

## **FOCUSING ON FILTRATION BOOSTING FOUNDRY**





Add: Guoruiyuan Building, ShengLi North Street, Chang' An District, Shijiazhuang City, Hebei Province, China. Tel/WhatsApp: +86 15830114065 E-mail: andy@foundryfiltration.com Website: www.foundryfiltration.com

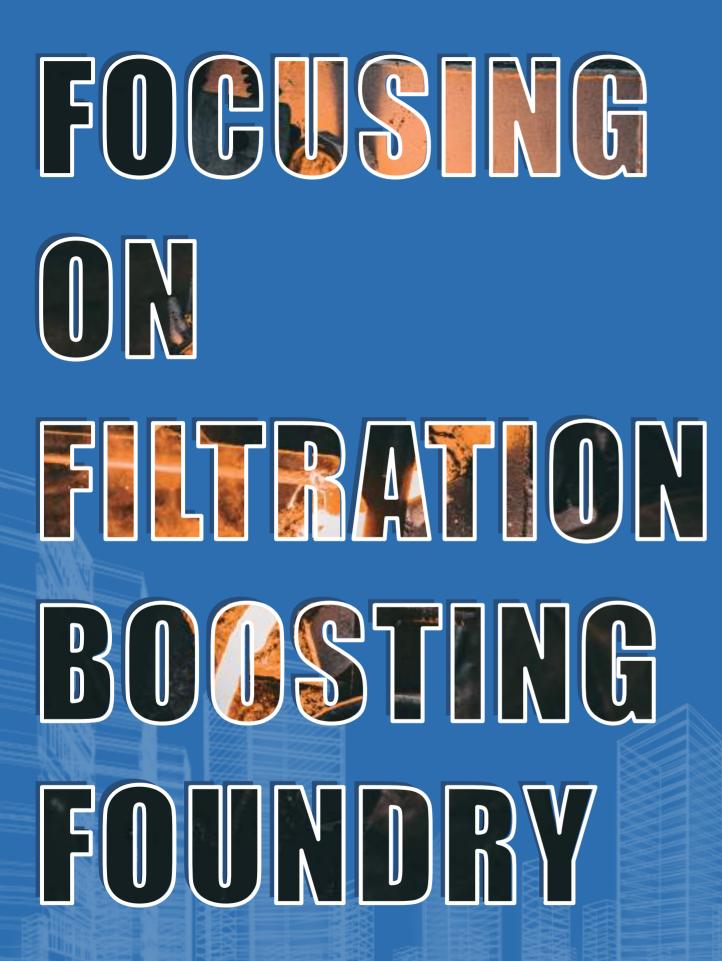


Website





Hebei CangChen Imp. & Exp. Trade Co., LTD.











#### Hebei CangChen Imp. & Exp. Trade Co., LTD.

Hebei Cangchen, a professional foundry filtration products manufacturer who is focusing on the production, sales, service and solutions. We are the recognized leader in the development and production of casting filters at home and abroad, and possesses the excellent innovation capabilities in filter manufacturing technology.

Currently we have two production lines in our plant, one is fiberglass



line that provides smokeless & odorless & flameless Hi-temp carbonized fiberglass filtration mesh, fiberglass cap filter, fiberglass combo filter bag, high silica fiberglass filter mesh and other heteromorphic filter mesh.

The other is ceramic line which mainly produces SIC, Alumina, Zirconia ceramic foam filters, Aluminium silicate plug and Honeycomb extruded ceramic filter.



Hebei Cangchen, as a professional and experienced supplier, not only customize the casting filtration products to those who have their own brand, but also customize the solutions and service to them.

"Always Better" is our Business Philosophy. We insist on "Professionalism & Innovation" and make progress and development together with them.







