



O.B.T GROUP



<http://www.obtceasting.com>



Company Profile

OBT has been manufacturing and supplying foundry and refractory materials for more than 20 years. Our stable quality and good after-sales service help us to obtain high feedback from European, South America, Japan, Thailand, Korea, Taiwan, Vietnam, Cambodia, Philippine, Malaysia, etc.

Our product range:

Chamotte sand

Colloidal Silica

Pattern Wax

Chemical additive

Application:

Precision Investment Casting

Lost Wax Casting

Refractory Bricks Manufacturing

Coatings industry

Textile industry
Paper industry
Petroleum industry
Ceramic industry
Electronic polishing industry

Our advantage:

- No.1 largest mullite sand and foundry materials manufacturing and supplying plant in China
- 200,000tons–500,000tons production capacity
- 8 own calcining kilns , maximum 10% cost reduction benefit to customers
- 5 days of the minimum delivery period
- No dust,Low abrasion, higher hardness, uniform particle size distribution makes it the most suitable to the manufacturing process.

After 20 years of development, we have become a world renowned company which meet the needs and solves the problems of customers with foundry materials. We will focus on listening to the changing needs of customers and using the power of our core values to be better. We welcome new and old customers contact us for future business and mutual benefits.



QINGDAO O.B.T CO.,LTD
Tel:0086–532–80997318
Mob/Whatsapp:0086–18661859609
Email:lisa@foundrykaolin.com
<Http://www.obtcasting.com>

Chamotte Sand/Flour

Product introduction and application:

The chamotte sand has high aluminum content, low iron content, small dust, reasonable particle size distribution, high bulk density, high temperature strength and low residual strength, no dust.

Available: 10-16M, 16-30M, 30-60M, 60M, 70M, 100M, 200M, 325M (can be customized).

Mainly used in lost wax casting, refractory materials, precision casting, aluminum silicate refractory fiber and ceramic industry.



OBT-22S



OBT-35S



OBT-200M

Chamotte Sand						
The Physical And Chemical Indicators						
Grade	Fe ₂ O ₃ % max	Al ₂ O ₃ % min	SiO ₂ % min	TiO ₂ % max	B.Dg/ccm min	Refractoriness °C
A. Prime Grade	1.20	46.00	50.50	0.70	2.55	1750
High Grade	1.50	44.00	51.50	0.90	2.53	1750
Normal Grade	2.30	43.00	52.50	1.00	2.50	1730
200 mesh/325 mesh						
200 mesh/325 mesh	93% min					
22S(16---30 mesh)						
16-12 mesh	1.18-1.70mm				25-35%	
20-16 mesh	0.85-1.18mm				40-50%	
30-20 mesh	0.60-0.85mm				<25%	
50-30 mesh	0.30-0.60mm				0.02%	
—50 mesh	0.00-0.30mm				0.04-0.06%	
35S(30-60)mesh						
50-30 mesh	0.30-0.60mm				65-75%	
80-50 mesh	0.18-0.30mm				1.00%	
—80 mesh	0.00-0.18mm				0.04-0.06%	

Zircon Sand

1. Product introduce and application:

Zircon sand Description:

Zircon sand, also known as zircon sand and zircon, is a mineral composed mainly of zirconium silicate ($ZrSiO_4$). Pure zircon sand is a colorless transparent crystal. It is often dyed yellow, orange, red, brown, etc. due to different origins and different types and types of impurities. The crystal structure is tetragonal and has a quadrangular pyramid shape. The main chemical composition is ZrO_2 ; SiO_2 , and a small amount of Fe_2O_3 , CaO , Al_2O_3 and other impurities. The melting point fluctuates with the impurity in $2190\sim 2420^\circ C$.

Applications:

Foundries, Investment Casting Industries, Casting coatings.
Special Refractories Industries, Refractory Castable.
Ceramic Industries.

2. Characteristic :

Dense structure, High temperature resistance
High thermal conductivity, Acid and alkali resistance
Good stability, Low thermal expansion coefficient



Fused Silica

Product introduction and application:

Fused Silica Products

Natural high purity quartz its microstructure at high temperature becomes the amorphous structure of the fused silica.

Is molten particles and silicon powder with high quality fused silica, through special crushing grinding process, the product high purity, controllable particle size distribution.

The main characteristics of fused silica are:

- High temperature resistance, good whiteness, melting point $1750^\circ C$.
- Excellent low electrical insulation.
- High hardness, high resistance to wear.
- Low expansion coefficient is low.

●Chemical properties of stability, in addition to react with hydrogen fluoride ether and alkali, does not react with any other material.

Photovoltaic materials, electronic materials, refractory materials, investment casting, high voltage electrical insulation materials, paint coating, silicone rubber, special ceramics, advanced materials, fine chemical industry, aerospace and other industries.



