# LIFTING AND SLING HOOK **SELECTION GUIDE**

## THIS GUIDE WILL HELP YOU CHOOSE THE **RIGHT HOOK TO USE FOR YOUR LIFT:**

#### **EYE HOOKS**

On an eye hook, a chain or fittings are welded for a permanent connection to the sling. With an eye hook, you get far more flexibility in terms of movement and ergonomics to position the hook and attach it to the load. However, an eye hook is a permanent solution-if the throat of the hook becomes stretched, cracked, or bent during use, the whole sling would have to be failed out upon inspection and removed from service.



#### **CLEVIS HOOKS**

A clevis fastener is a fastener system consisting of a clevis and clevis pin. The clevis is a U-shaped piece that has holes at the end of prongs to accept the clevis pin. The clevis pin is similar to a bolt, but is only partially threaded or unthreaded with a cross-hole for a split pin. The clevis is a mechanical connection used to fasten the hook to a bracket or chain.

### SWIVEL HOOKS

There are two types of swivel hooks and the user should be aware of the type of swivel hook that they're using prior to lifting a load into the air:

- Positioning Swivel Hook This type of hook swivels to allow the rigger to properly align the hook during connection to the load.
- True Swivel Hook with Bearing This type of swivel hook has a bearing inside that allows the hook to rotate freely under load.



#### SLING HOOKS WITH SELF-CLOSING LATCH KITS

All hook manufacturers make products with or without latches. Some hooks are compatible with self-closing latch kits so that a latch can be added at the time of the sale or post-sale. The one disadvantage of a hook with a self-closing latch is that they can have a shorter life span than a positive latching hook. One thing to consider when buying a hook with a latch kit is to understand if it's an imported or domestically-made product. It may be more difficult to find replacement parts on imported products.



### **POSITIVE LATCHING HOOKS**



#### **FOUNDRY HOOKS**

Foundry hooks are typically used on chain slings and are designed with a wide deep throat to fit trunnions and handles on molds or castings for foundry work. Foundry hooks are most commonly designed to be used without a latch, because they're often used in high-heat applications where there is a clear danger for a human to reach up to connect or remove the load from the hook.

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#### **J-HOOKS**

J-Hooks are most often used in industrial and manufacturing applications. They have a low-profile and slimmer design than traditional sling hooks, which allows them to be used with chains, hoists, and slings to efficiently move materials in applications where a sling hook, grab hook, or foundry hook would not be suitable. J-Hooks are often used with eye bolts or an engineered lifting point on a load. A low-profile tip and throat can fit in much easier than a larger sling hook or foundry hook for a positive connection to the load.

#### **GRAB HOOKS**

Grab hooks are designed with a special narrow throat used to "grab" and shorten or hold a length of chain used in tie-down applications and in load-rated lifting slings. The throat engages the chain between the links for quick non-slip handling.

- Standard Grab Hook Becoming less common, the "non-cradle" grab hook is most often seen in tie-down applications. When using a standard style grab hook, it is important to be aware of any reductions in working load limit (WLL) that the hook manufacturer may require based on usage configuration. When using a "standard" grab hook, most manufacturers require a reduction of 20% of the WLL.
- Cradle Grab Hook The "cradle style" is replacing the "non-cradle" or "standard" grab hook for most applications due to its improved support of the engaged chain link. This additional support of the engaged link often means there is no reduction of working load limit (WLL) when used as designed.





A positive latching hook is a hook with a latch that is a more robust and engineered component of the hook. The advantage of a positive latching hook is that it's nearly impossible to break the latch on these hooks and once it closes, it can't open again until the load is released from the hook. These types of hooks are close to standard on chain slings because they're more robust and can handle heavier-duty environments and lifts where chain is the preferred sling medium.

#### **SORTING HOOKS**

Sorting hooks, also known as "lay out hooks" or "shake out hooks," are used to sort or lay out products like flat plate, pipes, or other tube-shaped objects. They're used in multi-leg sling assemblies for applications where the object or item will engage to the full depth of the throat of the hook. Sorting hooks must be used at a 30° to 45° angle to get full engagement-if the load is not fully engaged with the throat opening, significant reduction to the Working Load Limit of the hook can occur.

Always follow manufacturer recommendations for all lifting products.



#### **DRUM / BARREL HOOKS**

Barrel Hooks are used for lifting barrels or drums. They have a wide end point that goes under the lip of a barrel or drum and are used in conjunction with a multi-leg sling assembly. Typically used in conjunction with a pair of slings and are designed to be utilized at 30-45° angles.



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