Ceramic **Foam Filter** Line

















#### **Perfect after-sales** service system

## **Fiberglass** Production Line

Fiberglass filtration mesh is made of high temperature resistant fiber, woven and processed by special technology. There are kinds of products series with advanced technology and stable quality. Compared with other types of filters, fiberglass casting filter is cheap, easy to use, does not change the metal composition of the casting, has good slag filtering effect and low gas generation. In addition, it also has high temperature resistance, ablation resistance, good chemical stability, resistance to metal melt erosion and good steel strength.

In casting production, steel castings, iron castings, aluminum castings and other alloy castings are prone to quality problems such as slag holes, sand holes and gas holes due to various reasons. Therefore, the removal of non-metallic inclusion in metal melt is of great technical and economic value to improve the yield of castings and the quality of castings.

Fiberglass filtration mesh is an ideal filter material for various metal melts. It can also be used for the filtration of chemical corrosive liquids and high temperature gases.

- Fiberglass Filtration Mesh For Aluminium
- Fiberglass Cap Filter For Aluminium
- Fiberglass Shunt Filtration Combo Pouch/Bag/Basket For Aluminium
- Fiberglass Fabric Filter Mesh In Roll For Aluminium
- High Silica Fiberglass Filtration Filter For Iron And Steel

#### "Smokeless & Odorless & Flameless" **Fiberglass Filtration Mesh For Aluminium**



#### SPECIAL PROCESS

It is woven with special high-twist & high-strength alkali-free fiberglass and special post-treatment. The maximum temperature resistance can reach 900 °C.



#### WIDE RANGE OF APPLICATIONS

Widely used in automobile and motorcycle wheels, cylinder pistons, aluminum rods, aluminum materials, aluminum ingots, aluminum plates and precision casting of all types of aluminum alloy casting.



#### NEW PATENT

New patented product "Smokeless & Odorless & Flameless" Fiberglass Filtration Mesh" will gradually replaces similar products, it can effectively remove impurities, reduce turbulence and eliminate air bubbles, thereby the quality of castings is improved and the cost is reducd. Meanwhile it does not pollute aluminum liquid and not affect chemical properties of the metal. Therefore, filtered aluminum liquid containing the filter mesh, liquid from sprue and the riser can be directly returned to the furnace for remelting, greatly reduce costs.

Weight Work Softening Temperature Temperature



Application: Filtration of molten aluminium

## Certificate 700-800°C 900°C 150-350 g/m<sup>2</sup> ISO9001:2015



### **Fiberglass Cap Filter For Aluminium**



SPECIAL PROCESS

The cap-style is woven with special high-twist & high-strength alkali-free fiberglass and special post-treatment. The maximum temperature resistance can reach 900 °C.



#### WIDE RANGE **OF APPLICATIONS**

It is widely used in automobile and motorcycle wheels, cylinder pistons, aluminum rods, aluminum materials, aluminum ingots, aluminum plates and precision casting of all types of aluminum alloy casting.



#### INCREASE SUCCESS RATE

Cap Filter is not only used to reduce casting porosity, but also can effectively reduce casting surface defects and increase process yield. It can effectively screen and adsorb small pre-slag, so that the quality of metal castings is better, the performance is better, to create high-quality castings.



Weight Softening Temperature

Certificate

## 700-800°C

900°C

150-350 g/m<sup>2</sup> ISO9001:2015



### Application: Filtration of molten aluminium

### **Fiberglass Shunt Filtration Combo Pouch/Bag/Basket For Aluminium**



#### SPECIAL TREATMENT

It is weaved by special high-twist & high-strength alkali-free fiberglass, special post-treatment, coated with resin and "carbonized" by high temperature. Apply to filter and evenly distribute molten aluminum in molds.



BETTER EFFECT

Comparing to other filter bags, it does not affect the component of aluminum alloy, and with good filtration effect, high temperature resistance, high strength, excellent acid and alkali resistance, non-stick aluminum, non-slagging, non-peeling, as well as easy installation.



