Range

The Quick Joint Range (patent pending)
QJ2 (up to 2 tonnes at 1.2 metres)
QJ4 (up to 4 tonnes at 1.8 metres) - under development
QJ6 (up to 6 tonnes at 2.5 metres) - under development

The Modular Spreader System Range
MOD 6 (up to 6 tonnes at 2.5 metres)
MOD 12 (up to 12 tonnes at 3m, up to 4m at a lower weight)
MOD 24 (up to 24 tonnes at 3m, up to 6m at a lower weight)
MOD 34 (up to 34 tonnes at 3m, up to 8m at a lower weight)
MOD 50 (up to 50 tonnes at 6m, up to 11m at a lower weight)
MOD 70 (up to 70 tonnes at 7m, up to 12m at a lower weight)
MOD 70H (up to 100 tonnes at 6m, up to 12m at a lower weight)
MOD 110 (up to 110 tonnes at 11m, up to 16m at a lower weight)
MOD 110H (up to 170 tonnes at 8m, up to 16m at a lower weight)
MOD 110SH (up to 240 tonnes at 6m, up to 16m at a lower weight)
MOD 250 (up to 300 tonnes at 12m, up to 20m at a lower weight)
MOD 400 (up to 600 tonnes at 12m, up to 23m at a lower weight)
MOD 600 (up to 800 tonnes at 14m, up to 26m at a lower weight)
MOD 1000 (up to 1000 tonnes at 23m, up to 30m at a lower weight)
Mod 1600 (up to 1600 tonnes at 19m, up to 34m at a lower weight)
Lattice Spreaders (up to 20 tonnes with a span width from 6 to 45m)
The Modulift Product Range

Key Features, Advantages & Benefits

Our Modular Spreader Systems bring to you the ultimate in flexibility and value. Our system is suitable for a variety of jobs. With an imaginative approach you can build and easily store a stock of components to deal with an array of lifts from 0.2m to 45m and from 2 tonnes through to 3000 tonnes!

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>ADVANTAGE</th>
<th>BENEFIT</th>
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<tbody>
<tr>
<td>Modular</td>
<td>This enables you to build a stock of components to deal with most lifting requirements you will encounter.</td>
<td>The benefit of this stock of components is to reduce the overall cost of lifting, giving you the ability to get a real ROI from the re-use of components time and again.</td>
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<tr>
<td>Strut Length</td>
<td>With a range of different length struts the versatility and range of spans you can lift can be limitless, simply build your stock so that you have a selection of sizes.</td>
<td>Over a period of time you will be able to collect the full range of sizes with duplicates so that you can easily construct your components into the right size beam for the current lift. Simply bolt together use, unbolt and store for next time.</td>
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<tr>
<td>End Units</td>
<td>Step-down end units allow you to lift lighter weight at greater span than standard.</td>
<td>With longer span lifts you may have to go to the heavier struts, with step down end units you can use the heavier struts but still step down to the lighter shackles more suitable for the lighter lift.</td>
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<tr>
<td>Drop Links</td>
<td>Our drop links allow some movement to the load.</td>
<td>With this movement you have a margin for error on the lift and loads that are slightly off centre can still be lifted within safety limits.</td>
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<tr>
<td>Storage System</td>
<td>The Modular design and our storage system allow for organized components and quick retrieval.</td>
<td>Our storage systems will enable you to keep your components together without the need to take up too much valuable space, they are also perfect for moving and shipping your components to where they are needed most.</td>
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<tr>
<td>Accessories</td>
<td>Our range of accessories furthers the range of lifts that can be undertaken as well as making the storage and assembly of the beams safer with minimized risk.</td>
<td>With a full range of specialist drop links and handling accessories we can help you to achieve the maximum range of lifts and handle the equipment with the safety of your staff in mind.</td>
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QuickJoint is the new addition to the Modulift Spreader System.

QuickJoint has a similar arrangement to the standard Modulift Spreaders and retains all the flexibility of the Modulift system with the improved ability to be assembled quickly.

The compact size and lightweight of the QuickJoint Spreaders means that spreaders are no longer bulky and difficult to take to site. The convenient carry case will ensure that QuickJoint creates new, easier work procedures with the ability to select, carry and use appropriate lifting equipment in machinery assembly, installation and maintenance.

