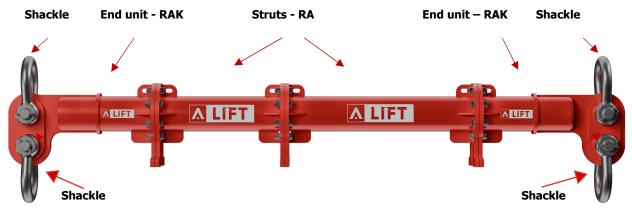




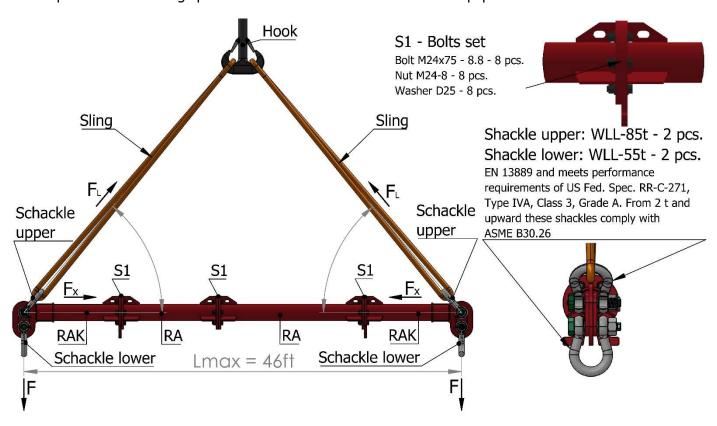
The spreader beam is designed for lifting and transporting equipment and cargo weighing up to 110t. It is adjustable in 1-foot increments within a range of 6 to 46 feet (L=6ft to L=46ft), as specified in the manual. The spreader beam is intended for use exclusively with lifting units equipped with appropriate chain or wire rope slings.



### **SPECIFICATION**

#### Spreader Beam RA110 WLL<sub>max</sub>=110t, L<sub>max</sub>=46ft consists of:

- 2 end units RAK: 3ft
- Struts RA used to adjust the span: 1ft, 2ft, 3ft, 4ft, 6ft, 12ft
- 2 shackles WLL=55t and 2 shackles WLL=85t
- Maximum weight of the spreader beam, according to the recommended configuration, is 2216,8 lbs
- Load capacity: 15-110 tons
- The  $\alpha$  angle between the beam and sling is 45° or more
- Use a bolt set to tighten (bolt+washer+nut) class 8.8. as per EN ISO 4014
- Bolt tightening torque **260 lb-ft**. Spanner size required 36mm
- Torque wrench and ring spanner are recommended as additional equipment







