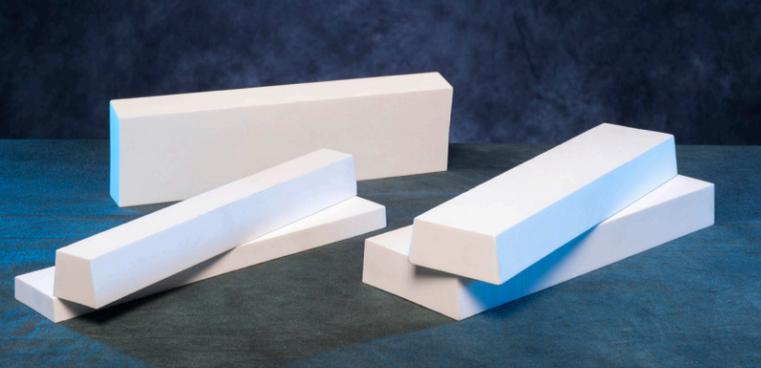




WearLine[®]

The Ultimate Solution to Severe Abrasion





WearLine®

The Ultimate Solution to Severe Abrasion

HUDCO enables you to win the war against severe industrial abrasion with WearLine®, the remarkable technological advancement in wear resistant ceramic tile. Developed by HUDCO from years of intensive research and practical in-field experience, WearLine® is one of the few wear resistant materials that effectively resists both impact abrasion and sliding abrasion. As a result, WearLine® saves the materials handling industry more maintenance dollars than other wear resistant lining available.

WearLine® is a high density ceramic composed of 90 – 92% microcrystalline alpha alumina and less than 2% silica. WearLine® has the highest density (232.2 Lb/ft³) and the lowest residual silica content of any commercially available ceramic tile. In field applications and laboratory tests WearLine® has consistently out performed in both wear and impact resistance. WearLine® is one of the most effective and economical ceramic tile on the market.

ADVANTAGES

Superior Wear Resistance

WearLine®'s firing methods (23 hours longer and 1000°F higher) are superior to other ceramic tiles giving WearLine the highest density and best wear characteristics.

High Impact Resistance

3 to 5 times better impact resistance than standard ceramic due to stronger grain boundaries.

Saves Down Time & Maintenance Costs

WearLine® lasts 3 to 7 times longer than the other ceramics tile resulting in increased productivity.

Increased Flow Rates

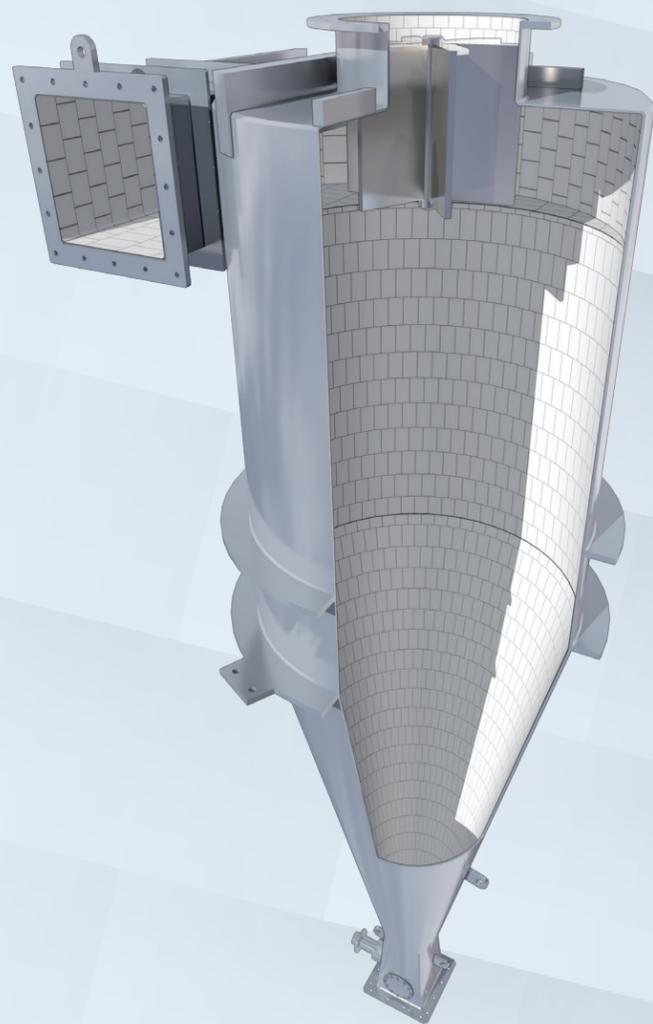
WearLine® polishes in use resulting in decreased friction, reduced material blockage and increased through put.

Dimensional Stability

WearLine® maintains its exceptional dimensional stability and resists temperatures up to 2900 without warping or loss of abrasion resistance.

Low temperature applications

WearLine®'s surface is impervious to moisture preventing material from freezing and sticking at low temperatures.



WearLine lined cyclones like this operate at cement mills and steel mills. Installed throughout many markets served.

