

**Safety Instructions for
ARMORTEC[®] Spreader Bar**




ARMORTEC[®]
Erosion Control Solutions



Preface

This instruction content is for informational purposes and should not be used in lieu of consultation with a professional rigger. Distribute this guide as a procedure for rigging and handling Contech-supplied Spreader Bars.

WARNING: Notwithstanding the instructions contained in this guide, it is the responsibility of the customer or customer's agent to handle Contech products in a safe and efficient manner. For further information, refer to safety standard ASME B30.20 Below-the-Hook Lifting Devices.

Definitions

authorized: appointed by a duly constituted administrative or regulatory authority.

designated person: a person selected or assigned by the employer or the employer's representative as being competent to perform specific duties.

qualified person: a person who, by possession of a recognized degree in an applicable field or certificate of professional standing, or who, by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter and work.

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Notwithstanding the instructions contained in this booklet, it is the responsibility of the customer or customer's agent to devise safe unloading and handling procedures.



Warnings & Safety Instructions



Failure to follow these instructions can result in serious injury or death and/or damage to the product. Only trained and authorized equipment operators are to be permitted to use Contech-supplied Spreader Bars.

DO NOT exceed the rated load, or lift loads not specified in this guide.

DO NOT operate a damaged or malfunctioning unit, or a unit with missing parts.

DO NOT lift people.

DO NOT leave suspended loads unattended.

DO NOT remove or obscure warning labels.

DO NOT operate without having read and understanding all of these instructions.

DO NOT stand under or near a suspended load.

DO NOT lift loads higher than necessary.

DO NOT make alterations or modifications to a spreader bar.

SAFETY INSTRUCTIONS

Wear approved safety hat, shoes, gloves and eye protection.

The customer shall be responsible for the safety of their employees and agents. Adequate safety indoctrination is the customer's responsibility and shall be given to all personnel employed by the customer.

Safe practices on construction work as outlined in the latest edition of the "Guide of Accident Prevention in Construction," published by The Associated General Customers shall be used and observed.

The customer shall comply with all applicable city, state and federal safety codes in effect in the area where he/she is performing the work. This conformance shall include provisions of the current issue of the "OSHA Safety and Health Standards" as published by the U.S. Department of Labor.

OPERATING PRACTICES

1. Read and understand these instructions completely before assembling and using the Spreader Bar.
2. This Spreader Bar shall be operated by the following qualified personnel: designated persons; persons under the direct supervision of a designated person; inspectors, maintenance and test personnel when it is necessary to perform their duties.
3. *Qualifications:* The operator shall be instructed in the use of the device by a designated person. Instructions should include, but not be limited to, the following:
 - How to perform a visual inspection.
 - The assembly of the Spreader Bar.
 - The rigging requirements of the Spreader Bar for different mattress sizes.
 - Proper lifting techniques for using the Spreader Bar.
 - The limitations of the Spreader Bar including load capacity.
 - Instructions in any special operations or precautions.
 - Condition of the load itself required for operation of the Spreader Bar, such as, but not limited to, balance, surface cleanliness, flatness, bending, and load thickness.
 - Storage of the spreader bar to protect it from damage.

- Not exceeding the rated load of the Spreader Bar or the capacity of the hoisting equipment by the combined weight of the load, Spreader Bar and rigging.
 - The proper attachment of adapters (i.e. chokers, hooks, chains, straps, etc) to Spreader Bar for special load handling.
 - The operator shall demonstrate the ability to operate the spreader bar as instructed before assuming responsibility for using the Spreader Bar.
4. An operator shall not use this Spreader Bar which is tagged "**OUT OF SERVICE**" or otherwise designated as non-functional.
 5. "**OUT OF SERVICE**" tags shall not be removed without the approval of the person placing them, or an authorized person.
 6. An authorized person shall perform a visual inspection of all Spreader Bar components to ensure it is free from damage and defects and it is properly assembled before it can be used.
 7. All rigging equipment used with this Spreader Bar shall satisfy the recommended rigging geometry and have a manufacturer's capacity rating label, be inspected and approved for use.
 8. Tag lines should be used as necessary to stabilize and direct the load from a safe distance.
 9. The spreader bar shall not be used to carry people and should not lift a load over people.

OPERATING PRACTICES, cont.