#### OEM

Logo, Size and Shape of fiberglass filter bag, according to customer's requirement, and also drawing or samples.

Work Temperature **≤1000°C**  Melting Point

**1100°C** 



**Application: To filter and evenly** distribute molten aluminum in molds

Tensile Certificate Strength 8Kgs ISO9001:2015

### **Fiberglass Fabric Filter Mesh In Roll For Aluminium**



#### **EFFECTIVELY REMOVE MPURITIES**

Weaved by alkali-free E-glass fiberglass yarn. Specially developed and used for filtration, turbulence reduction and flow distribution improvement of non-ferrous alloys especially the molten aluminium. Used in molten aluminium launder or holding furnace sprue, transferring from ladle to holding furnace etc. Effectively remove the inclusions and aluminum oxide films from molten aluminium liquid.



OEM

Width, Length, Mesh opening, in addition to the fixed size, other sizes can be customized.

#### Work Temperature

Softening Temperature

900°C

#### 700-900°C

Continuous Working Hours <20Min Certificate

## ISO9001:2015

**Application: Filtration of molten** aluminium in vertical casting tables

### **High Silica Fiberglass Filtration Filter For Iron And Steel**



#### SPECIAL PROCESS

It is weaved by high silica fiberglass yarn and coated with special refractory coating. It can effectively remove slag, refractory particles and non-metallic inclusions from molten metals. Made from specially treated silica yarns, the thick type silica mesh filters are capable of withstanding pouring temperature up to 1620°C.



Silica mesh filter are ideal for in-mold filtration of gray, malleable, white, compacted graphite and ductile cast irons, as well as non-ferrous aluminum and copper-based metal alloys and many types of small scale steel casting filtration.



#### OTHER **APPLICATIONS**

Besides the function of molten metal filters, it could be also used for riser knock-off or de-gating knock-off. Investment casters have also placed the perform cup shape filters in the wax mold gating system to filter metal at pattern entry.

Work Temperature **≤1620°C** 

Weight



Application: Filtration of molten steel, Iron, copper and aluminium

## Ceramic Foam Filter Line

Ceramic foam filter is just developed as a new type molten metal filters to decrease casting flaw and also as a catalyst carrier for Air Treatment in recent years, play a vital role in the metal casting and air treatment, where they are used to filter out impurities in molten metal to improve the quality and performance of the end product or decompose organic pollutants into pollution-free water (H2O) and carbon dioxide (CO2) to meet high environmental requirements.

- SIC Ceramic Foam Filter For Iron and Copper
- Alumina Ceramic Foam Filter For Aluminium
- Alumina Ceramic Foam Filter Plate For Aluminium
- Zirconia Ceramic Foam Filter For Steel
- Honeycomb Extruded Ceramic Filter For Iron and Aluminium

### **SIC Ceramic Foam Filter For Iron and Copper**

#### SIC

SIC (silicon carbide) ceramic foam filters adopts German imported polyurethane foam sponge as the carrier, the slurry which mainly contains silicon carbide slurry is extruded into the foam sponge, and then extrude slurry, the remaining slurry coated around the foam fiber during by drying, roasting and sintering at high temperature, polyurethane thermal decomposition, leaving the foam like ceramic products, namely, silicon carbide foam ceramic filter.

#### FILTER METAL

They are developed and manufactured for the filtration of all copper alloys, cast iron and non ferrous alloys.

#### **ADVANCED APPLIANCE**

As the most advanced filter type with the higher filtration efficiency, it can effectively reduce inclusions and turbulence of molten metal, ensuring purified molten metal goes into the mould cavity with improved flow rates.

#### **UNIQUE FORMULA AND PROCESS**

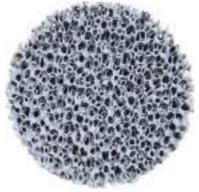
Using the unique formula and manufacturing process, sic ceramic foam filters have the excellent thermal shock, chemical and high temperature resistance up to 1500°C

Application: Filtration of molten steel and alloy, large scale iron casting and copper.













