Pan Abrasives

Global Products - Local Service

Clean
Deflash
Protect

ABRASIVE MEDIA GUIDE

One Stop Local Supply Source



Pan Abrasives
Global Products - Local Service

One Stop
Local Supply
Source

Clean
Deflash
Protect

Company Profile

Since 1973, Pan Abrasives has played a leading role with a comprehensive supply program supporting both local and regional surface preparation and finishing industry requirements.

This "**Global Products Local Service**" comprehensive supply program includes abrasive blasting media such as EnviroGrit™ Garnet, QuickCut™ Aluminium Oxide, PanaShot™ Steel Shot, PanaGrit™ Steel Grit, BrightBlast™ Glass Beads, etc. and complementary PanBlast™ equipment and accessories for abrasive blasting such as pressure blast pots, suction and pressure blast cabinets, personal protective equipment, airless painting systems, airless wheel blast parts, etc.

With our ready stock of products in both Singapore and Malaysia, we are well equipped to be your "**One Stop Local Supply Source**" via our team of sales and service personnel who are just one phone call away!

Visit www.pan-abrasives.com to view high-resolution images and e-catalogs of our broad product range.

Singapore
Pan Abrasives Pte Ltd
2 Woodlands Sector1
#05-06 Woodlands Spectrum I
Singapore 738068

Tel : 65-6861-6988
Fax : 65-6861-0919

Malaysia
Pan Abrasives Sdn Bhd
Kompleks Hamodal 6
Lot 3291, 5 ½ Miles, Jalan Kapar,
42100 Klang, Selangor Darul Ehsan.

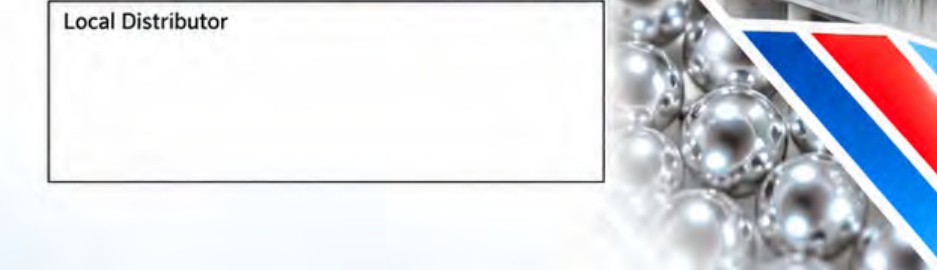
Tel : 60-3-3290-3518
Fax : 60-3-3290-2187

www.pan-abrasives.com











Local Distributor

BLASTING PERFORMANCE REFERENCE

NOZZLE PRESSURE, AIR, POWER & ABRASIVE REQUIREMENTS

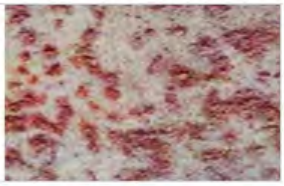
Nozzle - Φ inch - Φ mm	Air, Power & Abrasive Requirement	Nozzle Pressure - psi (kpa) 50 (345)	60 (414)	70 (483)	80 (552)	90 (621)	100 (689)	125 (862)
#2 - 1/8" - 3.2 mm	Air - ft³/min (m³/min)	12 (0.34)	13 (0.37)	15 (0.42)	18 (0.51)	19 (0.54)	21 (0.59)	26 (0.74)
	Power - hp (kw)	1.75 (1.30)	2 (1.49)	2.5 (1.86)	3 (2.24)	3.5 (2.61)	4 (2.98)	6 (4.47)
	Abrasive - lb/hr (kg/hr)	70 (32)	80 (36)	90 (41)	100 (45)	110 (50)	120 (54)	135 (61)
#3 - 3/16" - 4.8 mm	Air - ft³/min (m³/min)	25 (0.71)	30 (0.85)	35 (0.99)	40 (1.13)	43 (1.22)	45 (1.27)	60 (1.70)
	Power - hp (kw)	5 (3.73)	8 (5.97)	9 (6.71)	9.5 (7.08)	10 (7.46)	10.5 (7.83)	16 (11.93)
	Abrasive - lb/hr (kg/hr)	150 (68)	170 (77)	200 (91)	215 (98)	240 (109)	260 (118)	320 (145)
#4 - 1/4" - 6.4 mm	Air - ft³/min (m³/min)	50 (1.42)	55 (1.56)	60 (1.70)	70 (1.98)	75 (2.12)	80 (2.27)	95 (2.69)
	Power - hp (kw)	10 (7.46)	12 (8.95)	13 (9.69)	16 (11.93)	17 (12.68)	18 (13.42)	25 (18.64)
	Abrasive - lb/hr (kg/hr)	270 (122)	300 (136)	350 (159)	400 (181)	450 (204)	500 (227)	675 (306)
#5 - 5/16" - 8 mm	Air - ft³/min (m³/min)	80 (2.27)	90 (2.55)	100 (2.83)	115 (3.26)	125 (3.54)	140 (3.96)	190 (5.38)
	Power - hp (kw)	17 (12.68)	20 (14.91)	25 (18.64)	27 (20.13)	28 (20.88)	30 (22.37)	36 (26.85)
	Abrasive - lb/hr (kg/hr)	470 (213)	530 (240)	600 (272)	675 (306)	750 (340)	825 (374)	1000 (454)
#6 - 3/8" - 9.5 mm	Air - ft³/min (m³/min)	110 (3.12)	125 (3.54)	145 (4.11)	160 (4.53)	175 (4.96)	200 (5.66)	275 (7.79)
	Power - hp (kw)	25 (18.64)	29 (21.63)	32 (23.86)	35 (26.10)	40 (29.83)	45 (33.56)	57 (42.50)
	Abrasive - lb/hr (kg/hr)	675 (306)	775 (352)	875 (397)	975 (442)	1060 (481)	1100 (499)	1350 (612)
#7 - 7/16" - 11 mm	Air - ft³/min (m³/min)	150 (4.25)	170 (4.81)	200 (5.66)	215 (6.09)	240 (6.80)	255 (7.22)	315 (8.92)
	Power - hp (kw)	35 (26.10)	40 (29.83)	45 (33.56)	50 (37.28)	55 (41.01)	60 (44.74)	70 (52.20)
	Abrasive - lb/hr (kg/hr)	900 (408)	1000 (454)	1200 (544)	1300 (590)	1400 (635)	1550 (703)	1800 (816)
#8 - 1/2" - 12.7mm	Air - ft³/min (m³/min)	200 (5.66)	225 (6.37)	250 (7.08)	275 (7.79)	300 (8.50)	340 (9.63)	430 (12.18)
	Power - hp (kw)	45 (33.56)	50 (37.28)	55 (41.01)	63 (46.98)	70 (52.20)	75 (55.93)	95 (70.84)
	Abrasive - lb/hr (kg/hr)	1200 (544)	1350 (612)	1500 (680)	1700 (771)	1850 (839)	2025 (919)	2525 (1145)
#10 - 5/8" - 16 mm	Air - ft³/min (m³/min)	300 (8.50)	350 (9.91)	400 (11.33)	450 (12.74)	500 (14.16)	550 (15.58)	700 (19.82)
	Power - hp (kw)	70 (52.20)	80 (59.66)	90 (67.11)	100 (74.57)	110 (82.03)	120 (89.48)	150 (111.85)
	Abrasive - lb/hr (kg/hr)	1900 (962)	2200 (998)	2400 (1089)	2700 (1225)	3000 (1361)	3300 (1497)	4000 (1814)
#12 - 3/4" - 19 mm	Air - ft³/min (m³/min)	430 (12.18)	500 (14.16)	575 (16.28)	650 (18.41)	700 (19.82)	800 (22.66)	1100 (31.15)
	Power - hp (kw)	100 (74.57)	115 (85.76)	130 (96.94)	145 (108.13)	160 (119.31)	175 (130.50)	215 (160.33)
	Abrasive - lb/hr (kg/hr)	2700 (1225)	3100 (1406)	3500 (1588)	3900 (1769)	4300 (1950)	4700 (2132)	5700 (2586)

Note:

This table is to be used for reference only.
The abrasive quantity requirements are based on sand with a bulk density of 100lb/ft³.
Results will vary with different abrasive types.

