

DESCRIPTION

Maximum capacity:	110 tonne at 60° included sling angle (at 12m)
Tare weight:	1820kg (excluding shackles) at 20m
Lifting Lugs (top) suit:	85 Te Grade 'S' bow shackle
Lifting Lug (lower) suit:	55 Te Grade 'S' bow shackle

PRODUCT COMPLIANCE

Designed by Edwards Heavy Lift to Australian Standard AS4991: 2004

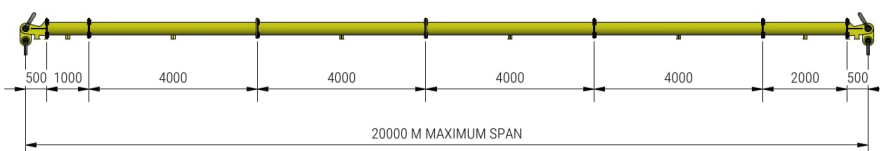
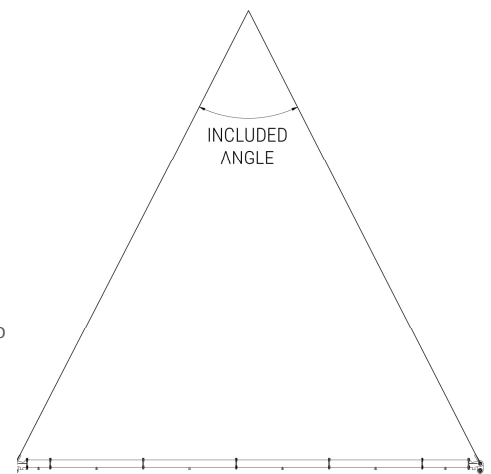
Span (m)	WLL (max included angle) (tonnes)			Approximate top sling length (m)			Approximate Headroom (m)			END UNIT	Modules (m)				Weight (excluding shackles) (kg)
	60°	90°	120°	60°	90°	120°	60°	90°	120°		0.5	1	2	4	
20	25	10	5.0	20.0	14.1	11.5	18.1	10.8	6.5	2		1	1	4	1820
19.5	30	15	10.0	19.5	13.8	11.3	17.7	10.5	6.4	2	1		1	4	1757.5
19	32.5	15	10.0	19.0	13.4	11.0	17.2	10.3	6.3	2			1	4	1695
18.5	35	20	10.0	18.5	13.1	10.7	16.8	10.0	6.1	2	1	1		4	1670
18	40	20	10.0	18.0	12.7	10.4	16.4	9.8	6.0	2		1		4	1645
17.5	42.5	20	10.0	17.5	12.4	10.1	15.9	9.5	5.8	2	1			4	1582.5
17	47.5	25	15.0	17.0	12.0	9.8	15.5	9.3	5.7	2				4	1520
16.5	50	25	15.0	16.5	11.7	9.5	15.1	9.0	5.5	2	1	1	1	3	1530
16	57.5	30	15.0	16.0	11.3	9.2	14.6	8.8	5.4	2		1	1	3	1540
15.5	62.5	35	20.0	15.5	11.0	8.9	14.2	8.5	5.2	2	1		1	3	1477.5
15	67.5	35	20.0	15.0	10.6	8.7	13.8	8.3	5.1	2			1	3	1415
14.5	72.5	40	20.0	14.5	10.3	8.4	13.3	8.0	5.0	2	1	1		3	1390
14	80	45	25.0	14.0	9.9	8.1	12.9	7.8	4.8	2		1		3	1365
13.5	87.5	50	25.0	13.5	9.5	7.8	12.5	7.5	4.7	2	1			3	1302.5
13	95	50	30.0	13.0	9.2	7.5	12.0	7.3	4.5	2				3	1240
12.5	105	60	35.0	12.5	8.8	7.2	11.6	7.0	4.4	2	1	1	1	2	1250
12	110	60	35.0	12.0	8.5	6.9	11.2	6.8	4.2	2		1	1	2	1260
11.5	110	60	35.0	11.5	8.1	6.6	10.7	6.5	4.1	2	1		1	2	1197.5
11	110	60	35.0	11.0	7.8	6.4	10.3	6.3	3.9	2			1	2	1135
10.5	110	60	35.0	10.5	7.4	6.1	9.9	6.0	3.8	2	1	1		2	1110
10	110	60	35.0	10.0	7.1	5.8	9.4	5.8	3.7	2		1		2	1085
9.5	110	60	35.0	9.5	6.7	5.5	9.0	5.5	3.5	2	1		2	1	1022.5
9	110	60	35.0	9.0	6.4	5.2	8.6	5.3	3.4	2			2	1	960
8.5	110	60	35.0	8.5	6.0	4.9	8.1	5.0	3.2	2	1	1	1	1	970
8	110	60	35.0	8.0	5.7	4.6	7.7	4.8	3.1	2		1	1	1	980
7.5	110	60	35.0	7.5	5.3	4.3	7.3	4.5	2.9	2	1		1	1	917.5
7	110	60	35.0	7.0	4.9	4.0	6.8	4.3	2.8	2			1	1	855
6.5	110	60	35.0	6.5	4.6	3.8	6.4	4.0	2.6	2	1	1		1	830
6	110	60	35.0	6.0	4.2	3.5	6.0	3.8	2.5	2		1		1	805
5.5	110	60	35.0	5.5	3.9	3.2	5.5	3.5	2.4	2	1			1	742.5
5	110	60	35.0	5.0	3.5	2.9	5.1	3.3	2.2	2				1	680
4.5	110	60	35.0	4.5	3.2	2.6	4.7	3.0	2.1	2	1	1	1	1	690
4	110	60	35.0	4.0	2.8	2.3	4.2	2.8	1.9	2		1	1	1	700
3.5	110	60	35.0	3.5	2.5	2.0	3.8	2.5	1.8	2	1		1	1	637.5
3	110	60	35.0	3.0	2.1	1.7	3.4	2.3	1.6	2			1	1	575
2.5	110	60	35.0	2.5	1.8	1.4	2.9	2.0	1.5	2	1	1		1	550
2	110	60	35.0	2.0	1.4	1.2	2.5	1.8	1.3	2		1	1	1	525
1.5	110	60	35.0	1.5	1.1	0.9	2.1	1.5	1.2	2	1			1	462.5
1	110	60	35.0	1.0	0.7	0.6	1.6	1.3	1.1	2				1	400

