

Benchmark Performance Zirconia Toughened Alumina

ACEarmour™ wear liners have been designed to offer increased resistance to both impact and abrasion, specifically in harsh bulk materials handling applications.

ACEarmour™ ceramic wear liners are composed of Zirconia Toughened Alumina (ZTA) tiles.



FEATURES

- ★ One sided fixing system
- ★ Tapered to suit conveyors and apron feeders
- ★ Adjustable shims to optimise liner height and maximise wear life
- ★ Designed with economy and safety in mind



BENEFITS

- Superior impact and abrasion resistance compared to standard alumina liners
- Improved sound reduction
- Smooth ceramic face enhances flow efficiency
- Low cost per tonne benefit

For Additional Information

Call ACE on +61 8 9303 9944 or email info@australce.com



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Item	Description	Unit	Result
Composition	ZTA	%	21.3
Material Properties	Total Porosity	%	2.5
	Apparent Density	g/cm ³	4.2
Mechanical Properties	Hardness	HV10	1551
	Fracture Toughness	MPa.m ^{1/2}	2.9
Rubber	Hardness	Shore A	60 +/- 5
	Elongation	%	400
	Resilience	%	65

Note:
Fracture toughness (K_{1c}) calculations were carried out using indentation methods used for median crack system; ref. Evans and Charles using HV values. A number of different equations and methods exist for fracture toughness calculation within the industry and may vary between analytical laboratories. Different calculation methods may not be readily comparable in terms of values as they may be based on different assumptions and empirically derived constants, and different values may be obtained depending on the method used. Thus all values for fracture toughness are indicative and best used comparatively using a preferred method of calculation.

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