

## CASTING

**Gestión de Compras** has the facilities to design and manufacture any casting part through die casting, lost wax casting, gravity casting and sand casting.

### PROCESS:

Casting is a metalworking technique in which molten metal is poured into a mold and then allowing it to cool and solidify. The solidified part is also known as a casting, which is ejected or broken out of the mold to complete the process. The metal piece can be finished with grinding, sanding and polishing. This is one of the oldest metalworking techniques in the world.

Common Processes:

- **Die casting:** The molten metal is forced under high pressure into mold cavities in order to get the final part. Most die castings are made from nonferrous metals, specifically zinc, copper and aluminium based alloys, but ferrous metal die castings are possible. The die casting method is especially suited for applications where many small to medium sized parts are needed with good detail, a fine surface quality and dimensional consistency.
- **Lost wax casting:** Also called "investment casting" or "precision casting". The molten metal is poured into a mold that has been created by means of a wax model. Once the mold is made, the wax model is melted and drained away. A hollow core can be executed by the introduction of a heat-proof core that prevents the molten metal from totally filling the mold.
- **Gravity casting or permanent mold:** The molten metal is poured from a vessel or ladle into the mould. The cavity fills with no force other than gravity,

filling can be controlled by tilting the die. This process gives a better surface finish than sand casting as well as better mechanical properties, both due to rapid solidification.

- **Sand casting:** It is characterized by using sand as mold material. It allows for smaller batches than permanent mold casting and at a very reasonable cost. However it is less accurate than other methods and tends to leave rough surfacing on the product which needs machining in most cases.

According with the worldwide census of casting production, the top nation in this production is China with millions of tons produced in their foundries and exported to the rest of the world.

### PRODUCTS:

There is a huge range of parts made by casting such as joints, nuts, pipes, valves, fittings... and they are used in many different sectors as automobile, aerospace, railways, shipping, construction, farming, mining, machinery, defence, plant machinery, electrical, household...

### MATERIALS:

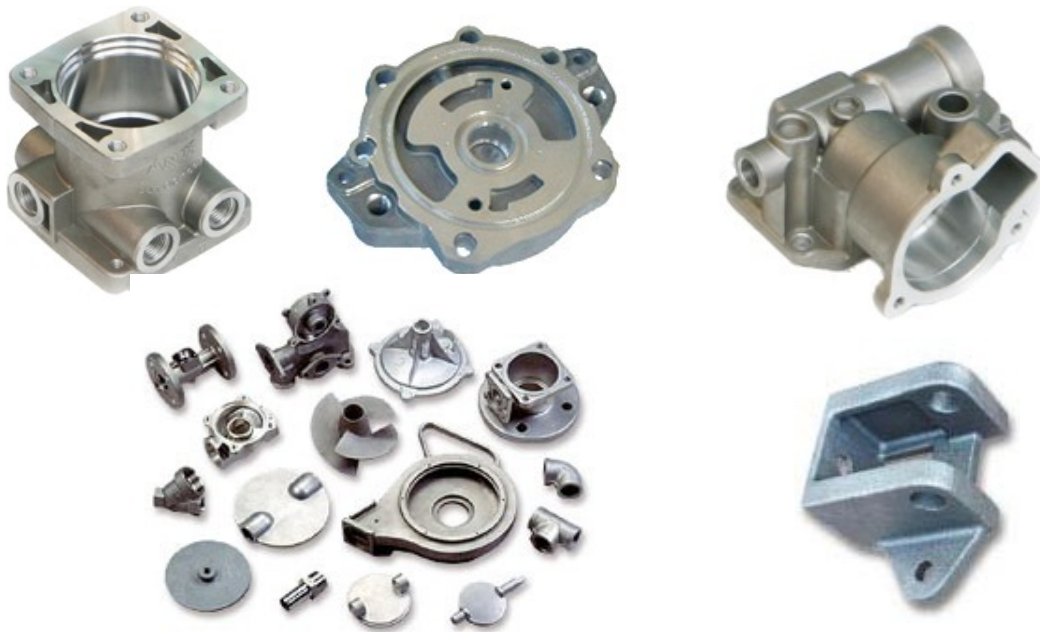
Usually any metal, alloy or non-ferrous metal can be casted; the most common materials include grey iron, ductile iron, iron and steel, aluminium, copper, zinc, magnesium, titanium, zamak...

### RELATED PRODUCTS:

[Die casting](#), [Lost wax casting](#), [Gravity casting](#), [Sand casting](#),

### PRODUCTS :





### **NORMATIVE:**

DIN, ISO, EN, ANSI, AISI, SAE, BS, JIS, China GB/T, KS, ...

### **CONTACT:**

In **Gestión de Compras** works with a wide range of customers from different sectors but have in common the search for products that suit your needs at the best price and the guaranteed maximum quality. Check with us about any product. We have a qualified staff who will advise you.

**C/ Marzo, 9**

**02002 Albacete (Spain)**

**Phone: + (34) 967 221 602**

**Fax: + (34) 967 223 369**

**Email: [info@gestiondecompras.com](mailto:info@gestiondecompras.com)**

**Contact us now!!**

