The terms anchor shackles and bow shackles are both used interchangeably and refer to a type of shackle with a larger, round “O” shaped bow. A larger bow shape allows these types of shackles to be side loaded or used in multiple sling-leg connections.

Anchor shackles can be used for side pulling when you factor in the reduction to the WLL based on the angle deviation from in-line (0°).

Chain shackles, also referred to as D shackles, have a D-shaped bow that is narrower than anchor shackles. Because these shackles are designed and rated for in-line tension, they should not be side loaded, as side loading can twist or bend the bow of the shackle.

When using a chain shackle, the center line of the load should always coincide with the center line of the shackle.
SHACKLES: PIN TYPES

AT A GLANCE

Screw Pin Shackles

On a screw pin shackle, a threaded pin is inserted through the ears and tightened down. Screw pin shackles are quick and easy to connect and disconnect so they’re convenient for rigging that is used for “pick and place” applications or when slings and other hardware are often changed out. **Screw pin shackles are not recommended for permanent or long-term installations.**

Bolt Type Shackles

A bolt type shackle is a more secure version used in rigging that features the combination of a bolt and nut located alongside a cotter pin. Bolt type shackles can be used in any application that uses a round pin or a screw pin. These types of shackles remain secure even when the shackle is subjected to rotation or torque.

Round Pin Shackles

Round pin shackles consist of a round unthreaded pin that is secured in place with a cotter pin. These perform well in applications where the pin may be subjected to torque or twisting. They’re most popular in tie-down, towing, suspension, or applications where the load is strictly applied in-line. A cotter pin is used to secure the shackle pin in place. **Round pin shackles are not recommended for overhead lifting applications.**
SHACKLES: SPECIALTY TYPES

AT A GLANCE

Synthetic Sling Shackles

On a synthetic sling shackle, the bow of the shackle is widened to increase synthetic web sling or synthetic roundsling efficiency. This design allows for 100% of the sling’s WLL to be achieved by preventing the slings from pinching or bunching, which can damage the slings or reduce the rated capacity.

Synthetic sling shackles are available in screw pin or bolt type design.

Wide Body Shackles

Wide body shackles are used in conjunction with high capacity synthetic web slings, synthetic roundslings, or wire rope slings. When using a shackle with wire rope, the shackle must be equal or greater than the wire rope diameter. The increased radius of the shackle bow provides:
• An increase in surface area for a better D/d ratio
• Improved service life of the sling
• Eliminates need for a thimble eye
• Prevents kinking and bunching of the sling around the bow

Long Reach Shackles

Long reach shackles are ideal for use in construction applications where a longer reach is needed to attach to pick points. They can also be used as a bail for lifting thicker products.

Sheet Pile Shackles

Just what their name implies, they’re designed specifically for pulling sheet piling. These types of shackles are equipped with an easy opening pin that will not detach and become lost.