Wear resistant ceramic which are mainly composed of at least 90% Al2O3 are the most widely used in the world today.

Our products are made from strictly selected alumina powder with uniform particle sizes and low CaO content. Wear resistant ceramics can be made through common dry press or isostatic pressing process and then sintering them at high temperature in the kiln. They are desirable lining materials for high wear equipment due to precise dimensions, high density, high alumina content, good flatness and stable quality.



Technical Data:

92 series 95 series

Alumina Content 92 95

Hardness (Mohs) 9 9

Water Absorption 0.01% 0.01%

Fluctual Strength 255 275

Density 3.60-3.62 g/cm3 3.65-3.68g/cm3

Various Size:

Square-end

65×12.7×12.7 130×12.7×12.7

Key way tiles

147×50×72 147×50×36 147×50×28 147×50×38

Rectangular

 $65 \times 12.7 \times 12.7$ $76.2 \times 25.4 \times 6.4$ $100 \times 100 \times 13$ $100 \times 100 \times 25$

 $101.6 \times 25.4 \times 6.4 \quad 130 \times 12.7 \times 12.7 \quad 130 \times 25 \times 12.7 \quad 130 \times 35 \times 25$

 $150 \times 100 \times 25 \quad 150 \times 100 \times 50 \quad 150 \times 100 \times 13 \quad 150 \times 100 \times 6.5$

 $150x50x6.5 \qquad 150x50x12 \quad 150x50x25 \quad 325 \times 325 \times 25$

Trapezoid

 $65 \times 35 \times 32 \times 12.7 \quad 65 \times 50 \times 47 \times 12.7 \quad 130 \times 35 \times 32 \times 12.7 \quad 130 \times 50 \times 44 \times 25$

 $130 \times 50 \times 47 \times 12.7$ $130 \times 50 \times 47 \times 20$ $130 \times 50 \times 47 \times 25$ $228.6 \times 47.3 \times 40 \times 25$

Arch

150×75×12.7R200 150×50×44×25R4 77×51×10R100

Diamond

 $20 \times 20 \times 10$ $20 \times 20 \times 6$ $20 \times 20 \times 4$ $24.4 \times 21.3 \times 12.7$

Rectangular with hole

130×12.7×12.7 130×25×12.7 130×35×25 150×100×25

Cylinder

 $\emptyset 80 \times \emptyset \ 105 \times 60$ $\emptyset \ 100 \times \emptyset \ 130 \times 40$ $\emptyset \ 150 \times \emptyset \ 176 \times 60$ $\emptyset \ 200 \times \emptyset \ 226 \times 50$

 $\emptyset \ 225 \times \emptyset \ 251 \times 50$ $\emptyset \ 250 \times \emptyset \ 276 \times 50$ $\emptyset \ 300 \times \emptyset \ 326 \times 40$ $\emptyset \ 220 \times \emptyset \ 240 \times 600$

Grooved

150×50×50×50R5 150×50×45×50R5 150×50×47.5×25R4

150×50×50×25R4 150×50×47.5/50×25R5 150×50×44×25R4

150×29.25×23.5×25R4 150×29.25×26.5×25R4

Note: We can make according to your requirement.

Features:

High hardness

Rockwell hardness of high alumina ceramics is up to HRA80-90 which is second only to diamond and far exceeds wear-resistant steel stainless

Excellent wear resistance

The wear resistance of high alumina ceramics is 266 times that of

manganese steel and 171.5 times that of high chromium cast iron. According to our investigation & follow-up to the clients, the service life of equipment can be prolonged over 10 times under the same working conditions.

Corrosion resistance

High alumina ceramics are inorganic oxides with extremely stable molecular structure and no electrochemical corrosion, thus they can resist erosion of acid, alkali, salt solutions and organic Solvents.

Thermostability

Working temperature of high alumina ceramics can be as high as 1400 ℃.

Good self-lubricity

High alumina ceramics have the properties of self-lubricity and inadhesion, the roughness is only 1/6 that of steel pipes thus less flow Resistance.

Light weight

The density of high alumina ceramics is about 3.6g/cm3, which is only half that of steel, thus easy for construction and installation

Wear solutions we provide:

This is a complex process.Our engineers understand wear problems and specify solutions to meet your operational environment.

Material properties, tolerances, flatness, attachment methods, and material costs are all considered in a wear solution.

Applications of High Alumina Ceramics

Applications Markets

Chutes/HoppersCoal-fired Power GenerationClassifier ConesAbrasive Material Handling

Cyclone Separators
Elbows
Abrasive Material Ha
Chemical Processing
Food Processing

• Fan Housing & Blades • Iron/Steel Manufacturing

Lined Piping
Nozzles
Mineral Processing
Powder/Bulk Solids Conveying
Wear Panels
Pulp & Paper Manufacturing

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