

## PRODUCTS FOR MINING, MINERALS PROCESSING AND WEAR



### Blasch VERKAPSE™ Cyclone and Hydrocyclone Liners

Blasch high performance monolithic drop-in replaceable silicon carbide liners are specifically engineered for classifying applications in sizes up to 60 inch diameter. These liners are designed for highly abrasive ores process such as coal, iron ore, gold, copper, cement, FGD and phosphate mining. With a variety of highly abrasion-resistant compositions available, both OEMs and single plants can optimize classification efficiencies, maximize cyclone life and eliminate costly installation traditionally found in epoxied tile constructions.



### Blasch CeraLine™ Ceramic Lined Elbows

Available as a turnkey unit with steel pipe & flanges, Blasch ceramic lined elbows are engineered for unparalleled life. Blasch pre-cast tight tolerance shapes are used to line pipe with diameters ranging from one-half inch to several feet. Premature wear and interrupted flow are eliminated with CeraLine's engineered joints and smooth bore, reducing pressure drop and flow restriction.



### Blasch CeraLine™ Pipe and Spool Linings

Blasch's unique casting process contributes to the successful application of smooth bore abrasion-resistant pipe linings. Pipe diameters ranging from 1/2" up to several feet can be lined with Blasch pre-cast tight-tolerance shapes available with engineered joints and smooth bore that eliminates premature wear and interrupted flow. Available in a variety of premium refractory materials and complete turnkey units with steel pipe and flanges, these systems are individually engineered and offer unparalleled life and ease of installation.



### Blasch Flash, Quench, Blast and Impingement Block Linings

Autoclave and pressure oxidation developers continue to improve in scale and process conditions. They appreciate the limitless size and shape capability that Blasch offers to help them engineer very complex, high temperature, abrasion and corrosion resistant lining systems for items like flash pots, quench vessels, choke tubes, vent blast tubes, impingement blocks, oxygen injection nozzles, pipe and valve systems.



### Blasch Abrasion-Resistant Valves and Components

Blasch helps designers and process engineers control costs with refractory solutions throughout their process. Reliable high performance valves and other shapes are custom engineered to convey and control fluids and gases. The superior dimensional control afforded by the Blasch process results in close tolerance net shape parts like valves, nozzles, seats, bearings and other ancillary parts that help minimize process variability.

By employing Blasch's advanced ceramic technology, many manufacturers and original equipment suppliers have successfully increased throughput and reliability of their thermal processing operations.



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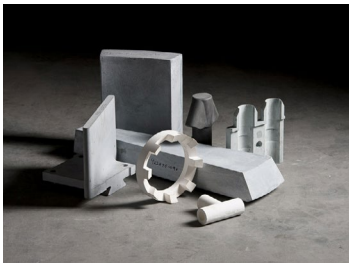
### Blasch Pump Components

Reliable wear-resistant linings are designed to optimize grinding mill performance for mining, oil, gas and general industrial uses. Suction side plates, impellers, volute casings, seals and tailing linings are custom-designed, maximizing mill productivity, maintenance downtime and ore processing costs. Blasch engineers can design, manufacture, repair and install linings on new or worn pump parts by utilizing Blasch abrasion-resistant materials, such as OXYTRON™ and NITRON™ silicon variability enabling unparalleled life over conventional high alloy, rubber or other lining systems.



### Blasch In-Line Chokes and Reducers

Blasch engineers help designers and process engineers control other costs with refractory solutions throughout their process. Reliable high performance valves and other shapes are custom engineered to convey and control fluids and gases. The superior dimensional control afforded by the Blasch process results in close tolerance net shape parts like valves, nozzles, seats, bearings and other ancillary parts that help minimize process variability for our customers



### Blasch Reactor Vessel Linings and Components, Bubble Caps, and Tuyeres

Plant developers continue to advance processes, temperature, efficiency, plant life guarantees and fuel sources. Blasch's virtually limitless size and shape capability enables them to engineer very complex, high temperature, abrasion and corrosion-resistant lining systems. Reactor sleeves, bubble caps and tuyeres available in several abrasion-resistant materials are far superior to metallic components or dense tiled constructions. Extend time between outage cycles and reduce maintenance downtime with Blasch pre-cast shapes.



### Blasch FGD and Ceramic Spraying Nozzles

The Blasch nozzle is designed for use in the Power Generation emission industry. FGD and spray nozzles are made in a wide variety of silicon carbide materials including NITRON™ and OXYTRON™. Blasch NITRON and OXYTRON nozzles have been used successfully in numerous applications such as gas cooling, NOx, SOx and particulate removal, atomizing, vortexing, spraying, injecting and combustion; all involving a broad range of shapes and sizes. Threaded, flanged and various other mounting configurations are available as well as combined with a metallic assembly.



### Blasch Custom Shapes

Blasch engineers can help you custom-design a product that will fit your exact requirements. With our vast shape making capability, there is no shape we can't make or provide for you. For decades, engineers and designers have come to Blasch when no one else could cast the shape that they required. The superior dimensional control afforded by the Blasch process results in closely toleranced net shape parts that are repeatable from the first part to the 1,000th.