

What are Metal Stampings?



Metal stamping is a system of processes focusing on sheet metal manufacturing. This is one big chunk of the whole science & art of metalworking.

How do they do it?

Mechanical and hydraulic are the two types of stamping presses. Metal stamping machines cast, punch, cut and shape metal sheets. To create three-dimensional shapes, a flat sheet of metal is inserted into a die and then a mechanical press is activated to create the object. Sheets of up to 1/4 inch thickness are molded into specified shapes and sizes. Aluminum, copper, gold filled and sterling silver are some of the metals used by companies offering metal stampings.

In the task of building structures, large or small scale, metal stamping is responsible for the processes of punching, blanking, piercing, embossing, drawing, bending, forming, flanging, and coining the metals as needed. Now that's too much responsibility that requires precision!

Such stages of stamping are carried out until the desired shape and form of the material is achieved. What happens is that sheets of metal are being cut, formed, and shaped by feeding and pressing them between high tonnage stamping dies. This is done in mass production so that parts developed through the process are generally low cost.

What is it for?

This science of metalworking has long been utilized over the millennia, and its cost-effective and mass-producing nature makes it an irreplaceable process for a number of industries. Industries range from intricate production such as jewelry, surgical instruments, and auto parts, to massive manufacturing such as ships, engineering machines, and bridges.