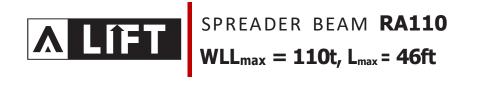




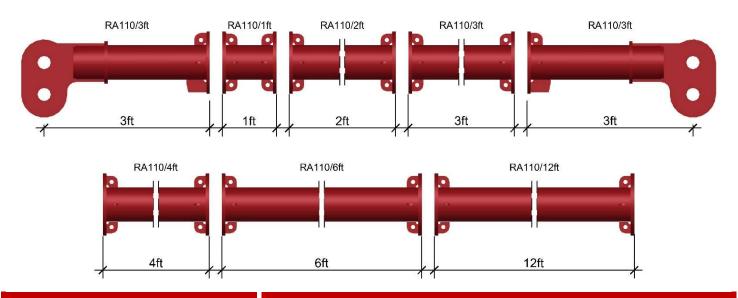
| Span<br>(ft) |    | REC | <b>WLL</b><br>COMME | <sub>nax</sub> = <b>11</b> ( | o <b>le 1</b><br>Ot, L <sub>max</sub> =<br>CONFI |    | ION | Bolts+Nuts<br>& Washers<br>M24x75-8.8<br>EN ISO 4014 (pcs.) | <b>Weight</b> (lbs) |
|--------------|----|-----|---------------------|------------------------------|--|----|-----|---|---------------------|
| 6            | RK | RK  |                     |                              |  |    |     | 8   | 561,2               |
| 7            | RK | 1   | RK                  |                              |  |    |     | 16  | 696,2               |
| 8            | RK | 2   | RK                  |                              |  |    |     | 16  | 727,2               |
| 9            | RK | 3   | RK                  |                              |  |    |     | 16  | 758,1               |
| 10           | RK | 1   | 3                   | RK                           |  |    |     | 24  | 893,1               |
| 11           | RK | 2   | 3                   | RK                           |  |    |     | 24  | 924,1               |
| 12           | RK | 6   | RK                  |                              |  |    |     | 16  | 851,1               |
| 13           | RK | 1   | 6                   | RK                           |  |    |     | 24  | 986,1               |
| 14           | RK | 2   | 6                   | RK                           |  |    |     | 24  | 1017,1              |
| 15           | RK | 3   | 6                   | RK                           | 517  |    |     | 24  | 1048,1              |
| 16           | RK | 1   | 3                   | 6                            | RK   |    |     | 32  | 1183,1              |
| 17           | RK | 2   | 3                   | 6                            | RK   |    |     | 32  | 1214,1              |
| 18           | RK | 12  | RK                  |                              |  |    |     | 16  | 1037,1              |
| 19           | RK | 1   | 12                  | RK                           |  |    |     | 24  | 1172,0              |
| 20           | RK | 2   | 12                  | RK                           |  |    |     | 24  | 1203,0              |
| 21           | RK | 3   | 12                  | RK                           |  |    |     | 24  | 1234,0              |
| 22           | RK | 1   | 3                   | 12                           | RK   |    |     | 32  | 1369,0              |
| 23           | RK | 2   | 3                   | 12                           | RK   |    |     | 32  | 1400,0              |
| 24           | RK | 6   | 12                  | RK                           |  |    |     | 24  | 1327,0              |
| 25           | RK | 1   | 6                   | 12                           | RK   |    |     | 32  | 1462,0              |
| 26           | RK | 2   | 6                   | 12                           | RK   |    |     | 32  | 1493,0              |
| 27           | RK | 3   | 6                   | 12                           | RK   |    |     | 32  | 1524,0              |
| 28           | RK | 4   | 6                   | 12                           | RK   |    |     | 32  | 1555,0              |
| 29           | RK | 2   | 3                   | 6                            | 12   | RK |     | 40  | 1690,0              |
| 30           | RK | 2   | 4                   | 6                            | 12   | RK |     | 40  | 1721,0              |
| 31           | RK | 1   | 12                  | 12                           | RK   |    |     | 32  | 1647,9              |
| 32           | RK | 2   | 12                  | 12                           | RK   |    |     | 32  | 1678,9              |
| 33           | RK | 3   | 12                  | 12                           | RK   |    |     | 32  | 1709,9              |
| 34           | RK | 4   | 12                  | 12                           | RK   |    |     | 32  | 1740,9              |
| 35           | RK | 2   | 3                   | 12                           | 12   | RK |     | 40  | 1875,9              |
| 36           | RK | 2   | 4                   | 12                           | 12   | RK |     | 40  | 1906,9              |
| 37           | RK | 3   | 4                   | 12                           | 12   | RK |     | 40  | 1937,9              |
| 38           | RK | 2   | 6                   | 12                           | 12   | RK |     | 40  | 1968,9              |
| 39           | RK | 3   | 6                   | 12                           | 12   | RK |     | 40  | 1999,9              |
| 40           | RK | 4   | 6                   | 12                           | 12   | RK |     | 40  | 2030,9              |
| 41           | RK | 2   | 3                   | 6                            | 12   | 12 | RK  | 48  | 2165,9              |
| 42           | RK | 2   | 4                   | 6                            | 12   | 12 | RK  | 48  | 2196,9              |
| 43           | RK | 3   | 4                   | 6                            | 12   | 12 | RK  | 48  | 2227,9              |
| 44           | RK | 2   | 12                  | 12                           | 12   | RK |     | 40  | 2154,8              |
| 45           | RK | 3   | 12                  | 12                           | 12   | RK |     | 40  | 2185,8              |
| 46           | RK | 4   | 12                  | 12                           | 12   | RK |     | 40  | 2216,8              |











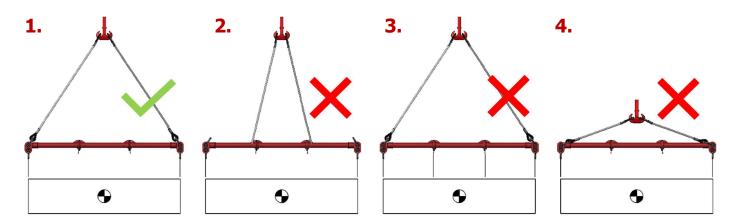
End units: RK - RAK110/3ft

Struts: 1 - RA110/1ft 2 - RA110/2ft 3 - RA110/3ft 4 - RA110/4ft 6 - RA110/6ft 12 - RA110/12ft

