

Nitride bonded silicon carbide riser tube for casting

■ Introduction:

Nitride bonded silicon carbide riser tube for casting is a riser tube for casting. It is made from a mixture of high purity silicon nitride and silicon carbide powder and sintered at high temperatures. The NSIC riser tube for casting has excellent corrosion resistance, wear resistance and high temperature strength, and can withstand molten metal and thermal stress during casting at high temperatures. It is commonly used in metal castings during the casting process to direct the flow of metal liquid from the furnace into the mold to avoid pores and defects in the casting.

■ Technical data sheet:

Item	Unit	Data
Contents: SIC		≧75
Si ₃ N ₄	Vol%	≧23
Si		0
Bulk Density 20 C	g/cm ⁻³	2.75-2.85
Apparent porosity	%	13- 15
Modulus of rupture(20 C)	Mpa	160- 180
Modulus of rupture(1200 C)	MPa	170- 180
Modulus of rupture(1350 C)	MPa	170- 190
Modulus of crushing(20 C)	MPa	580
Thermal conductivity(1200 C)	W.m ⁻¹ .k ⁻¹	19.6
Thermal expansion(1200 C)	a×10 ⁻⁶ /C	4.70
Thermal shock resistance(1200 C)		Excellent
Max. Working temperature	C	1580

■ Advantages

1. NSIC tube for aluminum casting can withstand stress and thermal shock at high temperatures, so they are ideal for high temperature environments in casting processes.
2. Ceramic riser for low pressure casting can withstand many corrosive media, such as molten iron and molten aluminum
3. NSIC riser tube have good abrasion resistance and oxidation resistance, so they have a long life
4. NSIC riser tube for casting have excellent dimensional stability, which ensures the stability of dimensional accuracy during casting.

