# C.L. SMITH INDUSTRIAL COMPANY Advanced Abrasive Wear Solutions

## CERAMICS

800.764.0080 www.clsmithindustrial.com





# FABRICATED COMPONENTS

# **CHUTES / HOPPERS**







**SCREWS / TROUGHS** 







#### **PATENTED BURNER NOZZLE LININGS**



U.S. Patent # 8,210,111 B2





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# FABRICATED COMPONENTS











#### **EXHAUSTER FANS Dynamic Balancing Available**





After







#### **CONES / CYCLONES**





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# MATERIALS

# **ALUMINA CERAMICS**



**ISO-PRESS** 





**SILICON CARBIDES** 

COLORED TILES









Maximum Operating Temperature 200°



Maximum Operating Temperature 350°



Max Temperature Range White - up to 500°F Red - up to 650°F



C.L. Smith Industrial Company

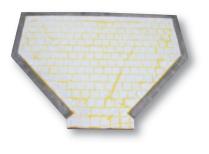
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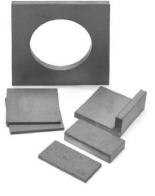
#### **ADHESIVES**





### **TUNGSTEN CARBIDES**







#### **BASALT / SPUNCAST CERAMIC LINING**





#### **TROWELABLE WEAR COMPOUND**



Maximum Operating Temperature 400°



Maximum Operating Temperature 200°

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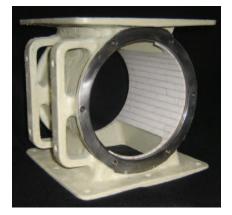




#### **VACUUM BONDING**







### **BRAZING / TUNGSTEN CARBIDE**







## **ENGINEERING SERVICES**



- Field Measure
- Hanger Studies
- Product Design
- Onsite Representation



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### FIELD INSTALLATIONS





OSHA / MSHA Certified Field Installers



## **SHOP FABRICATION AND INSTALLATION**







#### **RECONDITIONING SERVICES**





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# **COMPANY HISTORY**

C.L. Smith Industrial Company, a family owned business, is headquartered in St. Louis, Missouri. We specialize in solving abrasive wear problems for the coal fired power industry, mining industry, steel industry, cement industry, grain industry, pulp and paper industry and asphalt industry. For over thirty years, our fine reputation has been built on quality, service and customer satisfaction.

C.L. Smith Industrial Company provides service and materials to improve the reliability and service life of equipment and systems which are subjected to wear damage caused by abrasion or corrosion.

Our materials include high density plain and weldable alumina ceramic from 1/8" to 2" thick, vacuum bonded ceramic, ISO pressed ceramic cylinders, silicon carbide nitride bonded, silicon carbide reaction bonded, tungsten carbide, RTV silicone, epoxy adhesives, trowelable wear compounds and basalt linings.

These materials can be shop or field installed in assemblies you provide to us or fabricated in our shop to your specifications and requirements. Most of these products are available for installation by you; however, some applications may require that we install the products in order to insure they will provide the service life you will require.

C.L. Smith Industrial Company has ceramic lined classifier cones, fuel piping elbows, fan assemblies, fan blades, pulverizers, mill walls, cyclones, chutes, hoppers, bottom ash piping, burner nozzles, ash paddles, screw conveyors, transitions, asphalt silos and batch cones, just to name a few.

Our staff includes a sales force covering the United States and Canada, engineers equipped with CAD, AWS and ASME certified welders and a team of experienced ceramic installers. If you have any questions or wish to learn more about our products and services, please call our office.

#### **CERAMICS:**

Plain Ceramic					
PL	1	х	4	х	1/8″
PL	4	х	4	х	1/8″
PL	4	х	6	х	1/8″
PL	1	х	4	х	1/4″
PL	4	х	4	х	1/4″
PL	4	х	6	х	1/4″
PL	2	х	6	х	1/2"
PL	4	х	6	х	1/2"
PL	2	х	6	х	1″
PL	4	х	6	х	1″

#### Weldable Ceramic

WS 2 x 6 x 1/2" WS 4 x 3 x 1/2" WS 4 x 6 x 1/2" WS 2 x 6 x 1" WS 4 x 3 x 1" WS 4 x 6 x 1"

#### Hex Mesh

6 x 6 x 1/8" 6 x 6 x 1/4" 6 x 6 x 1/2" 6 x 6 x 3/8"

#### **ADHESIVES**

CLS-111 White RTV Silicone CLS-444 High-Temp Red RTV Silicone CLS-773 Regular Set Epoxy CLS-70-4 Fast Set Epoxy CLS-63 Heat Resistant Epoxy CLS-101 Fast Set Wear Compound CLS-202 Regular Set Wear Compound CLS-404 Heat Resistant Wear Compound



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