SURFACE CLEANLINESS REFERENCE

VISUAL GUIDE TO BLASTED SURFACE STANDARDS

	Condition A	Condition B	Condition C	Condition D
Unblasted				
Blasted to Sa1				
Blasted to Sa2				
Blasted to Sa2.5				
Blasted to Sa3				

Note:

The above pictures are for information purposes only to illustrate various blasted surface cleanliness levels.

Do not use this illustration as a blasted surface cleanliness comparator.

Surface cleanliness comparators are available from the International Organization for Standardization (ISO).

One Stop Local Supply Source

PanAbrasives

Global Products - Local Service

Index



Rank	Product	Page
01	QuickCut™ Aluminium Oxide	1
02	BrightBlast™ Glass Beads (Blasting)	3
03	BrightBlast™ Glass Beads (Peening)	5
04	PanaGrit™ Carbon Steel Grit	7
05	PanaShot™ Steel Shot (Blasting)	9
06	PanaShot™ Peening Shot	11
07	CeraBlast™ Blasting Beads	13
08	CeraBlast™ AZ/NZ	15
09	CeraBlast™ F	17
10	CeraBlast™ SB Series	19
11	CeraPeen™ HDC	21
12	CeraPeen™ YZ	23
13	CeraPeen™ Peening Beads	25
14	LiteBlast™ Plastic Media	27
15	LiteBlast™ Cryogenic Deflash Media	29
16	LiteBlast™ Deflash Media	31
17	LiteBlast™ BB Series	33
18	EnviroGrit™ Garnet	35
19	Silica Sand	37
20	EnviroGlass™ Crushed Glass	39
21	HardCut™ Silicon Carbide	41
22	NaturalGrit™ Organic Abrasives	43
23	MillRite™ Milling Beads	45
24	CleanBlast™ Zinc Shot	47
25	WireBlast™ Cut Wire (As Cut)	49
26	WireBlast™ Conditioned Cut Wire	51
27	PaintMix™ Line Marking Beads	53
28	SatinBlast™ Stainless Steel Shot	55
29	DeFlash Media	57
30	FastBlast™ Chilled Iron Grit	59
31	FastBlast™ Chilled Iron Shot	61
32	JetBlast™ Copper Slag	63
33	PanaCut™ Granite Cutting Grit	65
34	ProFinish™ Olivene	67

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

QuickCut™ Aluminium Oxide

Product Description and Technical Data:

QuickCut™ Aluminium Oxide is one of the most economical processing medias for many dry and wet process applications where anything from a coarse profile to a micro finish is required.

This sharp, angular abrasive is the second hardest mineral after diamond and is especially suitable when no ferrous contamination can be tolerated on the processed surface.

It can be used for the roughest cutting-down operations or in well-conditioned, pebbled form for producing very low microinch finishes on precision dimensioned parts. Its high density and sharp, angular structure make it one of the fastest cutting abrasives available.

QuickCut™ is obtained by a process of electrically fusing and processing high-grade Bauxite to produce Brown Aluminium Oxide, and high-grade Alumina in the case of White and Pink Aluminium Oxide. Their crystalline nature contributes to their hard and fast cutting properties. It is also used widely in the manufacture of bonded and coated abrasives.

QuickCut™ can be recycled many times depending on the grade of material and the actual process and may be used in most types of standard abrasive blasting equipment.







QuickCut™ Abrasive Properties:

Shape	Angular
Hardness (Moh Scale)	9
Particle S.G.	3.9 - 3.94
Colour	Brown, Pink, White
Bulk Density (kg/m³)	2400
Size Standard	FEPA / ANSI

Brown Aluminium Oxide	GE D50TF5-S8 Class D	ANSI B74.12	Rolls Royce CSS12
White Aluminium Oxide	GE D50TF5-S8 Class A	ANSI B74.12	CID A-A-59316



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

QuickCut™ Aluminium Oxide

QuickCut™ Typical Chemical Composition:

Compound	Brown #120 and below	Brown #150 - #220	Brown #240	Pink	White
Al_2O_3	≥ 95.0%	≥ 93.0%	≥ 92.0%	≥ 99.0%	≥ 99.0%
TiO_2	≤ 3.0%	≤ 3.6%	≤ 4.5%	N/A	N/A
SiO_2	≤ 1.3%	≤ 1.5%	≤ 2.0%	< 0.2%	< 0.1%
Cr_2O_3	N/A	N/A	N/A	< 0.5%	N/A
Fe_2O_3	≤ 0.16%	≤ 0.3%	≤ 0.4%	< 0.15%	< 0.1%
CaO	≤ 0.5%	≤ 0.6%	≤ 0.7%	< 0.5%	< 0.5%
Na_2O	N/A	N/A	N/A	< 0.5%	< 0.5%

QuickCut™ Available Sizes:

Grade	12	14	16	20	24	30	36	40	46
Microns	1400 - 2000	1180 - 1700	1000 - 1400	850 - 1180	600 - 850	410 - 500	425 - 600	355 - 500	300 - 425
Inch	.055 - .078	.046 - .067	.040 - .055	.033 - .046	.023 - .033	.016 - .019	.017 - .023	.014 - .019	.012 - .017

Grade	60	80	90	100	120	150	180	220	240
Microns	212 - 300	150 - 212	125 - 180	106 - 150	90 - 125	63 - 106	53 - 90	45 - 75	28 - 70
Inch	.008 - .012	.006 - .008	.005 - .007	.004 - .006	.003 - .005	.0025 - .004	.002 - .003	.0018 - .003	.001 - .0027

Other non-standard sizes available upon request.

QuickCut™ Packaging:

25kg Bags
1 Tonne Pallet (40 x 25kg Bags)

QuickCut™ Ordering Information:

Stock Code: AAL-XXXYZ

Key
XXX - Mesh Size (e.g. 030 for Mesh 30)
Y - B for Brown
Y - P for Pink
Y - W for White
Z - Blank for Standard Grade
Z - P for Premium Grade



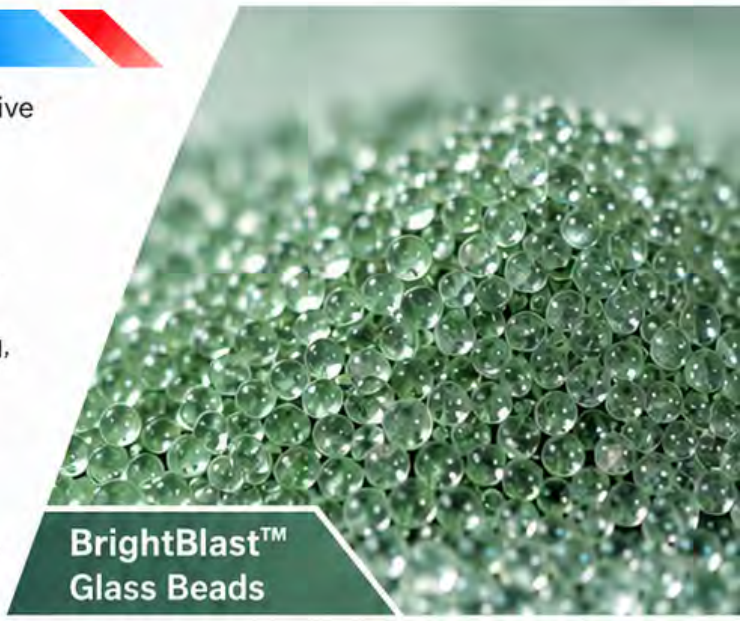
Linked in
www.linkedin.com/company/pan-abrasives

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

BrightBlast™ Glass Beads

For Blasting and Surface Finishing

Product Description and Technical Data:



BrightBlast™ Glass Beads are high-performance, non-abrasive media widely used for blasting, cleaning, conditioning and decorative surface finishing of metallic and non-metallic surfaces.

