



#### Higher Precision Carbon Steel Silica Sol Investment Casting

Ningbo Zhiye Mechanical Components Co.,Ltd. is a leading manufacturer in Producing in Higher Precision Carbon Steel Silica Sol investment casting in China,such as silica sol investment casting,water glass investment casting,lost foam investment casting,shell mold sand casing and specific characteristic technique of lost wax casting in the foundry.



### Product Description

What is carbon steel?

Zhiye is one of the famous China Higher Precision Carbon Steel Silica Sol Investment Casting manufacturers and Higher Precision Carbon Steel Silica Sol Investment Casting suppliers. Our factory specializes in manufacturing of Carbon Steel Silica Sol Investment Casting. Carbon steel is among one of main materials in the world of Higher Precision Carbon Steel Silica Sol Investment Casting. Carbon steels can be classified into below types according to their carbon content:

Low-carbon steels(< 0.20% C): Offer a range of tensile properties via heat treatment and can be hardened to give high surface hardness with abrasion resistance and good core ductility.

Medium-carbon steels(0.20 to 0.50% C): This composition allows it to be more durable, pliable, and stronger. A range of tensile strengths are possible with good ductility and shock resistance, readily machined in the softened condition.

High-carbon steels(> 0.50% C): Strong and has a good shape memory, making it a particularly useful option for spring manufacturers. This alloy steel for high tensile applications is subject to wear and abrasion and is suitable for heavy-duty applications as well.



Material	Carbon steel, alloy steel, stainless steel, Aluminum alloy, Copper, etc.
Process	Lost wax casting + cnc machining
Casting dimension tolerance	CT7
Casting surface roughness	Ra 12.5 um
Casting weight range	0.1-90 kg

Casting Size	Max linear size: 1200 mm, Max diameter size: 600 mm
Machining Precision	Positioning accuracy 0.008 mm, Rep. position. accuracy 0.006 mm
Machining surface roughness	Ra0.8 ~ 6.3 um
Max Travel Of Spindle	1900 mm x 850 mm x 700 mm
Max Turning Diameter	830 mm
Material standard	GB, ASTM, AISI, DIN, BS, JIS, NF, AS, AAR
Surface treatment	KTL (E-coating), Zinc plating, Mirror Polishing, Sand Blasting, Acid pickling, black oxide, Painting, Hot galvanizing, Powder coating, Nickel plating.
Service available	OEM & ODM
Quality control	0 defects, 100% inspection before packing
Application	Train & railway, automobile & truck, construction machinery, forklift, agricultural machinery, marine parts, petroleum machinery, construction, valve and pumps, electric machine, hardware, power equipment and so on.
Keywords	Investment casting, sand casting, precision casting, lost wax casting, water glass casting, silica sol casting, die casting

### Carbon Steel Casting Process:

Same as alloy steel casting, carbon steel casting could be produced in two kinds of different casting processes: Water Glass Casting and Silica Sol Casting.

**Water Glass Casting:** This type of casting process can make carbon steel castings with tolerance CT7-CT8. Most of carbon steel castings use water glass casting process for its low cost. In China, around 70% casting foundries are water glass casting manufacturers.

**Silica Sol Casting:** Another lost wax casting method for carbon steel casting. This casting process can control carbon steel castings within tolerance CT5-6. Also the surface finish will be much better. The only consideration of selecting this process is its high production

cost. If you have high demands on your carbon steel castings, we recommend this process.



## Benefits of Carbon Steel Castings

Carbon steel is an extremely popular material option for steel castings, as it has a vast range of applications in several different industries. For the low material cost and a variety of material grades, carbon steel casting is commonly used and can improve its strength, ductility and other performance by heat treatment for industrial applications. Due to its ferromagnetic properties, this material is particularly useful for motor and electrical appliances. Carbon steel is safe and durable and has a high level of structural integrity, features that add to its popularity and make it one of the most created alloys in the world.

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### Automotive & trucks casting parts



### Rail & Train Casting parts







### Agricultural machinery accessories



### Pump & valve casting parts





### Carbon Steel Casting Manufacturer & Exporter

As the leading investment casting supplier, Ningbo Zhiye foundry can make carbon steel castings in all carbon steel alloys. Common used material grades of carbon steel castings in our company are AISI 1010, AISI 1020, AISI 1035, AISI 1045, AISI 1060, etc. Besides, we can also customize such carbon steel casting according to your material compositions. Our investment casting capabilities enable us to achieve tight tolerances in different dimensions for your cost savings.

We also have other capabilities of secondary operations such as machining, non-destructive testing, heat treat, and assembly. Like alloy steel castings & stainless steel castings, We can prove to supply carbon steel castings as good as any foundry can offer, better than most.

Please contact us and let us know how we can serve your carbon steel investment casting needs. If you are still confused at the grade of your castings, do not worry, our material specialist will advise the right option for you.