10. People shall stay clear of the Spreader Bar and the load while it is lifted or moved.
11. The Spreader Bar shall be used so there is no sudden acceleration or deceleration of the load or motions that cause the swinging of the load.
12. The Spreader Bar shall be used in a manner that minimizes or eliminates any shock loads on the spreader bar and subsequent Armorflex product.
13. The Spreader Bar shall not be used for side pulls or sliding the load.
14. **DO NOT** allow the load or Spreader Bar to come in contact with any obstruction.
15. **DO NOT** make modifications or alterations to the Spreader Bar. Spreader Bar tags, labels, and marking shall not be removed, altered, or defaced.
16. When not in use, the Spreader Bar should be stored at an assigned location.
17. The Spreader Bar shall not be utilized for any function for which it was not designed.

ASSEMBLY AND USE INSTRUCTIONS

1. Prior to Spreader Bar assembly, a visual inspection of all components shall be completed by a designated qualified person.
2. If Connector Links and Eye Hooks with Snap Lock are not already attached, install them onto the Hook Tube Assembly as shown in Detail A (Pg. 10).
3. Attach (2) Hook Tube Assemblies to the Main Lifting Beam using (2) Screw Pin Shackles at the appropriate Lift Lugs based on mattress length; see rigging diagram. Ensure Shackle Pins are installed per manufacturer's instructions and rated for the loading expected.
4. Attach the rigging to appropriate points depending on mattress size; see rigging diagram. All rigging required to attach spreader bar to crane is supplied by others or end user. See rigging recommendations (Page 12).
5. Lift and center the Spreader Bar symmetrically over the mattress to be lifted. Lower the Spreader Bar to attach the Hook Tube Assembly Eye Hooks (12 total) to both ends of the mattress. Ensure that the mattress wire rope loops are fully engaged onto the Eye Hooks and the Snap Locks are closed.
6. **Follow safe operating practices to perform the lift.**

Spreader Bar Detail

At Hook Tube Assembly

Screw Pin Shackle

Supplied by OTHERS

Main Lifting Beam

Supplied by CONTECH

Hook Tube Assembly

Supplied by CONTECH

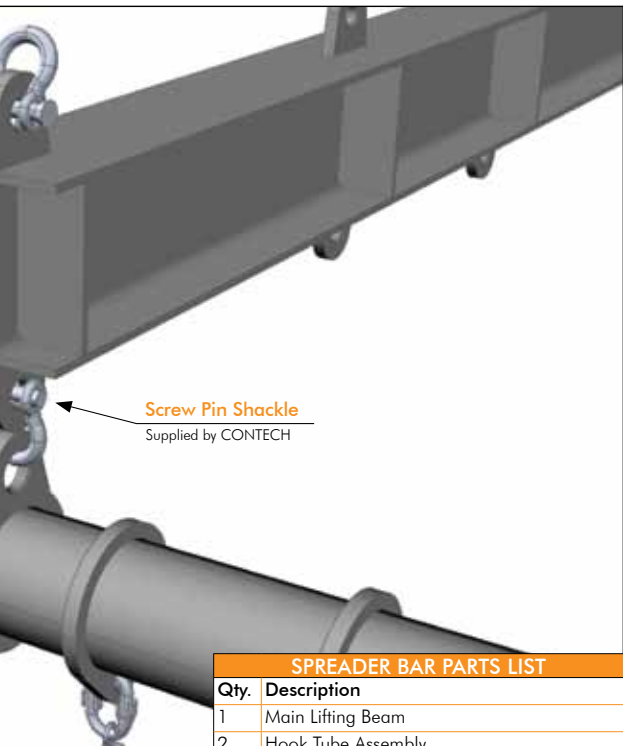
Eye Hook w/ Snap Lock

Supplied by CONTECH

Connector Link

Supplied by CONTECH

DETAIL A



Screw Pin Shackle

Supplied by CONTECH

SPREADER BAR PARTS LIST

Qty.	Description
1	Main Lifting Beam
2	Hook Tube Assembly
12	Connector Link, Lok-A-Loy 6-5/8", 16,500 lb Crosby #1014459
12	Eye Hook w/ Snap Lock - 2 ton S-320C Crosby #1022233
2	1" Screw Pin Shackle 20,000 lb Columbus McKinnon #600-02515
	Replacement Latch Kit - Crosby #1096468

RIGGING RECOMMENDATIONS

1. All end user-supplied chokers, slings, shackles or other rigging equipment used with this Spreader Bar shall be manufactured, and rated, per the requirements of ASME B30.20 or OSHA 1926 and shall have a minimum load capacity of 13,000 pounds, for a total minimum load capacity of 26,000 pounds (for 2).
2. This Spreader Bar requires (2) chokers, or slings, of the same length, and (2) shackles [supplied by the Customer] to become operational.
3. Each of the (2) chokers, or slings, shall have a length that matches the length between the Main Lifting Beam Lift Lugs. This ensures a 60 degree angle between the bar and the line. For example: a 40 ft long mattress requires (2) – 40 ft long chokers or slings, attached at the 40' mattress lugs. See Rigging Diagram (Detail B).