BrightBlast™ is manufactured from high-grade crushed and sized glass cullet. The cullet is melted to a spherical shape and annealed to equalise internal stresses, producing strong, non-abrasive, clear and transparent spheres that provide a clean, consistent finish without embeddiing into the surface or causing contamination.

BrightBlast™ Glass Beads are ideal for removing light contamination, oxides, paints, coatings and surface deposits while leaving the base material intact. They are widely used for surface conditioning, deburring, cosmetic finishing and decorative effects, producing an attractive, uniform finish on a variety of materials.

The non-abrasive nature of BrightBlast™ ensures that surfaces are cleaned and finished without significant material loss, making it ideal for components where dimensional accuracy and surface integrity must be maintained.

BrightBlast™ Glass Beads are suitable for use in air blasting, wheel blasting and other blasting systems. They are effective on metals such as stainless steel, aluminium, titanium and ferrous alloys, as well as glass, plastics, composites and other non-metallic materials.

For peening applications such as imparting compressive stresses, please refer to our separate BrightBlast™ Glass Beads – Peening brochure.

BrightBlast™ Abrasive Properties:

Shape	Spherical	Basic Material	Soda Lime Glass
Hardness (Moh)	5.5	Roundness %	Min 70
Bulk Density (kg/m³)	1500	Broken Particles %	Max 3 by count
Particle S.G.	2.45 - 2.50	Free Silica %	0
Colour	Clear Glass	Size Standard	ASTM

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

BrightBlast™ Glass Beads

BrightBlast™ Available Sizes:

Grade	GB3	GB4	GB5	GB6	GB7	GB8	GB9	GB10	GB11	GB12	GB13
Code	03B	04C	05AA	06D	07AB	08AC	09AD	10AE	11AG	12AH	13AI
Microns	425 - 600	250 - 425	212 - 425	212 - 300	180 - 300	125 - 250	106 - 212	90 - 150	53 - 106	45 - 90	< 53
Inch	.016 - .023	.009 - .016	.008 - .016	.008 - .011	.007 - .011	.005 - .010	.004 - .008	.003 - .006	.002 - .004	.001 - .003	< .002

Other blasting sizes available upon request.

BrightBlast™ Packaging:

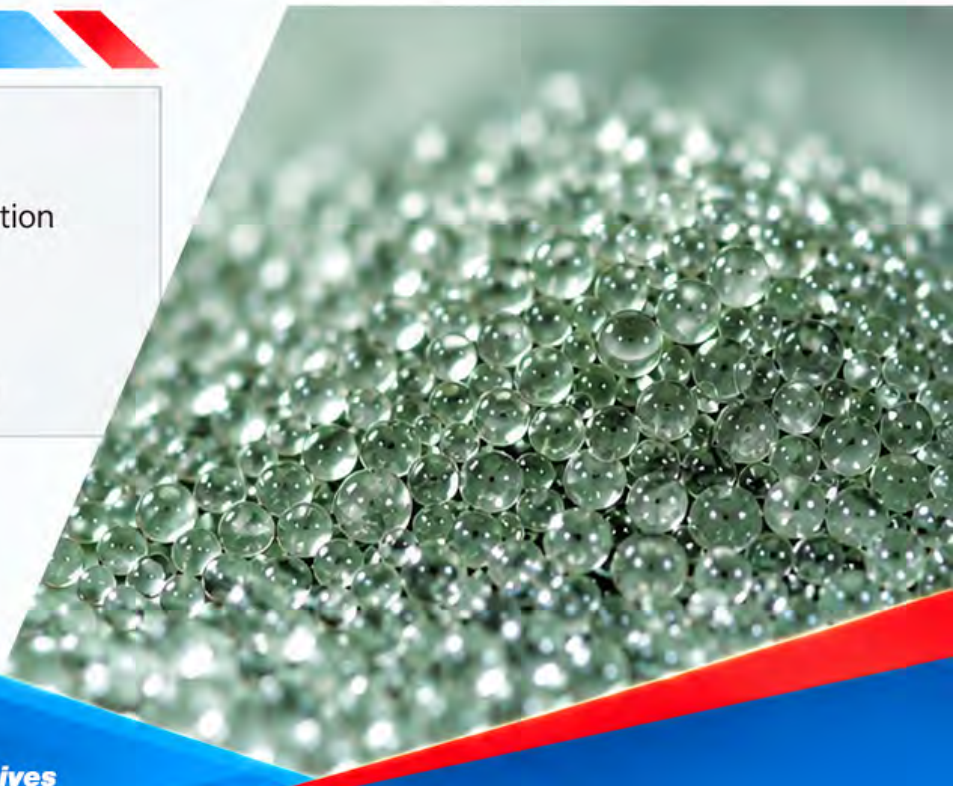
25kg Bags	1 Tonne Pallet (40 x 25kg Bags)

BrightBlast™ Ordering Information:

Stock Code	AGB-XXXX
Key	XXXX - Code for Product GB Grade

Typical Blasting Uses:

- Cleaning and removal of surface contaminants
- Surface conditioning and preparation
- Deburring and edge blending
- Cosmetic finishing
- Decorative satin / matte finishing

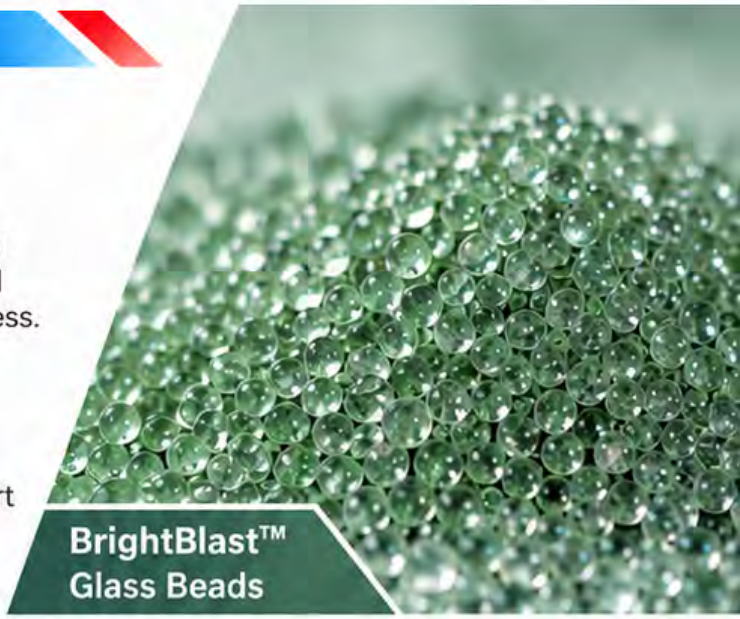


One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

BrightBlast™ Glass Beads

Peening Beads

Product Description and Technical Data:



BrightBlast™ Glass Beads are high-quality, controlled spherical media specifically designed for shot peening applications.