The QuickJoint Range lifts from 2 to 6 tonnes at a minimum span width of 0.2m to a maximum span width of 2m. Ideal for..

- Truck Loader (Hiab Type) Lifting Tasks
- Air Conditioning Unit
- Lift Winding Machinery
- Rotating Machinery:
  - Pumps
  - Electric Motors
  - Gas Turbines
  - Aero Engine
- Valves
- Generators
- Chemical Plant Process Equipment
- Skid based Process Equipment
- Oil Refinery Equipment
- Offshore Rig Maintenance
- Machine Tool Lifting
- Production Line Equipment
- Precision Machine equipment
- Metrology Measurement Equipment
- Aerospace Equipment
- Aircraft Maintenance
- Building Plant Room Equipment
- Vehicle Maintenance
- Railroad Rollingstock Maintenance
- Railroad Locomotive Maintenance
- Railroad Lineside Equipment

Cost Effective • Flexible Arrangement • Easy Transportation & Storage
The Modulift maintenance lift products - MOD 6

Lightweight components, lifting up to 6 tonnes with a span from 0.2m to 2.5m

Examples of use:
- Workshop load handling and Small loads, used in conjunction with a fork lift or hoist
- Railway installation and maintenance
- Air conditioning units
- Plant installation.
- Machinery installation.
- Small boats / Yachts
- Cable reel handling.

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Portable Lift products - MOD 12/24/34

Lightweight components, lifting up to 34 tonnes with a span from 0.5m to 8m

Examples of use:
- Lifting small boats / yachts.
- ISO Containers – bottom or top lift.
- Machinery removal.
- Plant installation.
- Machinery installation.
- Cable reel handling.
- Skid packs / Pipe racks
- Pre-cast concrete sections
- Temporary accommodation handling

The World’s No. 1 Spreader Beam System
Product Range

Heavy Lift products - MOD 50/70/70H/110/110H
Heavyweight components, lifting up to 170 tonnes with a span from 1m to 16m.

Examples of use:
- Lifting heavy yachts and boats
- Lifting long piping
- Wind generator mono-piles.
- Lifting pressure vessels and reactors.
- Large machinery
- Pre-cast concrete sections
- Transformers
- Turbines

Super Heavy Lift products - MOD 250/400/600/1000/1600 +
Heavyweight components, lifting up to 3000 tonnes with a span from 2m to 34m

Examples of use:
- Lifting superyachts and ships
- Lifting long piping
- Wind generator masts, blades, nacelles
- Lifting pressure vessels and reactors for Nuclear Plant and power generation construction
- Large machinery
- Pre-cast concrete sections
- Transformers
- Turbines

Lattice Spreaders
Suitable for long span lifts. Lifting up to 20 tonnes with a span from 6m to 45m

Examples of use:
- Infrastructure gas pipes
- Concrete rebar mesh assembly
- Pre-fabricated building panels and sections
- Roofing sheets
- Long beam structures
- Wire bundles

www.modulift.com
For Crane Hire Companies and Contractors
Accessories

Logistics Cradles
- Safe Storage
- Efficient handling
- Instant Component recognition
- Locking security case

Drop Link Cables
- Heavy spreader accessory
- Drop link support
- Easy align for shackle fitting
- Standard for heavier MOD’s

Tool Kits
- Optimised for rapid assembly and disassembly
- Portable storage tool box
- Improved safety and speed of rigging operations

Step-Down End Units
- For longer span & lighter loads
- Enable versatility for lifts
- Best for smaller Modulift sizes

Cone Adaptors
- For longer spans & lighter loads
- Enable versatility for lifts
- Best for larger Modulift sizes

Shackles & Slings
- For all Modulift Spreaders
- For all rigging requirements
- All types to suit all lifts

Other accessories available.....

Delta & Clevis Drop Links

Semi Spreaders
- End unit to extend spreader
- Best for long light loads

Delta Plates

Mennens
steelwire ropes, hoisting & lifting technology
Mennens Belgium
Vitshoekstraat 10 - Havennummer 1037
2070 Zwijndrecht (B)

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