



LIFTING DEVICE **SAFETY INFORMATION**

Actek® Mfg. & Eng. Inc. products are intended for use only by trained, qualified, and experienced personnel. Misuse of any Actek® product or lack of supervision and inspection can lead to serious accidents including death. Actek® Mfg. & Eng. Inc. has always stressed that safety is of utmost importance.

Prior to any use of Actek® product, evaluation of the product application, safety precautions, safe working load, and control of all field conditions is mandatory. Avoid applications that exceed the safe working load or any other product misuse. Actek® cautions you that all safety factors shown are approximate. Safe working loads should never be exceeded under any circumstances.

If you have any questions about the proper use or installation of any Actek® product, please contact our office directly.

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Safety Notes

Actek® Mfg. & Eng. Inc. ensures that all materials used on all of our products meets or exceeds the safety requirements for lifting. The safe working loads listed are based upon a new or “as new” condition product. The safe working load is considered to be the greatest load that should be applied to an item at any time.

Inspection & Maintenance

In order to ensure the safest lifting, all Actek® products must be used and maintained in the proper manner. Hoist rings are subject to wear, corrosion, deformation, overloading, and other limiting factors which will affect the safe working load. Prior to use of any Actek® product, the product should be regularly inspected to determine if it may be used or whether it should be removed from service. It is the responsibility of the user to inspect all lifting units for signs of wear and to discard any parts showing visible signs of wear. Every user should establish a safety inspection program for routine visual inspection of all products to determine whether signs of wear (e.g. cracks, corrosion, deformation) are present. The product inspection schedule should be established based upon factors such as frequency of use, period of use, and environment. In addition to the regular safety inspection, the following safety directives must be followed:

- Prior to use, always inspect hoist rings for possible wear or damage. Never use hoist rings that show any sign of wear or damage.
- Never use hoist rings if bail is bent or elongated.
- Prior to use, threads must be clean, undamaged, and must fit properly.
- Always install hoist rings using the listed torque value. Periodically check torque because screws could loosen during extended service.
- Bent bolts should be discarded or replaced; never straightened. Failing to do so may lead to serious injuries or death.
- Never use washers or spacers between bushing and mounting surface.
- Always make sure the hoist ring pivots and rotates in all directions freely.
- Never use hoist ring near or around corrosive material.
- If hoist ring is exposed to extreme temperatures (hot or cold), please contact our engineering department for suggestions/consultation.
- Safe working loads should never be exceeded under any circumstances.

If there are questions regarding the replacement or repair of worn Actek® products, please contact our engineering division.

ACTEK MFG. & ENG. CO.

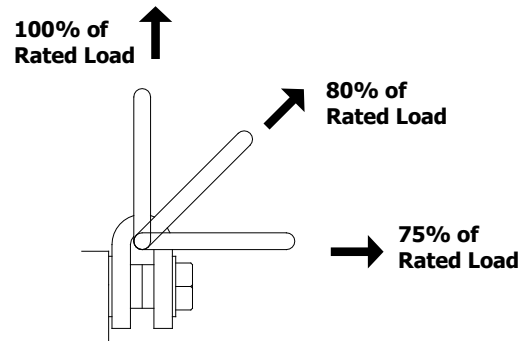
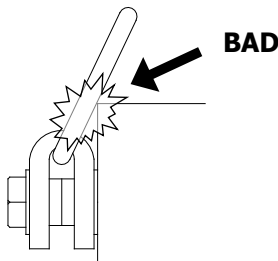
LIFTING RING

SAFETY PRECAUTIONS

WARNING: PRIOR TO USING ANY HOIST RING, PLEASE READ THE FOLLOWING FOR PROPER INSTALLATION AND USAGE.

As with all mechanical devices, regular inspection for wear and strict adherence to use instructions is necessary to prevent misuse failure.

- Despite the 4:1 safety factor, **NEVER EXCEED THE RATED LOAD CAPACITY.** This safety margin is needed in case of misuse, which could drastically lower load capacity.
- Tighten mounting screws to torque recommended. Periodically check torque because screws could loosen in extended service.
- **Make sure the hoist ring pivots and rotates in all directions freely.**
- Tensile strength of parent material should be above 80,000 PSI to achieve full load rating. For weaker material, consider through-hole mounting with a nut and washer on the other side.
- **DO NOT APPLY SHOCK LOADS.** Always lift gradually. Repeat magnaflux testing if shock loading ever occurs.
- **Rated load will be reduced based on different angles of the loading.**



Important: The load on each hoist ring is not simply total weight divided by the number of hoist rings. The resultant force can be significantly greater at shallow lift angles and with unevenly distributed loads. See the example below.

L = Load
W = Total weight = 2,000 Lbs.

N = Number of hoist rings = 4
A = Lifting angle

$$L = \frac{W}{N \sin A}$$

If A = 60:

$$L = \frac{2000}{4 \sin 60} = 577 \text{ Lbs.}$$

If A = 20:

$$L = \frac{2000}{4 \sin 20} = 1,462 \text{ Lbs.}$$