Spreader Bar Rigging Diagram 1626 Series

2 Part Line

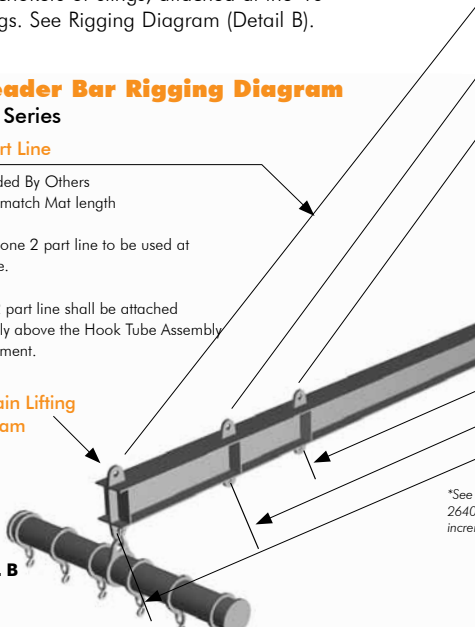
Provided By Others
Must match Mat length

Only one 2 part line to be used at a time.

The 2 part line shall be attached directly above the Hook Tube Assembly placement.

Main Lifting Beam

DETAIL B



*See
2640
incre

4. The locations where the (2) chokers, or slings, are attached to the Main Lift Beam Lift Lugs, shall match the locations of the Hook Tube Assemblies. For example: a 32 ft long mattress requires that the (2) chokers, or slings, be attached to the lift lugs at 32 ft spacing. See the Rigging Diagram (Detail B).
5. Know the weight of each mat AND the Spreader Bar.
 - Note: the assembled, estimated Spreader Bar weight is 2,600 lbs for 26' bars and 3,500 lbs for 40' bars.
6. Know the lift height requirements. For example, longer mats may have as much as 30' picking height from the bottom of the mat to the top of the spreader bar. This does not include trailer height or rigging above the Spreader Bar.

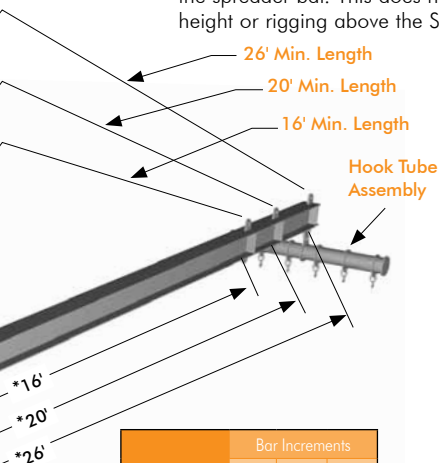


Table 1 for the 1626 Series end bar increments.

Spreader Bar	Bar Increments		
	Min.	Med.	Max.
1626 Series	16'	20'	26'
2640 Series	26'	32'	40'

Table 1

INSPECTION

The operator or other designated personnel should visually inspect the unit before every lift, as well as during operation in the event that damage occurs during a lift. Connector Links, Eye Hooks with Snap Lock and Screw Pin Shackles should engage properly and be free of damage.

The unit shall be free of structural deformation, cracks or excessive wear of any part of the Main Lifting Beam and the Hook Tube Assemblies. The operator should check for loose or missing fasteners, including Connector Links (12), Eye Hooks with Snap Lock (12) and Screw Pin Shackles (2). Welds should also be inspected for signs of obvious cracking.

MAINTENANCE

Any observed damage to the Connector Links, Eye Hooks with Snap Lock and Screw Pin Shackles or hazardous conditions found during an inspection shall be corrected before the Spreader Bar is put back into service. Adjustments and repairs shall be done by a qualified person, and the following process shall be followed by the customer or their designee:

1. Contact a ContechProject Manager before any repair work is performed.
2. The spreader bar shall be tagged **“OUT OF SERVICE”**.
3. Replacement parts shall be equal and/or exceed the original manufacturer’s specifications (see “Spreader Bar Parts List” Detail A, Page 10).
4. People working on the device must be qualified to make the given repair.

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