IMPORTANT

Prior to use of modular spreader beam, a lift study must be performed by a suitably qualified person noting the tare weight and capacity of the modular spreader beam in its various configurations

WARNING

- Never exceed the stated WLL. Refer chart above for length and sling angle.
- The spreader WLL is based on the spreader remaining level during lifting
- The spreader WLL is based on the maximum included angle (refer chart above).
- The WLL in the chart are provided for the same length top sling (symmetric). If asymmetric top sling lengths are required to suit the CoG of the load, the maximum load to each end shall not exceed 55 tonnes. The length of slings shall be increased to ensure the sling angle to the spreader is equal to or better than the included angle if the slings were symmetric.
- Do not suspend any loads from anywhere on the spreader except for the shackles connected to the end units. Connecting to the sections or flanges is prohibited.
- Keep the spreader clear of obstacles. Contact could cause failure.
- Slings types, sizes and sling angles shall be selected to ensure that there is clearance between the sling/end fitting and the end unit.
- Do not rig the lower slings more than 5 degrees from vertical



DESCRIPTION

- The 110 tonne spreader is modular in length, and every spreader consists of 1 pair of End Units and, with intermediate sections that can be bolted into the assembly to achieve different spans. The spreader shall be configured with the sections as nominated in the load chart.

RISK ASSESSMENT

- A risk assessment shall be completed by a competent person prior to the transport, assembly and use of each lifting device in accordance with AS 4991. As a result of the risk assessment, the competent person shall formulate a safe work method procedure, which shall be monitored for ongoing effectiveness and modified whenever it is found to be deficient, when the task changes or when the associated risks change.

ASSEMBLY PROCEDURE

A competent person shall be in charge of the assembly and use of the spreader beam. A risk assessment and safe work method statement shall be developed.

- From the working load limit chart select the correct length you require for the lift.
- The assembly area must be level and clear of obstructions.
- All components must be checked for damage and clean mating surfaces
- Check the identification numbers of each component against the material and NDT certificates.
- Use synthetic round slings to position the inserts. Do not use a forklift to assemble the beam.
- Position the longest insert in the middle of the spreader
- Attach the required components to achieve the correct length and attach the end pieces.
- Each section shall be joined using 10 off M20 Grade 8.8/S bolts (snug tight) conforming to AS 1252.
- Tighten the bolts in a diagonal sequence with washers behind the nut and tighten to snug using the part turn method.
- Place the drop links in the end units. Position the shackles to suit.
- Select the correct length slings to give the required sling angle.
- Attach the crane hook to the head slings and lift the spreader clear of the ground.
- Check the shackle and sling clearance to the end piece.
- Connect the lower slings to the link plate / lower shackle.
- Connect the lower slings to the load.
- A thorough check of the assembly should be made by a competent person prior to commencing the lift

CHECKS BEFORE LIFTING

- Check there is no damage to the slings and they are not twisted
- Check the working load limit and sling angles against the assembled spreader.
- Check no loads are suspended from the spreader CHS sections or flanges.
- Check that the lower slings are vertical when connected to the load.

MAINTENANCE AND INSPECTION

- The lifting device shall have an independent periodic inspection by a qualified and competent person based on the severity of use. The maximum period between periodic inspections is 12 months.
- Bolts shall be NDT at the same time as periodic inspections. Alternatively, the bolts can be replaced with new bolts at the same time as periodic inspections.

Item	Description
1	End Unit
2	Link Plate
3	85 tonne Green Pin Grade 'S' bow shackle
4	45 tonne Green Pin Grade 'S' bow shackle