BrightBlast™ is manufactured from high-grade crushed and sized glass cullet, melted and formed into a spherical shape with a consistent size distribution and high roundness. The smooth, non-abrasive, transparent spheres deliver uniform and repeatable peening performance without cutting, embedding or removing base material.

In peening applications, BrightBlast™ Glass Beads impart a uniform layer of compressive stresses on component surfaces, improving fatigue resistance and extending service life. The controlled spherical shape ensures consistent stress distribution and helps preserve critical dimensions and surface finish.

BrightBlast™ Glass Beads are ideal for use on critically toleranced components, including aerospace, automotive, medical and precision engineered parts, where maintaining dimensional accuracy and surface integrity is essential.

The use of BrightBlast™ in peening reduces the risk of fatigue failure due to cyclic loading, stress corrosion and cracking. Being chemically inert and non-toxic, BrightBlast™ will not leave any undesirable or ferrous residue on peened surfaces and the spent media is environmentally harmless.

BrightBlast™ Abrasive Properties:

Shape	Spherical	Basic Material	Soda Lime Glass
Hardness (Moh)	5.5	Roundness %	Min 70
Bulk Density (kg/m³)	1500	Broken Particles %	Max 3 by count
Particle S.G.	2.45 - 2.50	Free Silica %	0
Colour	Clear Glass	Size Standard	ASTM

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

BrightBlast™ Glass Beads

BrightBlast™ Peening Available Sizes:

Designation Number / Grade	AGB-70 (MIL-3)	AGB-50 (MIL-4)	AGB-35 (MIL-5)	AGB-30	AGB-25 (MIL-6)	AGB-20 (MIL-7)	AGB-18 (MIL-8)	AGB-15 (MIL-9)	AGB-12 (MIL-10)	AGB-12 (MIL-11)	AGB-9 (MIL-12)	AGB-6 (MIL-13)
Microns	850 - 600	600 - 425	425 - 300	355 - 250	300 - 212	250 - 180	212 - 150	180 - 125	150 - 90	125 - 75	106 - 63	90 - 45
Inch	.033 - .023	.023 - .016	.016 - .012	.014 - .010	.012 - .008	.010 - .007	.008 - .006	.007 - .005	.006 - .0035	.005 - .003	.004 - .002	.0035 - .001

Other sizes peening grades available upon request.

BrightBlast™ Packaging:

25kg Bags	1 Tonne Pallet (40 x 25kg Bags)

BrightBlast™ Ordering Information:

Stock Code	AGB-MILXX
Key	XX - Product MIL Grade (e.g. 13 for MIL13)
Stock Code	AGB-AMS2431AGBXX
Key	XX - Product AMS 2431 Designation Number (e.g. 30 for AGB30)

Typical Peening Uses:

- Improves fatigue life by inducing beneficial residual compressive stress.
- Used for aerospace and automotive components.
- Ideal for springs, gears and precision parts.
- Helps increase resistance to stress corrosion and stress cracking.
- Provides a consistent, uniform finish without removing base material.



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

PanaGrit™ Carbon Steel Grit

Product Description and Technical Data:



PanaGrit™ is manufactured from high carbon cast PanaShot™ steel shots, crushed to granular grit form and subsequently tempered to three different hardnesses (GH, GL and GP) to cater for different applications.

After tempering the grit is mechanically screened to produce 10 grades conforming to SAE standard specifications for blasting grits.

Grades of differing sizes and/or hardnesses specifically for specialised applications, i.e. roll etching, granite cutting are also produced.

PanaGrit™ is produced under a controlled manufacturing process to achieve a product of uniform hardness, density and microstructure; coupled with good toughness for durability.

These factors result in an abrasive of correct hardness and shape to perform its cleaning function as well as an extended abrasive life.

PanaGrit™ is widely used as a media for descaling steel components prior to coating. In this application the media is used almost exclusively in compressed air, recovery blast rooms. The angular shape and relative hardness of PanaGrit™ ensures rapid cleaning rates and excellent recyclability.

PanaGrit™ is also widely used in the foundry casting industry to remove sand from castings when the castings have been exposed to ultra high temperatures and the sand is baked on to such an extent that steel shot cannot remove it.

If steel components cannot be cleaned utilising centrifugal wheel airless blasting equipment and steel shot, PanaGrit™ offers the next viable alternative.

SAE Steel Grit	SAE J 827	SAE J 444	SAE J 445

Typical Grades (SAE)


SAE G14


SAE G16


SAE G18


SAE G25


SAE G40


SAE G50



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

PanaGrit™ Carbon Steel Grit



SAE Steel Grit Size Specifications:

Screen opening sizes and screen numbers with max. and min. cumulative percentage allowed on corresponding screens.

Screen No.	Screen Size (In)	Metric Size (mm)	SAE Grit Number									
			G10	G12	G14	G16	G18	C25	G40	G50	G80	G120
7	0.1110	2.80	0 %									
8	0.0937	2.36		0 %								
10	0.0787	2.00	80 %		0 %							
12	0.0661	1.70	90 %	80 %		0 %						
14	0.0555	1.40		90 %	80 %		0 %					
16	0.0469	1.18			90 %	75 %		0 %				
18	0.0394	1.00				85 %	75 %		0 %			
20	0.0331	0.850										
25	0.0280	0.710					85 %	70 %		0 %		
30	0.0232	0.600										
35	0.0197	0.500										
40	0.0165	0.425						80 %	70 %		0 %	
45	0.0138	0.355										
50	0.0117	0.300							80 %	65 %		0 %
80	0.0070	0.180								75 %	65 %	
120	0.0049	0.125									75 %	60 %
200	0.0029	0.075										70 %

PanaGrit™ Abrasive Properties:

Hardness (HRC)	GP 46 - 50 GL 56 - 60 GH Min 60	**Microstructure**	GP Martensite and Bainite GL Martensite and Bainite GH Martensite and Austenite
Shape	Angular	**Carbon %**	0.8 - 1.2
Bulk Density (kg/m³)	3700	**Silicon %**	0.4 - 1.2
Particle S.G.	> 7.6	**Manganese %**	0.5 - 1.2
Colour	Grey, Silver, Blue	**Sulphur %**	< 0.05
Size Standard	SAE	**Phosphorus %**	< 0.05

PanaGrit™ Packaging:

25kg Bags or Drums of 750kg/800kg	1 Tonne Pallet (40 × 25kg Bags) or Drums

PanaGrit™ Ordering Information:

Stock Code	**ASA-STG**XXXYY-Z
Key	XXX - Product SAE Number (e.g. 018 for SAE G18) YY - Product Hardness GH, GL and GP Z - D for Packing in Drums Blank for Standard Packing

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

PanaShot™ Steel Shot

Standard Blasting Shot

PanaShot™ Standard Blasting Shot is manufactured from high quality steel scrap, melted and atomised using high-pressure water jets to produce spherical steel shot with consistent size and hardness.

The shot is carefully heat treated and tempered to provide a durable and uniform product for blasting applications.

PanaShot™ is designed for efficient descaling of steel components prior to coating, removing mill scale, rust and surface contaminants to produce a clean surface for subsequent processing.

