

What is angle casting?

[Container corner castings](#) are structural parts attached to container corners. These corner castings are used as attachment points for containers for stacking, connecting, lifting and connecting shipping containers around the world.

They are mainly used to lock containers horizontally and vertically, while also connecting them to another ISO 6346 shipping container by using bridge clips and twist locks.

The main benefit of using corner castings is that the container can be easily picked up and moved as needed.

Since they allow containers to be stacked, more containers can be easily transported without damage. Corner castings are usually made of steel, which is the strongest and most durable material that can be formed.

Manufacturers can shape castings to the right shape and weight for optimal use. The downside to corner castings is that there are different types of castings; therefore, you need to make sure the size is right for the container.

Types of corner castings

ISO shipping containers typically use eight corner castings: top right, top left, bottom right, and bottom left. Each corner requires two corner castings to equip the container.

Are all corner castings the same?

It is important to note that not all container corner castings are created equal. Top corner fittings feature acorn-shaped side holes. In contrast, the bottom corner fittings have semi-circular side holes.

For left and right corner castings, both top and bottom are mirror images. However, in all other respects, they are the same.

If you have a casting corner marked as difficult, you can view the corners of the inside corners.

aspect

The width of the aperture at the top of the corner piece must not exceed 66 mm. In addition, the length of the aperture at the top of the corner piece cannot exceed 127 mm. In addition, the thickness of the top plate cannot be less than 23 mm.

Any corner castings exceeding these dimensions require the vessel to be taken out of service immediately. It is critical to check all three dimensions: length, width and thickness.

Material

Corner castings are created by forming substances into specific shapes using a mold. There are many types of valid metal materials available for container corner castings.

Gray iron

Grey iron is one of the most commonly used casting materials. This is because it can be easily processed, formulated to meet specific requirements such as ISO 1161 standards, cost-effectively produced at scale, and tested for quality control.

Ductile Iron

Ductile iron is similar to grey cast iron, but it has greater strength, higher resistance, excellent ductility, reduced weight and shrinkage.

aluminum

Aluminum is popular for its versatility as a metal. It has many advantages, such as good strength at high temperature, high electrical and thermal conductivity, and corrosion resistance.

steel

Steel is another tough casting material because it can withstand heavy wear, impact and weight. Its corrosion resistance makes it suitable for use in water environments such as shipping containers by sea. Steel is designed to work at extremely low temperatures of -40° C.

Although steel is the strongest and safest material, you may want to consider the cost of buying these container corner castings in bulk.

cost

Prices for shipping container corner castings vary by size, material, and shape. On the lower end, you might find castings between \$40 and \$60.

However, they may use less durable materials such as aluminum. Higher quality materials and ISO 1161 standard castings can cost between \$160 and \$200 per corner casting.

How do I know if my container shipping is ISO compliant?

Containers and corner castings are ISO compliant, which means they can be carried. ISO grades specify simple dimensions and grades for containers and container corners. The best shipping method to determine if a container is manufactured to ISO standards is for lookup.

All ISO standard prints will feature a quad exposed container on the door.

If the container is already painted and you can't see the marketing, you can look at the corner castings to determine if the shipping container is ISO compliant.

All ISO standard corner castings shall have the following shapes. Top corner castings contain a stadium hole on the long side of the container and a guard hole at the rear or front of the container. Conversely, the bottom corner casting has two stadium-shaped holes on either side.

Also, evaluate the thickness of the angle castings. Any thickness below 18mm means that corner castings and shipping containers are not ISO standard.

in conclusion

Proper inspection of each container corner casting and selection of suitable ones can ensure the safe transportation of cargo. Container corner castings play a key role in handling and lifting containers. Please follow the guidelines above to minimize the risk of damaged or lost shipments and to keep the product safe.