Stay within the Safe Working Limits of all Johnson Manufacturing products. The Safe Working Limits assigned Johnson Manufacturing Products reflect our best engineering assessment. They should never be exceeded, regardless of the strength of the wire rope being used. Nor will we accept responsibility for any rating request which would result in a lower design factor than that we judge to be adequate. (See Design Factors indicated. Standard Design Factor 4.)

Note that Safe Working Limits apply only to loads held uniformly in direct tension. They do not apply to shock loads, which can multiply the static weight factor many times over. Likewise, they do not allow for hook tip loading, side loading, or for bending, torsional and related loads.

Note also that Safe Working Limits apply only to new products as they are shipped from the factory. Age, type of service and environmental conditions can subsequently affect these limits, and periodic tests should be undertaken to assure the product will perform in accord with existing regulations and sound operating practices.

Do not misuse Johnson Blocks hook latch attachments. Johnson Blocks Latch kits are designed solely for loose sling retention. They are not anti-fouling devices, and caution must be exercised to prevent a latch from supporting any portion of the load. Protect the latch and thereby, the workmen below, by: 1) continuous inspection to see that the latch is undamaged, in place, and properly centered on the hook; 2) taking care not to "crowd" the latch with over-sized ropes or "stiff" riggings; 3) making sure the load is properly seated prior to each lift.

Use caution in applying standard Johnson Manufacturing products to severe vibration or sharp-blow situations. Activities such as pile driving can have adverse effects upon the life of the product and therefore, may not be covered by the warranty. Standard cheek weights and overhaul balls, for example, are not designed as load-bearing members. They can break under extreme vibration or sharp blows.

Severe working conditions can also create problems for the undersized swivel or standard block. If you anticipate such conditions, have the factory fabricate the block to your particular job requirements. Or, in the case of an existing block, take the following precautions:

- Make sure the block's capacity rating is high enough if the block has a hook and latch, consider replacing them with the swivel tee and safety anchor shackle that is available as an option on all "J" blocks.
- Remove any cast iron cheek weights and replace the existing tie bolts with shorter ones. If additional weight is required, have Johnson Blocks supply steel plate cheek weight kits to your specifications.
- Tack weld any and all exposed tie bolt nuts, trunnion nuts and lower fitting shank nuts to the ends of their respective shafts. Weld the center pin nut, if any, to the side plates of the block itself.

Never use the yielding point of a hook, bail or other fitting as a "gauge" of its
capacity. Trusting a fitting to bend before it breaks is a dangerous practice and should never be used as an excuse to exceed the Safe Working Limit.

Lift only those loads for which our product was designed. Federal crane regulations prohibit the transport of personnel on any load or wire rope attachment (OSHA 1910, 180-h-3-v).

Never "two block," or allow any block, ball, or other attachment to be drawn into another under power.

Inspect your equipment regularly for excessive wear. Wear is a fact of life, and it will eventually affect load fitting cross sections and other critical component dimensions. Since worn components do not have the same S.W.L. rating, the responsibility for their maintenance and continued use is entirely up to the purchaser/user. To be certain, arrange for periodic product testing in accord with federal and local regulations.

When using wedge sockets note that two precautions should be taken. Make sure that a sudden jolt or impact does not dislodge a wedge. When installing wire rope, always pre-load the wedge with wire rope in place. Check frequently to retighten or reposition as necessary. Make allowance for the crimping effect common with all types of wedge sockets. Experience shows it will reduce the Safe Working Limit of a line by 20 percent.

Never weld any load bearing components such as hooks, shackles or other load fittings. Any welding to a load fitting could adversely affect the strength capabilities of the material.

Do not immerse standard Johnson Blocks products in water. Contact our Engineering Department for those special product designs necessary to meet fresh and salt water applications.

Make sure your wire rope is sufficiently rated for its overhaul ball and socket assembly attachments. Johnson Manufacturing offers a variety of wedge socket overhaul balls. As with other products, some of these balls have strengths substantially greater than the ropes to which they may be applied. To be sure, consult the chart "Safe Working Limits of Wire Rope." Type, application and S.W.L. are the sole responsibility of the customer and the end user.

Do not overload individual sheave bearings by subjecting a partially reeved block to full load applications. Bearing life expectancy is based on the use of all available sheaves under maximum parts of line. For example, in a 30-ton block with three sheaves, each sheave will have a bearing capacity of 10 tons. If only two sheaves are used, the block's sheave bearing capacity is thus reduced to 20 tons. If only one sheave is used, it is reduced to 10 tons.
Typical SWL Nameplate

![Typical SWL Nameplate](image)

Important safety information is provided by the two plates affixed to each product.

Typical Safety Caution Plate

![Typical Safety Caution Plate](image)