It is widely used in foundry cleaning to remove sand and burnt-on materials from castings, and in centrifugal wheel blasting equipment for high productivity cleaning.

The round shape and controlled hardness of PanaShot™ ensure consistent cleaning performance, good coverage and long service life, helping to reduce overall operating costs.

PanaShot™ Standard Blasting Shot is produced to strict quality control, providing uniform size distribution, density and microstructure for reliable and repeatable blasting performance.

Speciality peening grades are also available. Please refer to the PanaShot™ Steel Shot (Shot Peening) brochure for details.


SAE S780


SAE S660


SAE S550


SAE S460


SAE S390

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

PanaShot™ Steel Shot

STANDARD BLASTING SHOT

SAE Steel Shot Size Specifications:

Screen opening sizes and screen numbers with max. and min. cumulative percentage allowed on corresponding screens.

SAE Steel Shot Size Specifications

Screen No.	Screen Size (In)	Metric Size (mm)	SAE Shot Number										
			S780	S660	S550	S460	S390	S330	S280	S230	S170	S110	S070
7	0.1110	2.80	0%										
8	0.0937	2.36		0%									
10	0.0787	2.00	≥ 85%		0%	0%							
12	0.0661	1.70	≥ 97%	≥ 85%			≤ 5%	0%					
14	0.0555	1.40		≥ 97%	≥ 85%		≤ 5%						
16	0.0469	1.18			≥ 97%	≥ 85%		≤ 5%	0%				
18	0.0394	1.00				≥ 96%	≥ 85%		≤ 5%	0%			
20	0.0331	0.850					≥ 96%	≥ 85%		≤ 10%			
25	0.0280	0.710						≥ 96%	≥ 85%		0%		
30	0.0232	0.600							≥ 96%	≥ 85%	≤ 10%		
35	0.0197	0.500								≥ 97%		0%	
40	0.0165	0.425									≥ 85%	≤ 10%	0%
45	0.0138	0.355									≥ 97%		≤ 10%
50	0.0117	0.300										≥ 80%	
80	0.0070	0.180										≥ 90%	≥ 80%
120	0.0049	0.125											≥ 90%

Standard Blasting Shot Information

Typical Applications

General purpose cleaning, descaling, surface preparation, deflashing and shot blasting of steel components, castings and fabrications.

Key Benefits

High hardness, uniform size, spherical shape and long service life provide efficient cleaning performance and consistent results.

Available Grades

PanaShot™ standard blasting shot is available in a range of SAE sizes to suit different applications. Contact Pan Abrasives for advice on the most suitable grade for your process.

Packaging and Ordering Information



PanaShot™ steel shot is typically supplied in 25 kg bags and 1 tonne bulk bags. Other packaging options may be available on request.

Please contact Pan Abrasives for ordering information, availability and recommended grades for your specific application.

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

PanaShot™ Peening Shot

Product Description and Technical Data:

PanaShot™ Peening Shot is manufactured from high quality steel scrap that is melted, atomised with high-pressure water and then conditioned to produce a uniform, spherical shot designed specifically for shot peening applications.

The spherical shape, controlled hardness and refined microstructure ensure consistent and repeatable performance in peening operations, providing stable Almen intensity and uniform coverage.

PanaShot™ helps to introduce beneficial residual compressive stresses on the component surface, improving fatigue strength and extending service life.

The shot is carefully graded to meet international specifications such as SAE J441 and AMS 2431, ensuring accurate size distribution, high sphericity and minimal broken particles.

PanaShot™ Peening Shot is widely used for peening critical components including springs, gears, fasteners, automotive parts, aerospace components and other high-performance engineering applications.

With its consistent quality, durability and long service life, PanaShot™ provides a reliable and economical media solution for demanding shot peening operations.


SAE S780


SAE S660


SAE S550


SAE S460


SAE S390

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

PanaShot™ Peening Shot

AMS 2431 Peening Cast Steel Shot (Regular - ASR , High - ASH Hardness)

AMS 2431 Peening Cast Steel Shot (Regular - ASR , High - ASH Hardness)

Screen No.	Screen Size (In)	Metric Size (mm)	Shot Size										
			780	660	550	460	390	330	280	230	170	110	070
6	0.1320	3.35	0%										
7	0.1110	2.80	≤ 2%	0%									
8	0.0937	2.36	≤ 50%	≤ 2%	0%								
10	0.0787	2.00	≥ 90%	≤ 50%	≤ 2%	0%							
12	0.0661	1.70	≥ 98%	≥ 90%	≤ 50%	≤ 2%	0%						
14	0.0555	1.40		≥ 98%	≥ 90%	≤ 50%	≤ 2%	0%					
16	0.0469	1.18			≥ 98%	≥ 90%	≤ 50%	≤ 2%	0%				
18	0.0394	1.00				≥ 98%	≥ 90%	≤ 50%	≤ 2%	0%			
20	0.0331	0.850					≥ 98%	≥ 90%	≤ 50%	≤ 2%			
25	0.0280	0.710						≥ 98%	≥ 90%	≤ 50%	0%		
30	0.0232	0.600							≥ 98%	≥ 90%	≤ 2%		
35	0.0197	0.500								≥ 98%	≥ 50%	0%	
40	0.0165	0.425									≥ 90%	≤ 2%	0%
45	0.0138	0.355									≥ 98%	≤ 50%	≤ 2%
50	0.0117	0.300										≥ 90%	≤ 50%
80	0.0070	0.180										≥ 98%	≥ 90%
120	0.0049	0.125											≥ 98%

Regular and High Hardness Grades

PanaShot™ peening shot is available in Regular hardness (ASR) and High hardness (ASH) grades to meet the requirements of AMS 2431.

Regular Hardness (ASR)

- Typical hardness ~ 40 – 52 HRC
- Suitable for general peening applications
- Good durability and cost efficiency

Hign Hardness (ASH)

- Typical hardness ~ 55 – 62 HRC
- For more demanding peening requirements
- Extended service life and higher resistance to wear

Packaging and Order Information

PanaShot™ peening shot is supplied in standard 25 kg (55 lb) bags, 1,000 kg bulk bags or as per customer requirement.



For specific grades, sizes or customised packaging, please contact Pan Abrasives.

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

CeraBlast™
Ceramic Blasting Beads

Product Description and Technical Data:

CeraBlast™ Ceramic Blasting Beads are manufactured by an electric/thermal fusion of oxides. The internal structure is made up of a crystalline ceramic phase, bonded by an amorphous silica phase, resulting in high impact properties coupled with good hardness.


CeraBlast™ Blasting Beads

CeraBlast™ Beads are generally used for the surface treatment of components such as: rubber and plastic moulds, castings, boiler and heat exchanger parts and other precision components. They are ideal for blasting applications where a clean, consistent surface finish is required.

The spherical shape and high density of CeraBlast™ Blasting Beads enable efficient cleaning and surface preparation with low breakdown rates. The media provides a clean blasting action, producing a uniform and consistent finish while generating considerably less dust compared to many alternative blasting media.

CeraBlast™ Blasting Beads offer long media life and can deliver repeatable and consistent results, helping to reduce operating costs and downtime. They are particularly suitable for applications where ferrous contamination must be avoided, making them ideal for sensitive components and non-ferrous materials.

