# **ALUMINUM TITANATE PORDUCTS**

# Riser Tube( Stalk Tube)

Riser tube (stalk tube) is one of the key components of antigravity casting/low press die casting. When filling the mold, under the action of air pressure, the molten metal enters the mold from the crucible through the riser tube(stalk tube). When the pressure is released, the unsolidified molten metal also flows back into the crucible through the riser tube (stalk tube). As an important component in the gating system, the riser tube (stalk tube) has the functions of diversion and feeding. Therefore the riser tube (stalk tube) must have the ability of low coefficient of thermal expansion, good thermal shock resistance, and non-wetting by molten aluminum. Aluminum titanate with these properties is one of the good choices.





The aluminum titanate ceramics with high melting point, low thermal expansion coefficient, low thermal conductivity, and excellent thermal shock resistance and corrosion resistance. It is the best thermal shock resistance among low-expansion ceramics. The aluminum titanate has excellent high temperature resistance and can be used for a long time at 1400°C. It is mainly used in special environment with dramatic change in temperature and strong corrosion.

## **DATA SHEET**

Item	Riser Tube
Al203%	50-55
TiO2%	40-45
Fe203%	≤0.2
K20+Na20%	≤0.02
Density(g/cm3)	>3.4
Heat conductivity (W/m.k)	0.86-1.00
Flexural strength(Mpa)	30-35
Porosity (%)	<8
Max. Working temperature (°C)	< 1400

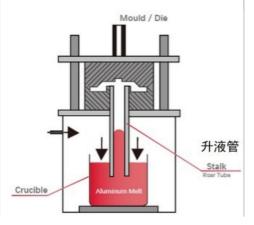


#### **Advantages**

- 1,Excellent thermal shock resistance
- 2,No infiltration with the nonferrous metal
- 3.Excellent wear resistance
- 4,Low thermal-expansion coefficient
- 5. Low mechanical stress

### **Application**

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# **Sprue Bushing**



Sprue bush is also known as insulating sleeve. It is a part on the low pressure casting machine for alloy wheel and other similar casting. Sprue bush is used to form low pressure runner.

Aluminium titanate sprue bush has good corrosion resistance, strength, airtightness and thermal shock resistance.

## Advantages

- 1. Excellent thermal shock resistance
- 2,Low wetting by aluminum and non-ferrous metal
- 3, Excellent wear resistance and corrision resistance
- 4, Increasing productivity and reduce cost.
- 5, Isostatic Forming
- 6, Exact dimensions machined by CNC



