

Wear Limits for Container Corner Fittings

Category

This is a structural information document.

Models and Markets

This applies to all Sidelifters.

Information

Normal use of a Sidelifter to handle ISO shipping containers requires lifting hooks as shown in figure 1 to be fitted into the four lower end corner pockets. In this operation large forces can be applied at these connection points.

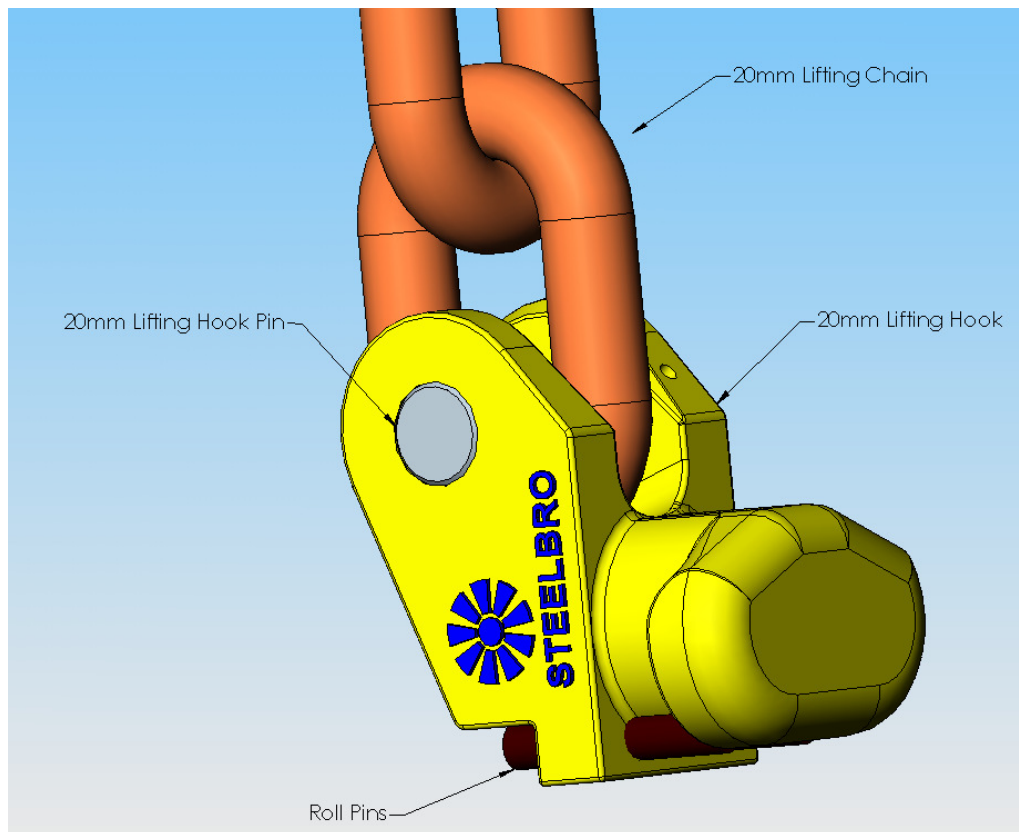


Figure 1 Lifting hook (or lug) on end of chain.

Figure 2 shows the manufacturing sizes for the corner castings used for ISO shipping containers. The size tolerances for these castings are compatible with Sidelifter lifting hooks and chains.

Repeated heavy lifting or mishandling can damage these pockets. If the opening is deformed too much then it will no longer be safe to lift a container with a Sidelifter.

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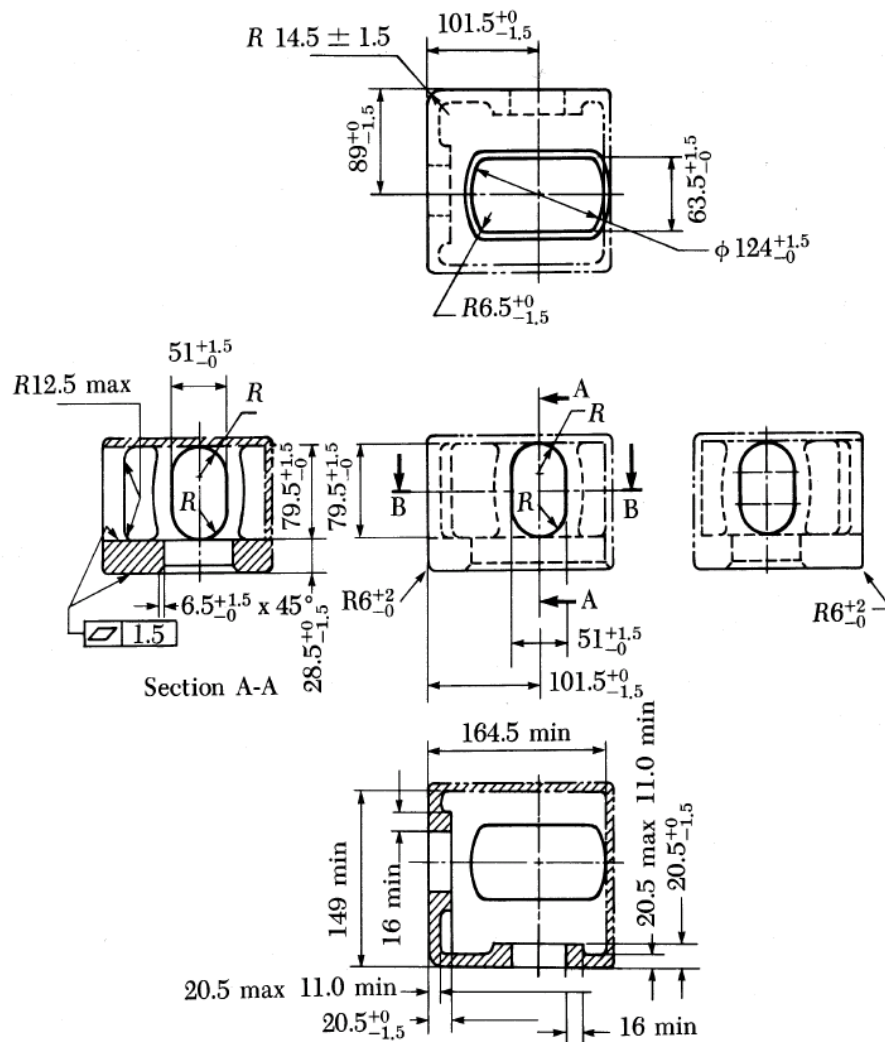


Figure 2 Bottom Corner Fitting detail

Some deformation in the openings will not be a problem for lifting with container hooks and chains, but if a significant amount of deformation exists then it will be unsafe to lift from these positions.

A maximum permissible width of the corner opening is 56mm. The minimum material thickness above the opening is 6mm. Material thickness at the opening should be approximately 20mm, and should not be used if less than 15mm. These dimensions are shown in figure 3 below.

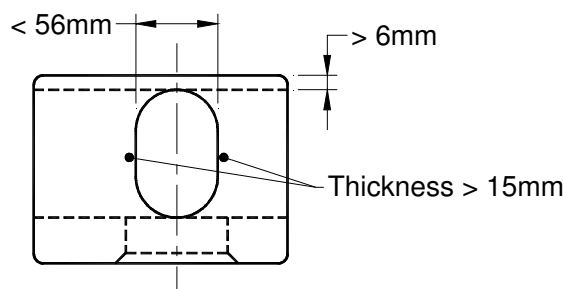


Figure 3 Corner Opening size limits

If any of the dimensions shown are exceeded, repairs will need to be made to return the component sizes to original manufacture limits.