CeraBlast™ Abrasive Properties:

Shape	Smooth Spherical Beads
Hardness (HRC)	65
True Relative Density	3.85
Bead Relative Density	3.76
Bulk Density (kg/m³)	2300
Size Standard	B - NF L 06.824



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

CeraBlast™
Ceramic Blasting Beads

CeraBlast™ Abrasive Properties:

Typical Crystallographic Analysis:	
Zirconia	67 %
Glassy Silica Phase	33 %

Typical Chemical Composition:	
ZrO_2	67 %
SiO_2	30 %
Others	3 %

CeraBlast™ Available Sizes:

Grade	B20	B30	B40	B60	B120	B125	B205
Microns	600 - 850	425 - 600	250 - 425	125 - 250	70 - 125	0 - 125	0 - 63
Inch	.023 - .033	.016 - .023	.01 - .016	.005 - .01	.003 - .005	0 - .005	0 - .002

CeraBlast™ Packaging:

25kg Pails

CeraBlast™ Ordering Information:

Stock Code	AOT-OABIYYY
Key	B = B type blasting bead YYY = Product Size (e.g. B120, YYY = 120)



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

CeraBlast™ AZ/NZ Ceramic Grits

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.


CeraBlast™ AZ/NZ Ceramic Grits

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/cm³
Hardness	21	19	GPa, 50 g load
Toughness Index	+	++	Source index
Sharpness Index	–	++	Source index
Available Grades	#14 – #220	#14 – #220	Grit

One Stop Local Supply Source
Global Products - Local Service
Pan Abrasives

CeraBlast™
AZ/NZ Ceramic Grits

Composition	CeraBlast™ AZ wt%	CeraBlast™ NZ wt%
Al_2O_3	75	60
ZrO_2	25	40
TiO_2	< 0.5	< 0.5
SiO_2	< 0.4	< 0.4
Fe_2O_3	< 0.5	< 0.5
Others (MgO, Na_2O, 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/cm³	4.7 g/cm³
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.

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

CeraBlast™ F

Zirconium Silicate Ceramic Grit

Product Description and Technical Data:

CeraBlast™ F is a fine zirconium silicate ceramic grit developed for controlled abrasive blasting where mild cutting action, smooth surface finish and preservation of fine geometries are important. With a density of 3.9 g/cm³ and a hardness of 8 GPa at 50 g load, CeraBlast™ F combines mild hardness with controlled abrasiveness. Its ceramic composition helps reduce particle embedment, supporting cleaner surface treatment with lower contamination.

CeraBlast™ F is particularly suited to surface treatment processes requiring a less aggressive abrasive action than harder alumina-based grits while still providing the angular cutting action associated with ceramic grit media.


CeraBlast™ F Ceramic Grit

Performance Advantages:

- Mild hardness for controlled surface treatment
- Mild abrasiveness
- Smoother surface finish
- Preserves the integrity of fine geometries
- Reduced particle embedment
- Lower contamination of the treated surface

Main Applications:

Precision Surface Finishing
Controlled abrasive treatment where a smoother resulting surface is required.

Fine-Geometry Components
Treatment of components where excessive cutting or loss of edge definition should be minimized.

Surface Cleaning
Removal of unwanted surface material using controlled abrasive action.

Surface Preparation
Creation of a controlled surface condition prior to subsequent processing or coating.



CeraBlast™ F Physical Properties:

Property	Typical Value	Units
Density	3.9	g/cm³
Hardness	8	GPa, 50 g load
Toughness Index	–	Source index
Sharpness Index	–	Source index

One Stop Local Supply Source
Global Products - Local Service
Pan Abrasives

CeraBlast™ F

Zirconium Silicate Ceramic Grit

CeraBlast™ F Typical Chemical Analysis:

Composition	wt%
Al_2O_3	10
ZrO_2	60
SiO_2	30
Fe_2O_3	< 0.5
Others (MgO, Na_2O, etc.)	< 0.5



CeraBlast™ F Available Sizes:

Grade	Source Size Designation
F205	200 mesh and finer
F170	170 – 400 mesh
F120	120 – 200 mesh

Fine grit coverage: up to approximately 125 µm

Fine CeraBlast™ F grades provide controlled abrasive action for surface finishing and treatment of detailed geometries while minimizing excessive cutting and particle embedment.

CeraBlast™ F Process Characteristics:

Characteristic	CeraBlast™ F
Abrasive action	Mild
Hardness	Mild relative to harder ceramic/alumina grits
Resulting finish	Smoother
Geometry preservation	Designed to minimize aggressive removal from fine geometries
Particle embedment	Low
Metallic contamination	Ceramic, non-ferrous media

CeraBlast™ F Packaging:

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

CeraBlast™ F Ordering & Range Identification:

Product Family	CeraBlast™
Product Range	CeraBlast™ F – Zirconium Silicate Ceramic Grit
Grade Designation	F205 / F170 / F120
Overall Size Coverage	Fine grades to approximately 125 µm
Packaging	1 kg, 5 kg, 10 kg and 20 kg plastic containers

Need help selecting a grade? Contact Pan Abrasives for media selection and application trials.

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

CeraBlast™ SB Series

Heavy Duty Ceramic Media

Product Description and Technical Data:



CeraBlast™ SB Series is a premium alumina-zirconia ceramic blasting media engineered for pressure blasting and surface preparation of hard surfaces. The media is produced by the fusion of high purity zircon sand and alumina at approximately 1950°C, forming a fine primary corundum structure with an alumina-zirconia eutectic crystalline phase. This unique microstructure delivers exceptional hardness, toughness and wear resistance, resulting in long media life and high productivity.

CeraBlast™ SB Series provides consistent surface preparation with low dust generation and minimal particle embedment. The spherical grain shape and high density enable efficient cleaning and a uniform, controlled surface finish. It also offers a low ferrous contamination risk, making it ideal for applications where a clean, high quality finish on very hard surfaces is required.

CeraBlast™ SB1 is optimized for durable blasting of very hard stone and mineral surfaces such as granite and memorial work, where maximum media life and consistent performance are essential.

CeraBlast™ SB2 is a broader heavy-duty blasting grade, suitable for demanding industrial cleaning and precision surface preparation applications. It offers the same high performance alumina-zirconia construction with a wide size range to meet diverse blasting requirements across industrial markets.

CeraBlast™ Physical & Abrasive Properties:

Media Form	Premium ceramic blasting media
Structure	Alumina-zirconia eutectic crystalline structure
Grain Form	Strong, untreated blasting grains
Crystal Size	17 microns
Hardness	21 GPa (Vickers, 50 g load)
True Density	4.30 g/cc
Melting Point	1950°C
Typical Chemistry	Al_2O_3 75.0%, ZrO_2 23.0%, TiO_2 0.10%, SiO_2 0.30%, Fe_2O_3 0.30%, Na_2O 0.08%, CaO 0.10%, MgO 0.03%, S 0.01%
Size Range Summary	SB1: 36 – 60 | SB2: 20 – 240

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

CeraBlast™ SB Series

Heavy Duty Ceramic Media

CeraBlast™ SB1 and SB2 Comparison Guide

Property	CeraBlast SB1	CeraBlast SB2
Media Type	Premium alumina-zirconia ceramic blasting media	Premium alumina-zirconia ceramic blasting media
Grain Form	Strong, untreated blasting grains	Strong, untreated blasting grains
Operating Profile	Standard to high pressure blasting	High pressure blasting / broader industrial duty
Available Grit Range	36 – 60	20 – 240
Best-Use Focus	Granite, memorial stone, hard mineral surfaces, applications requiring long media life and consistent finish.	Demanding industrial cleaning, precision surface preparation, turbine blade preparation for ceramic coatings, bridges, ship hulls, and hard-surface pressure blasting.
Recommended Applications	Pressure blasting of very hard stone and mineral surfaces where maximum media life and consistent performance are essential.	Industrial cleaning, precision surface preparation, turbine blade preparation for ceramic coatings, bridges, ship hulls, and hard-surface pressure blasting.