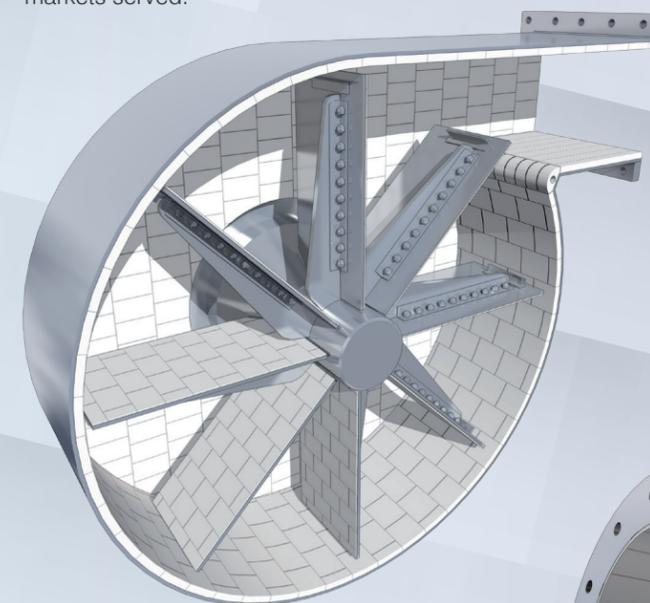
Wearline® High Alumina Ceramic

Property	SI Units
Alumina Oxide	90 – 92%
Bulk Density	3.52 – 3.6 g/cm³
Young's Modulus	20°C 270 GPa
Vickers Hardness	20°C 9 GPa
Shear Modulus	20°C 110 GPa
Modulus of Rupture	RT 275 MPa
Compressive Strength	20°C 1.77 GPa
Maximum Use Temp	1250°C
Apparent Porosity	0%

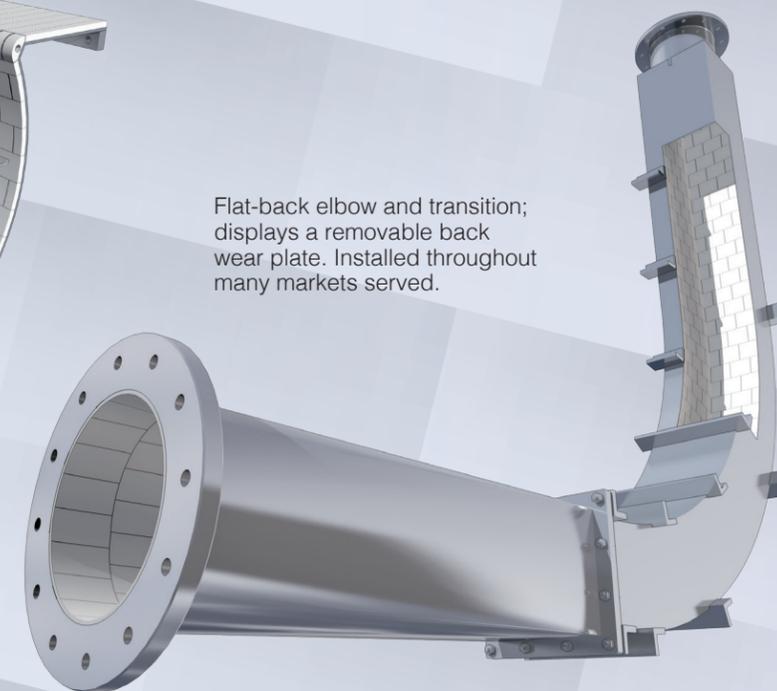
WearlineMax®-96 High Alumina Ceramic

Property	SI Units
Alumina Oxide	96%
Bulk Density	3.72 g/cm³
Flexural Strength	20°C 358 MPa (psi x 10³)
Elastic Modulus	20°C 9 GPa (psi x 10⁶)
Hardness	11.5 GPa (kg/mm²) 78 R45N
Fracture Toughness	4.5 MPa m ^{1/2}
Compressive Strength	2068 MPa (psi x 10³)
Maximum Use Temp	1250°C
Apparent Porosity	0%

Large industrial fans operate in abrasive environments at mills. Installed throughout many markets served.



Flat-back elbow and transition; displays a removable back wear plate. Installed throughout many markets served.





Applications

Ash Slurry Lines	Dust Collector Liners	Pulverizer Bodies
Ball Mill Liners	Exhaust Fan	Pulverizer Classifier
Bark Feed Screws	Housings	Cones
Bark Handling Chutes	Exit Ducts	Pulverizer Discharge
Blow Line Pipes	Feed Chutes	Valves
Box Back Elbows	Flat Back Elbows	Rock Bed Wall Liners
Clinker Hoppers	Gas Scrubber Lines	Silos & Bunkers
Coal Troughs	Hog Fuel Handling	Transitions
Conveyor Transitions	I.D. Fan Housings	Truck and Rail Car
Chutes	Mill Body Housings	Coal Dumps
Cyclones	Ore Bunkers	Washer Boxes

Markets Served

Aggregate	Foundry	Potash
Asphalt	Frac Sand	Pulp & Paper
Cement	Glass & Frit	Quarry
Chemical	Grain	Recycling
Coal Fired Power	Gypsum	Roofing Materials
Coal Processing	Iron & Steel	Sand & Gravel
Dredging	Mineral Processing	Sugar
Fertilizer	Mining	Wastewater
Fiberglass	Oil Sands	Powder/Bulk Material
Fly Ash	Oil & Gas	Handling
Food Processing	Petrochemical	

WearLine® Size Availability

6x4x1/4	4x2x1/4
6x4x1/2	4x2x1/2
6x4x1	4x2x1
6x4x2	4x1x1/8
6x1x1/4	4x1x1/4
6x2x1/4	2x1x1/8
6x2x1/2	1x1x1/8
6x2x1	1x1x1/4
6x2x2	6x2x2 T&G
3x4x1/2	9x4.5x1/2
3x4x1	9x4.5x1/2
3x4x2	9x4.5x1
	9x4.5x2



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HUDCO Industrial Products offers these other industrial products and services:

HUDCOAir Air-supported conveyor
MistAire Dust Extraction System
WearSpan
Engineering Services
Field Services
Specialized Product Development
Technical Evaluation
Testing and Evaluation

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