# **Ceramic-Lined Chokes**

#### Ideal for reducing flow and/or pressure in highly erosive slurries.



Ceresist ceramic-lined chokes are specified for use in extremely erosive slurries that contain a very high percentage of solids. The large radius entry of the chokes exhibit better consistency and flow recovery characteristics than sharpedged orifice plates. Furthermore, our ceramic-lined chokes are more compact than venturi-style chokes.

The durable and thick-walled silicon carbide ceramic lining allows their use in piping systems that require years of maintenance-free service.

#### Silicon Carbide Liner

Ceresist ceramic chokes are provided with a reactionbonded silicon carbide ceramic liner as standard, which is 30 times more wear-resistant than stainless steel. Sintered silicon carbide, alumina, and nitridebonded silicon carbide ceramics may optionally be specified to suit any process and budget.

#### Stainless Steel Housing

Housings are manufactured as standard in stainless steel 304 for durability against environmental corrosion. Alternate materials are also available.

#### **Review and Recommendation**

All choke applications are reviewed by our engineering staff who select the proper materials to ensure chemical compatibility and long service life. The process conditions are also run through our software to determine the proper bore size for predictable results in service.

#### Ground or Recessed Transition

In order to comply with plant standards, the transition between the ceramic liner and the exterior housing may be specified as recessed or diamond-ground to match the sealing surface.

#### **Exterior Protection**

Abrasion and corrosion-resistant coating systems may be applied for added protection and longevity in harsh environmental conditions.

#### **Industries Served**

- Coal Fired Power Generation
- Abrasive Material Handling
- Chemical Processing
- Food Processing
- Powder/ Bulk Solids Conveying
- Mining & Mineral Processing
- Pulp & Paper
- Pulverizing & Grinding
- Iron & Steel Manufacturing
- Sewage & Wastewater Treatment



## **Technical Information**



### **Design Variations**



Flanged



Wafer







Lined Spacer

#### **Operating Parameters**

Size Range	1/4" to 48"	DN8 to DN1,200
Pressure Class	ANSI 150 to 2,500 lb	PN16 to PN400
Maximum Operating Temperature	1,200° F	650° C
Maximum Operating Pressure	3,000 psig	206 Bar
Maximum Differential Pressure	3,000 psi	206 Bar
Maximum Thermal Shock	750° F	400° C



Ceresist is an ISO 9001:2008 Certified Company

