

Protection Pipe and Insulating Pipe of Alumina (Al₂O₃)

Features

- High Mechanical Strength
- High Thermal Conductivity
- High Spalling Resistance
- High Softening Temperature
- Excellent Insulativity
- Etching Resistance

Application

- Temperature Measuring Meters
- Protection and Insulation for Thermocouples, Thermometers
- Furnace Tube for Resistance Furnaces, Heat Treatment Furnaces
- Chemical Analysis for Steel, Iron
- Various Insulating Parts for High Temperature Resistance and Etching Resistance

Structure Model

- Round, Oval
- Mono-hole, Double-hole, Multi-hole
- Threaded
- Rhombohedral

Characteristics of Material

Item	Unit	Value	
		High Alumina	Corundum
Al ₂ O ₃ Content	%	85	99~99.5
SiO ₂ Content	%	12	0.2
Fe ₂ O ₃ Content	%	0.2	0.05~0.1
Mohs Hardness		7	8~9
Bulk Density	Injection molding	3.5~3.6	3.7~3.9
	Extrusion molding	3.4~3.5	3.7~3.8
	Hot-press molding	3.4~3.5	3.7~3.85
Water Absorption	%	<0.2	0.1~0.2
Bending Strength	Injection molding	180	200
	Hot-press molding	140	150
Operating Temperature	℃	Long term 1450 Short term 1600	Long term 1600
Max. Operating Temperature	℃	1600	1800

Dimensions of Insulating Pipes of High Alumina and Corundum Ceramic

Unit: mm

Hole Nos	Value		
	O.D	I.D	Length
Mono-hole	1~15	0.5~10	5~1000
Double-hole	2~15	0.5~4	5~2000
Flat double-hole	3×5~7×12	0.5~5	5~200
Four-hole	4~15	0.5~4	5~2000

Dimensions of Ceramic Protection Pipes for Thermocouples

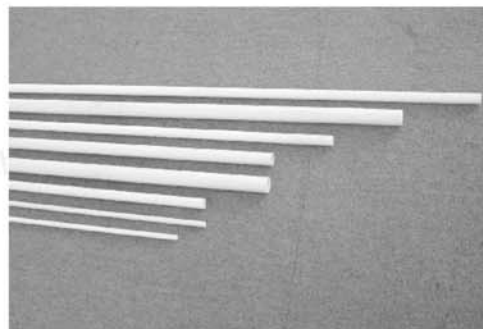
Unit: mm

Item	Value						
O.D	6	8	10	12	16	20	25
I.D	4	6	7	8	12	15	19
Length	100~2165						

Products of other specifications can be produced according to customers' requirements.



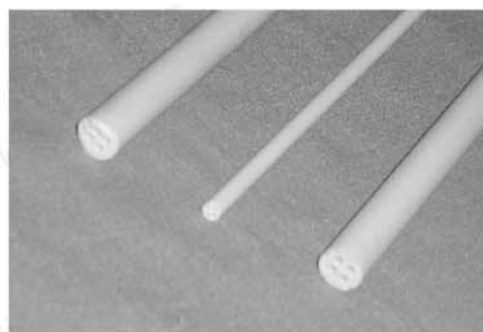
Insulating pipes of high alumina



Insulating pipes of corundum



Insulating pipes of corundum



Multi-holes protection pipes

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