### Alumina Ceramic Foam Filter For Aluminium

#### WIDE RANGE OF APPLICATIONS

Alumina ceramic foam filters are mainly used in the purification process production of non-ferrous alloys such as aluminum and aluminum alloys, and can also be used as gas-solid, liquid-solid separation medium, catalyst substrate, ceramic burner, sound absorption, environmental protection, and other fields.

#### **EFFECTIVELY REMOVE IMPURITIES**

Mainly used for the filtration of molten aluminium and alloys in foundries and cast houses. With the excellent resistance to attack and corrosion from molten aluminum, the filter can effectively remove inclusions, reduce trapped gas and provide laminar flow, and then the filtered metal is significantly cleaner. Cleaner metal results in higher-quality castings, less scrap, and fewer inclusion defects, all of which contribute

#### Application: Filtration of molten aluminium.









### Alumina Ceramic Foam Filter Plate For Aluminium

#### **MORE STABLE**

Alumina foam ceramic is a kind of foam material made from high purity alumina. The foam ceramics have the characteristics of uniform porosity, high temperature resistance, heat shock resistance, wear resistance and chemical stability.

#### SUPPORT CUSTOMIZATION

Products are widely used in casting processing, water treatment, chemical industry, environmental protection and other industries. Is the ideal liquid aluminum filter; Catalyst support, and good sound insulation, thermal insulation material. Product shapes, sizes, and voids PPI can be designed and manufactured on request.

#### **HIGH QUALITY**

Alumina foam ceramic filter plate is very important to the quality of aluminum melt, which affects the subsequent processing performance and the quality of final products to a great extent. Therefore, all countries in the world attach great importance to the purification of aluminum melt.

#### **APPLICATION FIELD**

Mainly used in the purification process of aluminum and aluminum alloy production, but also used as a variety of gas-solid, liquid-solid separation media, catalyst carrier, burner and sound absorption and environmental protection fields.

#### Application: Filtration of molten aluminium.













### Zirconia Ceramic Foam Filter For Steel

#### **HIGH QUALITY GRADES OF ALLOYS**

Zirconia Ceramic Foam Filters are used for filtration of all types of steel like unalloyed, low alloyed, stainless and high-alloyed. Filters are recommended especially for high quality grades of alloys.

#### **EFFECTIVELY REMOVE IMPURITIES**

With their excellent resistance to attack and corrosion from molten steel liquid, they can effectively remove inclusions, reduce trapped gas from liquid metal and provide laminar flow, and then the filtered metal is significantly cleaner.

#### **HIGH TEMPERATURE RESISTANT**

Cleaner metal results in higher-quality castings, less scrap, and fewer inclusion defects. They are the best choice for filtering of determined for filtering of steel and steel alloys up to the temperature of 1700°C.

### Application: Filtration of molten steel and alloy, large scale iron casting.







## Honeycomb Extruded Ceramic Filter For Iron and Aluminium

#### **HIGH TEMPERATURE RESISTANT**

Produced based Mullite with kinds of hole sizes, which can withstand heavy pouring thermal shock and extreme pouring temperature.

#### **CELLULAR DESIGN**

The cellular design also provides an engineered balance between flow rate and strength and it can effectively capture inclusions and reduce turbulence of the molten metal.

#### **MANY ADVANTAGES**

The extruded ceramic filters have excellent properties of precise dimension, good thermal stability, high specific surface area and resistance to acid and alkali.

#### **APPLICATION FIELD**

Widely used for ferrous and non-ferrous metal castings, ductile iron, gray cast iron, aluminum casting.

#### Application: Filtration of molten iron.



















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# Successful Cases







# Package and Delivery



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NORTH EUROPE AMERICA For Fiberglass Products SOUTH ANDOHEN AMERICA





For Ceramic Products







