



CeraBlast™ AZ/NZ

High-Performance Alumina-Zirconia Ceramic Grits

Product Description and Technical Data:

CeraBlast™ AZ and CeraBlast™ NZ are alumina-zirconia composite ceramic grits with a specialized fused microstructure designed to provide enhanced performance compared with conventional alumina abrasive grains. Their combination of higher density, hardness, toughness and wear resistance provides a durable abrasive action for demanding cleaning, surface preparation and finishing operations.

The two grades offer complementary performance characteristics. CeraBlast™ AZ emphasizes hardness, toughness, durability and consistency of surface finish, with reduced particle embedment and no ferrous contamination. CeraBlast™ NZ combines high density, high toughness and sharper grain geometry, making it particularly suitable for wet-blasting applications requiring effective separation and a high, consistent removal rate.



Performance Advantages:

AZ

- Longer service durability than conventional alumina grains
- Consistent and homogeneous surface finish
- Reduced particle embedment
- No ferrous contamination
- Reduced waste generation/disposal

NZ

- High toughness and wear resistance
- High density
- Sharper grain structure
- Effective media separation in wet blasting
- High and consistent removal rate

Main Applications:

Surface Cleaning

Angular cutting action for removal of unwanted surface material.

Surface Preparation

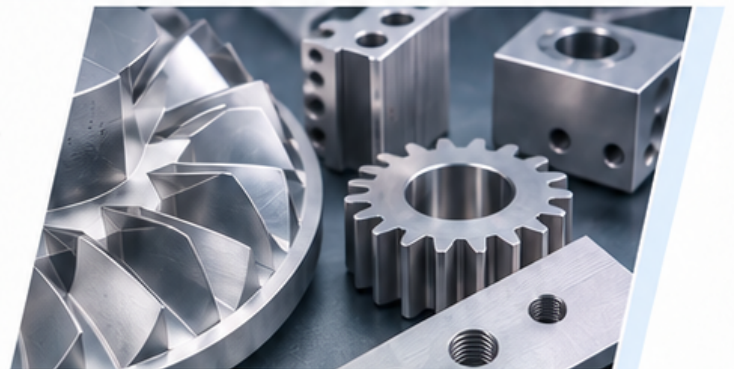
Controlled abrasive profiling prior to coating or subsequent treatment.

Surface Finishing

Consistent abrasive treatment where surface texture and uniformity are important.

Wet Blasting – CeraBlast™ NZ

High-density, sharp grit for wet-blasting processes requiring efficient separation and consistent material removal.



CeraBlast™ AZ/NZ Physical Properties:

Property	CeraBlast™ AZ	CeraBlast™ NZ	Units
Density	4.3	4.7	g/cm ³
Hardness	21	19	GPa, 50 g load
Toughness Index	+	++	Source index
Sharpness Index	–	++	Source index
Available Grades	#14 – #220	#14 – #220	Grit



CeraBlast™ AZ/NZ

Technical Properties

CeraBlast™ | Ceramic Blasting & Surface Treatment Media



CeraBlast™ AZ/NZ Typical Chemical Analysis:

Composition	CeraBlast™ AZ wt%	CeraBlast™ NZ wt%
Al ₂ O ₃	75	60
ZrO ₂	25	40
TiO ₂	< 0.5	< 0.5
SiO ₂	< 0.4	< 0.4
Fe ₂ O ₃	< 0.5	< 0.5
Others (MgO, Na ₂ O, etc.)	< 0.5	< 0.5



CeraBlast™ AZ/NZ Available Sizes:

Product	Available Grade Range
CeraBlast™ AZ	Grit #14 to Grit #220
CeraBlast™ NZ	Grit #14 to Grit #220

Broad grit coverage: #14 to #220

A wide size range supports cleaning, surface preparation and finishing applications across many blasting processes.

Selecting Between AZ and NZ:

Requirement	CeraBlast™ AZ	CeraBlast™ NZ
Higher hardness	Primary characteristic	–
High toughness	Yes	Very high
High density	4.3 g/cm ³	4.7 g/cm ³
Sharp cutting action	Moderate	Higher
Consistent surface finish	Key benefit	Yes
Wet-blasting performance	Suitable	Key application strength
Reduced particle embedment	Key benefit	–
No ferrous contamination	Key benefit	Ceramic media

Application / Process Notes:

CeraBlast™ AZ — Reference Source Trial: The source presentation reports comparative blasting trials on 17-4 stainless steel, medical grade, at 4 bar, where AZ demonstrated greater durability than BFA and a more consistent, homogeneous surface finish.

CeraBlast™ NZ — Wet Blasting: The source specifically identifies improved wet-blasting performance through better media separation and a high, consistent removal rate.

CeraBlast™ AZ/NZ Packaging:

1 kg, 5 kg, 10 kg and 20 kg plastic containers

CeraBlast™ AZ/NZ Ordering & Range Identification:

Product Family	CeraBlast™
Product Range	CeraBlast™ AZ/NZ – Alumina-Zirconia Ceramic Grits
AZ Grade Designation	Grit #14 to Grit #220
NZ Grade Designation	Grit #14 to Grit #220
Packaging	1 kg, 5 kg, 10 kg and 20 kg plastic containers



For product selection and application trials, contact Pan Abrasives.