#### NOTICE

- Follow the ASME B30.20 2021 guidelines when using A-LIFT equipment.
- Never exceed the indicated Working Load Limit (WLL). Always refer to **Table 2** for the appropriate WLL based on the specific sling angle used.
- Top sling length is critical for safe spreader beam operation. Refer to **Table 2** for the required values.
- Do not suspend any load from the spreader tube or flanges. The beam is designed to operate in axial compression only and is not intended to withstand bending forces.
- Shackles are not included with the spreader beam. They are optional accessories provided according to customer requirements.

## COMMON RIGGING MISTAKES



- 1. Correct sling set up example.
- **2. Incorrect.** Upper slings are not attached to the end units.
- **3. Incorrect.** The second pair of slings below cannot be attached to the spreader beams.
- **4. Incorrect.** Sling angle  $\alpha$  cannot be less than 45°







### ASSEMBLY METHOD

- Verify the size of each A-LIFT component by checking its tag ID to ensure the correct part is being used.
- Lay out the beam elements on a flat surface according to Table 1 to prevent them from rolling.
- Ensure all components and fasteners are free of dirt, debris, or damage before assembly.
- Assemble the components using the provided bolts, nuts, and washers. Tighten all bolts to the specified torque values.
- For safe use of the spreader, especially at longer spans, the number and condition of bolts are critical.
- Position the jaw of the top shackle over the jaw of the end unit, and attach the top sling to the body of the top shackle.
- Insert the top shackle pin through the shackle and the jaw of the end unit, then repeat the process at the opposite
  end of the beam.
- Attach the crane hook to the free ends of the top slings.
- Connect the lower slings and shackles to the lower holes of the end units, then attach them to the load to be lifted.
- Before lifting, a qualified person must perform a thorough inspection of the fully assembled spreader beam and lifting rig.

### SAFETY GUIDELINES FOR USE

- Ensure the beam is loaded exclusively through the RAK end units.
- Always use the correct top slings and avoid unnecessary twisting of any slings.
- Keep all obstacles clear of the loaded spreader any contact may lead to beam failure.
- Do not exceed the specified Working Load Limit (WLL) for the given span. Refer to **Table 2**.
- Never hang loads from the spreader tube, flanges, or support stands.
- Use tag lines to control the load when moving or positioning long elements or assemblies.
- Be aware that individual components may be heavy. Exercise extreme caution during any manual handling.

