

DURASTRIKE® ZTA

ABRASION RESISTANT CERAMIC FOR SEVERE IMPACT WEAR APPLICATIONS

DESIGNED TO PERFORM & OUTLAST

Durastrike® ZTA, Dense Zirconia Toughened Alumina was designed & developed after extensive field trials and R&D collaboration to overcome abrasion challenges in severe impact applications where traditional materials underperform.

BENEFITS



Improve productivity, profitability, and safety



Reduce downtime & maintenance



Cost-effective upgrade to traditional wear materials

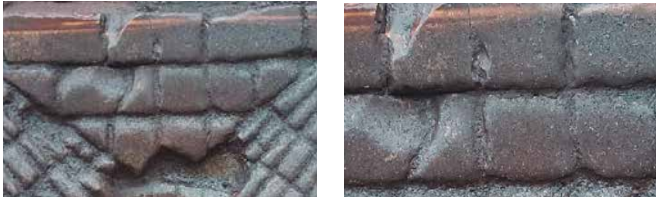


DURASTRIKE® ZTA

Durastrike® ZTA is in a special class of ceramics where zirconia impregnation controls microcrack propagation within the tile during impact, providing excellent resistance to abrasion and fracture. It significantly outperforms traditional dense aluminium oxide ceramics in terms of both impact and erosion.

COMMON FAILURES - EXAMPLES OF TRADITIONAL WEAR MATERIALS

Standard ceramic fracture & joint erosion



Temporary metal patches



DURASTRIKE® ZTA - HIGH PERFORMANCE CERAMIC MATERIAL

No fractures or joint erosion



Durastrike® ZTA offers 3-6 times greater impact resistance compared to traditional ceramics in applications where the impingement angle is $>30^\circ$ with the conveyed material density between 110 - 165 lb/cu ft (1.76 - 2.64 g/cm³).

Property	Durastrike® ZTA
Density, g/cm ³	> 4.17
Hardness, HV	1900
Fracture Toughness, K _{1c}	6.8
Flexural strength (MOR), MPa	450

TYPICAL MARKETS & APPLICATIONS



Mining (all types)



DRI charging



Material transfer points



Slurry pump components



Port facilities



Sinter plant



Piping components

Benefit from our expertise.

Saint-Gobain Performance Ceramics & Refractories engineers and researchers collaborate with you, our customers, to solve operational challenges with abrasion resistant ceramic lining systems.

For more information:

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