CeraBlast SB2 Typical Particle Size Distribution

Size	Oversize	Coarse Grit	1st Nominal	2nd Nominal	Pan	Back-up CG Sieve
30	+18/0	+25/(0-25)	+30/45+	(+30+35)/65+	-40/(0-3)	16
36	+20/0	+30/(0-25)	+35/45+	(+35+40)/65+	-45/(0-3)	18
46	+25/0	+40/(0-30)	+45/30+	(+45+50)/55+	-70/(0-5)	20
54	+30/0	+45/(0-35)	+50/25+	(+50+60)/60+	-80/(0-5)	25
60	+35/0	+50/(0-35)	+60/35+	(+60+70)/60+	-100/(0-5)	30
70	+40/0	+60/(0-25)	+70/35+	(+70+80)/65+	-120/(0-5)	35
80	+45/0	+70/(0-35)	+80/30+	(+80+100)/60+	-140/(0-5)	40
90	+50/0	+80/(0-25)	+100/35+	(+100+120)/60+	-170/(0-5)	45
100	+60/0	+100/(0-25)	+120/30+	(+120+140)/55+	-230/(0-5)	50
120	+70/0	+120/(0-25)	+140/20+	(+140+170)/50+	-270/(0-5)	60
150	+80/0	+140/(0-25)	(+170+200)/30+	(+170+200+230)/60+	-325/(0-5)	70
180	+80/0	+170/(0-20)	(+200+230)/30+	(+200+230+270)/60+	Record	70
220	+100/0	+200/(0-15)	(+230+270)/30+	(+230+270+325)/50+	Record	80
240	+120/0	+200/(0-10)	(+230+270)/5+	(+230+270+325)/30+	Record	100

** 100 grams sieved five minutes on U.S. Standard Sieves on Rotap. No automatic batch exceptions.*

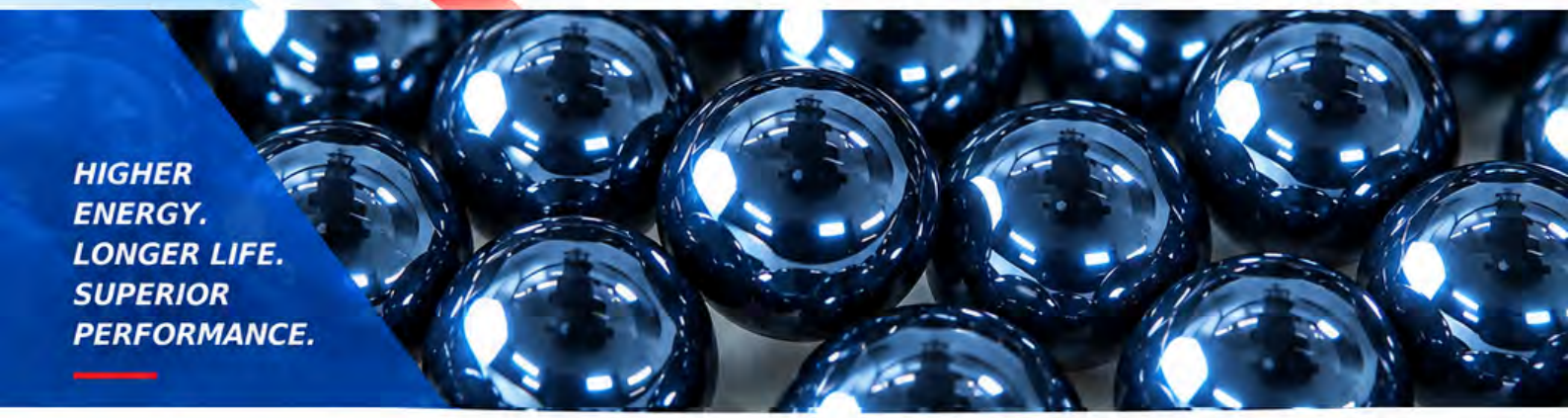
SB Series Application Notes

- Exceptional wear resistance and long media life.
- Low dust generation and reduced particle embedment.
- Delivers a clean, uniform and controlled surface finish.
- Suitable for hard-surface pressure blasting of stone, mineral and industrial substrates.
- Provides consistent blasting performance and improved finishing time.

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

CeraPeen™ HDC

High-Density Cerium-Stabilized Zirconia Ceramic Shot



Product Description

CeraPeen™ HDC is a high-density cerium-stabilized zirconia ceramic shot designed for high-energy shot peening, peen forming and precision surface treatment. Its high density and hardness enable superior impact energy for maximum compressive stress, while offering long media life, low dust generation and a smooth, highly spherical morphology for consistent, high-quality finishes.



Performance Advantages

- Higher kinetic energy and intensity transfer
- Long service life and low dust generation
- Smooth spherical media for consistent finishes
- Suitable for high-intensity shot peening and peen forming
- Effective on hard steels, titanium, aluminium and superalloys

Main Applications

- High-energy shot peening
- Peen forming
- Fatigue-life improvement
- Aerospace components
- Automotive components
- Precision surface finishing

Compatible Equipment

- Wet pressure shot peening
- Pneumatic pressure systems
- Suction systems
- Wheel turbine machines
- Robotized peening equipment

CeraPeen™ HDC Physical Properties

Property	Typical Value	Units
Specific Gravity	6.2	g/cm³
Bulk Density	3.8	kg/L
Vickers Hardness	1180	HV1
Composition	$ZrO_2 + CeO_2 > 98$ wt%	—
Morphology	Highly spherical	—

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

CeraPeen™ HDC

High-Density Cerium-Stabilized Zirconia Ceramic Shot



CeraPeen™ HDC Typical Chemical Analysis:

Composition	wt%
$ZrO_2 + CeO_2$	> 98
Other	< 2

CeraPeen™ HDC Available Sizes:

Grade	HDC850	HDC550	HDC425	HDC315	HDC250	HDC170
Microns	850 - 1180	425 - 600	300 - 425	212 - 300	150 - 212	90 - 150

Available size coverage: 90 - 1180 µm
Six HDC grades support precision selection for high-energy peening and peen-forming applications.

CeraPeen™ HDC Packaging:

10 kg and 25 kg drums

CeraPeen™ HDC Ordering & Range Identification:

Product Family	CeraPeen™
Product Range	CeraPeen™ HDC - High-Density Cerium-Stabilized Zirconia Ceramic Shot
Grade Designation	HDC850 / HDC550 / HDC425 / HDC315 / HDC250 / HDC170



LinkedIn
www.linkedin.com/company/pan-abrasives

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

CeraPeen™ YZ

High-Density Zirconia Ceramic Shot

Product Description and Technical Data:

CeraPeen™ YZ extends the CeraPeen™ family with fine, high-density zirconia ceramic beads for high-precision and high-energy shot peening. Its very fine and narrow size distributions combine with the high density, hardness and toughness of zirconia ceramic material to deliver controlled peening performance.

The media is suited to applications requiring high levels of compressive stress near the surface and the treatment of complex and precise shapes. Its smooth spherical form supports a smooth surface finish, while chemical inertness and very low particle embedment help minimize contamination of treated parts.