| Table 2: SPREADER BEAM RA110 WLLmax = 110t, Lmax = 46ft |                              |  |  |                              |  |  |                              |  |  |  |
|---|------------------------------|--|--|------------------------------|--|--|------------------------------|--|--|--|
| Span<br>(ft)  | Base to Sing Angle (BSA)     |  |  |                              |  |  |                              |  |  |  |
|   |                              | ∝= <b>45</b> <sup>0</sup>              |  |                              | ∝= <b>60</b> <sup>0</sup>              |  | $pprox=70^{0}$               |  |  |  |
|   | WLL<br>metric<br>tons<br>(t) | Min. Top<br>sling<br>length<br>(ft in) | Min. WLL<br>slings<br>metric<br>tons (t) | WLL<br>metric<br>tons<br>(t) | Min. Top<br>sling<br>length<br>(ft in) | Min. WLL<br>slings<br>metric<br>tons (t) | WLL<br>metric<br>tons<br>(t) | Min. Top<br>sling<br>length<br>(ft in) | Min. WLL<br>slings<br>metric<br>tons (t) |  |
| 6   | 110,0                        | 3' 5"                                  | 78,2                                     | 110,0                        | 5' 2"                                  | 63,9                                     | 110,0                        | 7' 11"                                 | 58,9                                     |  |
| 7   | 110,0                        | 4' 1"                                  | 78,3                                     | 110,0                        | 6' 2"                                  | 64,0                                     | 110,0                        | 9' 5"                                  | 58,9                                     |  |
| 8   | 110,0                        | 4' 10"                                 | 78,4                                     | 110,0                        | 7' 2"                                  | 64,0                                     | 110,0                        | 10' 10"                                | 59,0                                     |  |
| 9   | 110,0                        | 5' 6"                                  | 78,4                                     | 110,0                        | 8' 2"                                  | 64,0                                     | 110,0                        | 12' 4"                                 | 59,0                                     |  |
| 10  | 110,0                        | 6' 3"                                  | 78,5                                     | 110,0                        | 9' 2"                                  | 64,1                                     | 110,0                        | 13' 9"                                 | 59,0                                     |  |
| 11  | 110,0                        | 6' 11"                                 | 78,5                                     | 110,0                        | 10' 2"                                 | 64,1                                     | 110,0                        | 15' 3"                                 | 59,1                                     |  |
| 12  | 110,0                        | 7' 8"                                  | 78,4                                     | 110,0                        | 11' 2"                                 | 64,0                                     | 110,0                        | 16' 8"                                 | 59,0                                     |  |
| 13  | 110,0                        | 8' 4"                                  | 78,5                                     | 110,0                        | 12' 2"                                 | 64,1                                     | 110,0                        | 18' 2"                                 | 59,1                                     |  |
| 14  | 100,0                        | 9' 1"                                  | 71,5                                     | 110,0                        | 13' 2"                                 | 64,1                                     | 110,0                        | 19' 7"                                 | 59,1                                     |  |
| 15  | 95,0                         | 9' 9"                                  | 68,0                                     | 110,0                        | 14' 2"                                 | 64,2                                     | 110,0                        | 21' 1"                                 | 59,1                                     |  |
| 16  | 90,0                         | 10' 6"                                 | 64,5                                     | 110,0                        | 15' 2"                                 | 64,2                                     | 110,0                        | 22' 6"                                 | 59,2                                     |  |
| 17  | 85,0                         | 11' 2"                                 | 61,0                                     | 110,0                        | 16' 2"                                 | 64,3                                     | 110,0                        | 23' 12"                                | 59,2                                     |  |
| 18  | 85,0                         | 11' 10"                                | 60,9                                     | 110,0                        | 17' 2"                                 | 64,2                                     | 110,0                        | 25' 6"                                 | 59,1                                     |  |
| 19  | 80,0                         | 12' 7"                                 | 57,5                                     | 110,0                        | 18' 2"                                 | 64,2                                     | 110,0                        | 26' 11"                                | 59,2                                     |  |
| 20  | 80,0                         | 13' 3"                                 | 57,5                                     | 110,0                        | 19' 2"                                 | 64,2                                     | 110,0                        | 28' 5"                                 | 59,2                                     |  |
| 21  | 70,0                         | 13' 12"                                | 50,4                                     | 100,0                        | 20' 2"                                 | 58,5                                     | 110,0                        | 29' 10"                                | 59,2                                     |  |
| 22  | 70,0                         | 14' 8"                                 | 50,5                                     | 90,0                         | 21' 2"                                 | 52,8                                     | 110,0                        | 31' 4"                                 | 59,3                                     |  |
| 23  | 60,0                         | 15' 5"                                 | 43,5                                     | 80,0                         | 22' 2"                                 | 47,0                                     | 110,0                        | 32' 9"                                 | 59,3                                     |  |

We also offer spreader beam rentals Manufacturer: ANDARON Sp. z o. o. Europe: <a href="www.andaron.pl">www.andaron.pl</a> North America: <a href="https://horizonrigging.com/">https://horizonrigging.com/</a>