OBT 0-1



OBT 100-200



OBT 50-100

Colloidal Silica

1.Product introduction and application:

Normal series of products using water glass synthesis process, with good stability, low turbidity, the advantages of small batch differences, etc.

Mainly used in precision casting, ceramic polishing, batteries, coatings and other industries. According to different particles divided into small particle size Colloidal Silica and large particle size Colloidal Silica.



OBT-830



OBT-1430



OBT-930



2.Specifications of Colloidal Silica

Technical Parameters	Small Particle Sizes Types		
	OBT-830	OBT-1430	OBT-930
SiO ₂ %	29~31	29~31	26~28
Particles size	7~10	10 ~ 20	10 ~ 14
pH value (25℃)	9.0~10.5	9.0~10.5	9.5~10.8
Viscosity (25 °C,mm2/s)	≤6.5	≤6.5	≤7
Custom-Made Product	According to customer requirements, the pH value,viscosity concentration, stabilizer type and other indicators, customize the special specification products for you.		

Nickel Block

Material	Ni	Co	C	Si	Fe	Cu	Zn		
Purity	99.989%	0.0012	0.0016	0.0016	0.0018	0.017	0.0061	0.0001	0.0005
Material	As	Cd			Mn	Mg	Impurities		Bi
Purity	0.0005	0.00025	0.0001	0.00014	0.00045	0.00053	0.01	0.00056	0.00025

Ferro Molybdenum

Grade	Chemical Elements Contents					
	Mo	Si(Max)	C(Max)	P(Max)	S(Max)	C1(Max)
FeMo60	55.0-65.5	1.0	0.10	0.05	0.10	0.5
FeMo60Cu1	55.5-65.0	1.5	0.10	0.05	0.10	1.0
FeMo60Cu1.5	55.0-65.0	2.0	0.50	0.05	0.15	1.5
FeMo70	65.0-75.0	1.5	0.10	0.05	0.10	0.5
FeMo70Cu1	65.0-75.0	2.0	0.10	0.05	0.10	1.0
FeMo70Cu1.5	65.0-75.0	2.5	0.10	0.10	0.20	1.5



Nickel Block



Ferro Molybdenum

Casting Wax

1.Product introduction and application:

Our company model waxes are of high quality, non-filled medium temperature wax. The products are widely used in the process precision casting industry, with good form ability, suitable for general hardware, pipe valve parts, sewing machine parts, auto parts, golf heads, aerospace blades, turbines, steam turbines, etc. High-quality industrial parts and wax casting of precision casting products.

- Wide application range and good solubility with other wax materials.
- The fluidity and molding are good, the wax surface has good surface finish and high dimensional accuracy.
- Good toughness, high strength, repeated use, stable performance such as shrinkage, surface finish and fluidity.
- It is a fully recyclable wax that is used in the sprue system for excellent strength.
- This product is a new wax material with low impurity content and can be used in the production of titanium alloy casting wax mold.

2.Specifications:

Test Results	Method	Result
Viscosity at 100 °C	GB/T265	89.6cps
Viscosity at 80°C	GB/T265	519cps
Penetration at 25°C	GB/T4985	2.8dmm
Softening Point	GB/T2294	79°C
Drop Melting Point	GB/T4929	89°C
Congeaing Point	Q/0285XNK001-2018	74°C
Water Content	GB/T6284	0.09%
Ash Content	GB/T508	0.018%
Shrinkage	GB/T14235.4	0.72-0.85%
Bending Strength	GB/T14235.2	5.028kgf
Specific Gravity	T/CFA 0202101.1-2020	0.957



OBT-162



OBT-701



OBT-996



OBT-RW01

Wax Cleaner

1.Feature:

This product is a composite emulsion, using the etching function of high-quality solvents, it can thoroughly and quickly clean all kinds of oil stains on the surface of wax models, with good cleaning effect and low consumption.

● This product is a water-dispersed cleaning agent, non-flammable, non-polluting, safe and environmentally friendly, can comprehensively improve the working environment, and is beneficial to the health of employees.

● The product is simple and convenient to use. First shake the product well, pour it into the cleaning container, then dilute it with an appropriate amount of water and stir evenly. Dip the wax model and shake it for 7–8 times (10–20 seconds), rinse it with clean water, dry it or blow it with the wind. The surface of the wax model can be dried with a gun, and then the slurry can be sprayed and sanded.

● For casting products that require extremely high precision, we recommend washing them out of the cleaning agent and then rinsing them with water and alcohol for the first time.

● The product has a long service life. When using it, the impurities brought into the cleaning agent should be cleaned up in time. After use, it should be covered and stored. It should be stirred evenly before the next use. According to the production and usage conditions, clear the cylinder regularly, so that the effect is better. 6. This product is an emulsified dispersion, and it has the best effect of cleaning before use.



