



TLL's Semi-Annual Newsletter on Lifting Device Safety & Industry News



What's New at

- Congratulations to **Nancy Stubbs** from **Ada Stamping** in Ada, Ohio. She's the winner from our April 2004 Newsletter.
- Our team welcomes **Delbert Depaepe** as a new member of our technical staff.
- Best wishes to **Brenda McDonald**, who has recently retired from Technical Loadarm.

You Asked Us...

(Q) Is there inspection and load testing criteria for non-engineered below the hook lifting devices?

(A) Non-engineered devices should not be used. ASME B30.20 - Below the Hook Lifting Device Standard has the appropriate design, maintenance & inspection guidelines for Below the Hook Lifting Devices.

(Q) Am I in compliance with OSHA if I have my slings inspected once a year?

(A) According to CFR 1910.184 (3) (i) "Inspections are to be determined on the basis of (a) frequency of sling use; (b) severity of service conditions; (c) nature of lifts being made; and (d) experience gained on service life of slings used in similar circumstances. Such inspections shall in no event be at intervals greater than once every 12 months."

Please be advised that there are different frequencies for different lifting equipment. Inspection criteria varies depending in the types of equipment. Cranes, hoists, lift trucks and even die hooks have specifics detailed in the CFR 29. Every workplace is responsible to be aware of what is required. To obtain more information you can visit the OSHA web site at www.osha.gov

We're Getting Around!

Our technical staff is getting around. Listed below are places Technical Loadarm has been performing lifting device safety services in the last 6 months:

- Glen - Martinsburg, West Virginia
- Neil - Buffalo, New York
- Al - Louisville, Kentucky
- Neal - Port Hope, Ontario
- Chris - Alliston, Ontario
- Sam - Arlington, Texas
- Mike - Kansas City, Missouri
- Ray - Kalamazoo, Michigan
- Jason - Gananoque, Ontario
- Delbert - Strathroy, Ontario

Operator Safety Tip #11



Your feedback is valuable... newsletter@technicalloadarm.com

If you have any comments or questions, we would be pleased to hear from you. **Each response faxed or e-mailed to our attention will be entered into a draw for a T.L.L. Sweatshirt.**

The draw will be held on December 10, 2004. *Good Luck!*

Name: _____ Company: _____

Address: _____

City/State: _____ ZIP: _____

COMMENTS / QUESTIONS: _____

SAFETY • BULLETIN



2620 Griswold Road
Pt. Huron, MI
48060

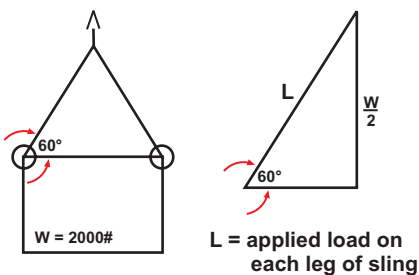
800.268.3496
technicalloadarm.com

Did You Know...

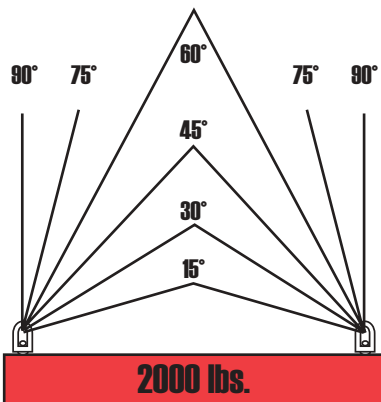
... the following information details some safe lifting practices for Swivel Hoist Rings.

1. The swivel hoist ring hole depth for a steel die is 1½ times the bolt diameter. For aluminum it is 2 times the bolt diameter. These are minimums for full thread engagement.
2. All rings must be fully seated or the engineered load rated of the ring will be severely compromised. Do not shim hoist rings.
3. The bail of the hoist ring should move freely in a lift and should not bind against the lift. Failure to follow this practice could result in undue stress on the bail.
4. Hoist rings are designed and rated to be pulled at any angle at the rated load. However the applied load on a multipoint lift will increase if the sling angle is less than 90 degrees.

Sample Calculation:



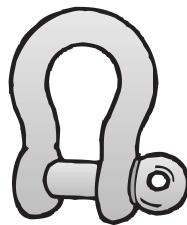
$$L = \frac{W}{2 \sin 60^\circ} = \frac{1000}{.866} = 1155\#$$



Sling Angle (Degrees)	Applied Load (Pounds)
90	1000
75	1040
60	1155
45	1410
30	2000
15	3860

Did You Know...

... Shackles are sized by the diameter of the steel in the bow section rather than the pin size. Shackles have a working load limit and are rated according to size.



SCREW PIN ANCHOR SHACKLE



BOLT TYPE ANCHOR SHACKLE

WORKING LOAD LIMIT (TONS)	NOMINAL SHACKLE SIZE (IN.)
1/3	3/16
1/2	1/4
3/4	5/16
1	3/8
1 1/2	7/16
2	1/2
3 1/4	5/8
4 3/4	3/4
6 1/2	7/8
8 1/2	1
9 1/2	1 1/8
12	1 1/4
13 1/2	1 3/8
17	1 1/2
25	1 3/4
35	2

Services Provided

Lifting Device Safety Inspection of:

- Tower, Mobile & Bridge Cranes
- Manual, Electric & Air Hoists
- Powered Lift Trucks
- Lift Truck Booms & Attachments
- Chain, Wire Rope & Fabric Slings
- Battery Hoists, Car Hoists & Lift Truck Hoists
- Spreader Beams, Crane Magnets & Tong Attachments
- Pallet Lifters, Sheet Lifters, Plate Lifters & Coil Lifters
- C Hooks, J Hooks, Crane Hooks & Coil Upenders
- Manlifts, Scissor Lifts, Zoom Boom, Snorkel Lifts & Man Cages
- Pallet Trucks, Die Carts, Lift Tables & Die Lifters
- Eyebolts, Swivel Hoist Rings & Shackles

Engineering Services:

- Capacity ratings for Crane Bridges, Monorails and Structures
- Miscellaneous Lifting Devices
- Industrial Racking & Other similar items
- Load Testing

Nondestructive Examination of:

- Automotive Mass Production Parts
 - Barrel Dumpers
 - Coil Cradles
 - Front End Loaders
 - Jacks & Die Stands
 - Pins & Shafts
 - Press Beds & Structures
 - Racking
 - Safety Harnesses & Lanyards
 - Scaffolding
 - Ladders
 - Tractor Trailers & Trailer Hitches
- *** NDE is performed using Visual, Dye Penetrant, Magnetic Particle or Ultrasound Processes

Training Programs:

- Crane & Rigging Operator Training
- Maintenance & Safety Inspection Training (all Devices)
- Lift Truck Operator
- Nondestructive Examination Training (magnetic particle)