# SPREADER BEAM RA110 WLLmax = 110t, Lmax = 46ft



|      | Base to Sing Angle (BSA) |                             |                              |                       |                             |                              |                           |                             |                              |  |
|------|--------------------------|-----------------------------|------------------------------|-----------------------|-----------------------------|------------------------------|---------------------------|-----------------------------|------------------------------|--|
| Span |                          | ∝= <b>45</b> <sup>0</sup>   |                              |                       | ∝= <b>60</b> <sup>0</sup>   |                              | ∝= <b>70</b> <sup>0</sup> |                             |                              |  |
| (ft) | WLL<br>metric<br>tons    | Min. Top<br>sling<br>length | Min. WLL<br>slings<br>metric | WLL<br>metric<br>tons | Min. Top<br>sling<br>length | Min. WLL<br>slings<br>metric | WLL<br>metric<br>tons     | Min. Top<br>sling<br>length | Min. WLL<br>slings<br>metric |  |
|      | (t)                      | (ft in)                     | tons (t)                     | (t)                   | (ft in)                     | tons (t)                     | (t)                       | (ft in)                     | tons (t)                     |  |
| 24   | 60,0                     | 16' 1"                      | 43,4                         | 80,0                  | 23' 2"                      | 47,0                         | 110,0                     | 34' 3"                      | 59,3                         |  |
| 25   | 60,0                     | 16' 10"                     | 43,5                         | 80,0                  | 24' 2"                      | 47,1                         | 110,0                     | 35' 8"                      | 59,3                         |  |
| 26   | 60,0                     | 17' 6"                      | 43,5                         | 80,0                  | 25' 2"                      | 47,1                         | 110,0                     | 37' 2"                      | 59,4                         |  |
| 27   | 55,0                     | 18' 3"                      | 40,0                         | 75,0                  | 26' 2"                      | 44,2                         | 100,0                     | 38' 7"                      | 54,1                         |  |
| 28   | 50,0                     | 18' 11"                     | 36,5                         | 70,0                  | 27' 2"                      | 41,4                         | 100,0                     | 40' 1"                      | 54,1                         |  |
| 29   | 45,0                     | 19' 8"                      | 33,1                         | 65,0                  | 28' 2"                      | 38,5                         | 100,0                     | 41' 7"                      | 54,2                         |  |
| 30   | 40,0                     | 20' 4"                      | 29,6                         | 60,0                  | 29' 2"                      | 35,7                         | 90,0                      | 43' 0"                      | 48,8                         |  |
| 31   | 38,0                     | 21' 1"                      | 28,1                         | 60,0                  | 30' 2"                      | 35,6                         | 90,0                      | 44' 6"                      | 48,8                         |  |
| 32   | 35,0                     | 21' 9"                      | 26,0                         | 60,0                  | 31' 2"                      | 35,7                         | 90,0                      | 45' 11"                     | 48,8                         |  |
| 33   | 35,0                     | 22' 6"                      | 26,0                         | 60,0                  | 32' 2"                      | 35,7                         | 90,0                      | 47' 5"                      | 48,8                         |  |
| 34   | 32,0                     | 23' 2"                      | 23,9                         | 55,0                  | 33' 2"                      | 32,8                         | 90,0                      | 48' 10"                     | 48,9                         |  |
| 35   | 30,0                     | 23' 11"                     | 22,6                         | 50,0                  | 34' 2"                      | 30,0                         | 90,0                      | 50' 4"                      | 48,9                         |  |
| 36   | 30,0                     | 24' 7"                      | 22,6                         | 45,0                  | 35' 2"                      | 27,1                         | 80,0                      | 51' 9"                      | 43,6                         |  |
| 37   | 27,0                     | 25' 4"                      | 20,5                         | 45,0                  | 36' 2"                      | 27,1                         | 80,0                      | 53' 3"                      | 43,6                         |  |
| 38   | 25,0                     | 26' 0"                      | 19,1                         | 45,0                  | 37' 2"                      | 27,2                         | 70,0                      | 54' 8"                      | 38,3                         |  |
| 39   | 25,0                     | 26' 9"                      | 19,1                         | 45,0                  | 38' 2"                      | 27,2                         | 60,0                      | 56' 2"                      | 33,0                         |  |
| 40   | 22,0                     | 27' 5"                      | 17,0                         | 40,0                  | 39' 2"                      | 24,3                         | 60,0                      | 57' 7"                      | 33,0                         |  |
| 41   | 22,0                     | 28' 2"                      | 17,1                         | 40,0                  | 40' 2"                      | 24,4                         | 50,0                      | 59' 1"                      | 27,8                         |  |
| 42   | 20,0                     | 28' 10"                     | 15,8                         | 35,0                  | 41' 2"                      | 21,5                         | 50,0                      | 60' 7"                      | 27,8                         |  |
| 43   | 20,0                     | 29' 7"                      | 15,8                         | 30,0                  | 42' 2"                      | 18,7                         | 40,0                      | 62' 0"                      | 22,5                         |  |
| 44   | 15,0                     | 30' 3"                      | 12,2                         | 30,0                  | 43' 2"                      | 18,6                         | 40,0                      | 63' 6"                      | 22,5                         |  |
| 45   | 15,0                     | 30' 12"                     | 12,2                         | 30,0                  | 44' 2"                      | 18,6                         | 40,0                      | 64' 11"                     | 22,5                         |  |
| 46   | 15,0                     | 31' 8"                      | 12,2                         | 30,0                  | 45' 2"                      | 18,6                         | 40,0                      | 66' 5"                      | 22,5                         |  |

# CERTIFICATES



PN-EN ISO 9001



PN-EN ISO 3834 PN-EN 1090-1

# CONTACT



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