OBT-S04

2.Product specifications and technical indicators

Project	Index
Appearance	milky white liquid
Effective substance content	≥ 58%
pH value	6–8
Validity period (room temperature)	1 year
packaging and storage	25kg/barrel, stored in a cool and dry place

Zirconia Ceramic Foam Filter

1.Product introduction and application:

It is used for the purification of carbon steel, alloy steel and stainless steel solutions, can withstand the technical requirements of steel technology, can filter slag inclusions and corroded materials of the model, and can slow down turbulent flow, thereby reducing reoxidation slag inclusions.

- Purification of Cast Steel Solution
- Improve the yield of steel castings
- Reduce inclusions in steel castings
- Reduce internal reoxidation defects
- Reduce subsurface defects after machining



OBT-S101

2.Specifications:

Performance	Value
Hole Density	4-60ppi
Porosity	80-90%
Maximum Operating Temperature	1700
Bending Strength At Room Temperature	0.8-1.0Mpa
Normal Temperature Compressive Strength	1.0-1.2Mpa
Thermal Shock Resistance (Times/1100°C)	6
Apply	Alloy Steel And Other High MeltingPoint Metal Alloys

Silicon Carbide Foam Ceramic Filter

1.Product introduction and application:

It is used to improve the quality of ductile iron, gray iron and ductile iron castings, and helps to slow down the turbulent flow of molten iron in the sprue mouth. It has excellent thermal shock resistance and high temperature strength, and can withstand the extreme environment in the casting process.

- Purify molten iron
- Improve the quality of cast iron parts
- Reduce the number of oxide inclusions in cast iron
- Stable filling time



OBT-S102



OBT-R101

2.Specifications:

Performance	Value
Hole Density	4-60ppi
Porosity	80-90%
Maximum Operating Temperature	1500
Bending Strength At Room Temperature	0.8
Normal Temperature Compressive Strength	0.9Mpa
Thermal Shock Resistance (Times/1100°C)	6
Apply	Cast Iron

High Silica Glass Fiber Mesh Cup Filter

1.Product introduction and application:

High silica glass fiber mesh cup filter is generally suitable for filtering gray castings, ductile iron and small steel castings, effectively removing harmful impurities such as air bubbles, ash oxides and various inclusions in molten metal, thereby fundamentally eliminating air holes, Slag holes and trachoma greatly increase the yield of castings and improve the internal quality and appearance quality of castings.

2.Specifications:

Performance	Value
Density	0.9-1.5
Hole Density	8-60ppi
Porosity	80-90%
Fire Resistance	≤1700°C
Bending Strength	> 1.0Mpa
Compressive Strength	> 1.2Mpa
Apply	Steel Castings, Iron Castings, Aluminum Castings And Other Alloy Castings



OBT-F101



OBT-F102



OBT-F103

Wetting Agent

Chinese name of ingredients	Concentration or concentration range (ingredient percentage)	Cas No.
polyoxyethylene alkanes	25%–40%	9003–11–6
polyoxyethylene ether	25%–40%	9002–92–0
sulfonate	25%–40%	54–77–3
AEO	25%–40%	9064–14–6
Water	25%–40%	7732–185



OBT-R01

Defoaming Agent

Single Product/mixture	Mixture
Organic acids (citric acid, sulfonic acid, oxalic acid, etc.)	10–35%
Inorganic	16–25%
Organic amine	1–5%
Suppress fog	1–2%
slow agent	2–4%



OBT-R02

Oxidized Glue



OBT-866

Oxidized glue ensures that the surface layer does not peel off, does not fall off, does not bulge, and does not produce cracks when wet.

Dosage: 100 kg of silica sol for the surface layer, 10 kg of oxidized gel.

Strengthening Agent

Strengthening agent: the main job is to make the expansion coefficient of the surface layer and the second layer uniform at high temperature, and the tension caused by thermal expansion and contraction, to relieve the stress caused by the impact of molten steel on the shell during the casting process.

● Dosage of Strengthening agent: Add 10–15 kg of enhancer to 100 kg of surface powder, the enhancer can greatly save the amount of zirconium powder!

● Surface viscosity: No. 4 cup, 45–60 seconds, No. 5 cup, 25–28 seconds.

● The surface layer does not need to add wetting agent and Defoaming Agent.

● Subsequent grouting can be done by adding oxidized glue and reinforcement according to the normal proportion.

● This solution can change the zirconium powder particles, and the molecular coverage can be changed microscopically. Effectively prevent cracks, rat-tail lines, burrs, shell cracking, and improve collapsibility!



OBT-868





QINGDAO O.B.T CO.,LTD

Tel:0086-532-80997318

Mob/Whatsapp:0086-18661859609

Email:lisa@foundrykaolin.com

Http://www.obtcasting.com