CeraPeen™ YZ Beads

Performance Advantages:

- Maximum level of compressive stress near the surface
- Ability to treat complex and precise shapes
- Smooth surface finish to minimize crack generation
- Chemical inertness with very low particle embedment

Main Applications:

Ultrafine Shot Peening
Fatigue strength, corrosion, pitting wear and micro-fretting applications.

Peening and Forming
High-hardness metals.

Surface Finishing
Precision surface finishing.

Main Users:

- Automotive
- Aeronautics
- Energy
- Biomedical



CeraPeen™ YZ Physical Properties:

Property	Typical Value	Units
Specific Gravity	6.0	g/cm³
Bulk Density	3.2 - 3.7*	kg/L
Vickers Hardness	1250	HV1

* Bulk density depends upon bead size.

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

CeraPeen™ YZ

High-Density Zirconia Ceramic Shot

CeraPeen™ YZ Typical Chemical Analysis:

Composition	wt%
Y2O3-Stabilized Zirconia	99.5
Other	< 0.5

CeraPeen™ YZ Available Sizes:

Grade	YZ350	YZ300	YZ250	YZ200	YZ150	YZ100
Microns	300 - 425	250 - 355	212 - 300	180 - 250	125 - 212	90 - 150

Grade	YZ80	YZ50	YZ50-L	YZ30	YZ20	YZ20-L
Microns	63 - 106	45 - 90	20 - 80	20 - 53	15 - 36	10 - 63

Fine size coverage: 10 - 425 µm
Twelve YZ grades support precision selection for ultrafine and high-energy peening applications.

CeraPeen™ YZ Packaging:

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

CeraPeen™ YZ Ordering & Range Identification:

Product Family	CeraPeen™
Product Range	CeraPeen™ YZ - High-Density Zirconia Ceramic Shot
Grade Designation	YZ350 / YZ300 / YZ250 / YZ200 / YZ150 / YZ100 / YZ80 / YZ50 / YZ50-L / YZ30 / YZ20 / YZ20-L

One Stop Local Supply Source
PanAbrasives
Global Products - Local Service

CeraPeen™ Peening Beads

Product Description and Technical Data:

CeraPeen™ Ceramic Peening Beads are manufactured by an electric/thermal fusion of oxides. The internal structure is made up of a crystalline ceramic phase, bonded by an amorphous silica phase, resulting in high impact properties coupled with good hardness and durability.


CeraPeen™ Peening Beads

CeraPeen™ Peening Beads are specifically designed for peening and peen forming applications, particularly in the aerospace and precision industries. They are ideal for critical components where consistent performance, cleanliness and freedom from ferrous contamination are essential.

Compared with traditional peening media such as steel shot and glass beads, CeraPeen™ Peening Beads can achieve similar peening intensities while generating a lower surface roughness. The non-metallic composition eliminates the risk of ferrous contamination, making them suitable for applications where steel shot cannot be used.

CeraPeen™ Peening Beads enable peening at lower operating velocities, resulting in significantly less media breakdown and dust. This provides a cleaner working environment, better operator visibility and reduced maintenance requirements.

The uniform, smooth spherical shape and narrow particle size distribution ensure repeatable, consistent results, making CeraPeen™ Peening Beads the preferred choice for demanding and high-precision peening applications.

CeraPeen™ Abrasive Properties:

Shape	Smooth Spherical Beads
Hardness (HRC)	65
True Relative Density	3.85
Bead Relative Density	3.76
Bulk Density (kg/m³)	2300
Size Standard	Z - AMS 2431/7



One Stop Local Supply Source
PanAbrasives
Global Products - Local Service

CeraPeen™ Peening Beads

CeraPeen™ Abrasive Properties:

Typical Crystallographic Analysis:	
Zirconia	67 %
Glassy Silica Phase	33 %

Typical Chemical Composition:	
ZrO_2	67 %
SiO_2	30 %
Others	3 %

CeraPeen™ Available Sizes:

Grade	Microns	Inch
Z850	850 - 1180	.033 - .04
Z600	600 - 850	.023 - .033
Z425	425 - 600	.016 - .023
Z300	300 - 425	.01 - .016
Z210	210 - 300	.008 - .01
Z150	150 - 210	.006 - .008
Z100	100 - 150	.004 - .006

CeraPeen™ Packaging:

25kg Pails

CeraPeen™ Ordering Information:

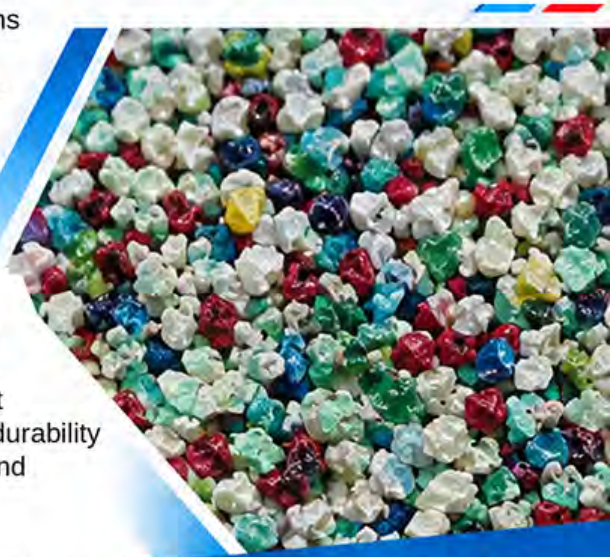
Stock Code	AOT-OAZIXYYY
Key	Z = Z type peening bead YYY = Product Size (e.g. Z300, YYY = 300)



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

LiteBlast™ Plastic Media

LiteBlast™ Plastic Media is a manufactured abrasive utilised in applications requiring a controlled, gentle, non-abrading action, where damage or etching to the underlying substrate cannot be tolerated. The low hardness and specific gravity of LiteBlast™ Plastic Media allow it to be used in the most sensitive applications. Available in 5 types of plastic stock, each with its own differing characteristics, the most suitable LiteBlast™ Plastic Media can be selected for any given application.



Controlled Cleaning. Maximum Protection.

LiteBlast™ Plastic Media is suitable for use in both wet and dry compressed-air blasting equipment and may be used effectively at extremely low blasting pressures to ensure no damage to the component being blasted. When used in dry compressed-air blasting equipment, LiteBlast™ Plastic Media is pre-treated with an anti-static agent to prevent adhesion to the component and thus reduce abrasive wastage. The high durability and irregular particle shape of LiteBlast™ ensure maximum productivity and abrasive life when utilised in equipment incorporating recycling and re-classification components.

LiteBlast™ Plastic Media is commonly used in applications where the traditional method of component cleaning is to utilise solvents and chemicals. With the inherent health risks, wastewater-treatment costs and environmental concerns associated with chemicals and solvents, LiteBlast™ Plastic Media offers a safe, economical and environmentally friendly alternative. No free silica is present in LiteBlast™. The use of chemicals is also non-discriminatory because the product is immersed. This can lead to damage or stock removal from the base material. Utilising LiteBlast™, this problem is eliminated because the abrasive is directed only at the waste product that is required to be removed.

LiteBlast™ Abrasive Properties:

Type	II	III	V	VI	VIII
Colour	Mixed	Mixed	Mixed	Grey	Mixed
Hardness (Moh)	3.5	4.0	3.5	3.0	3.5
Particle S.G.	1.47 - 1.52	1.47 - 1.52	1.1 - 1.2	1.28 - 1.33	1.36 - 1.46
Material	Urea Formaldehyde	Melamine Formaldehyde	Acrylic	Poly Carbonate	Composite
Size Standard	ASTM and MIL-P-85891A Type VIII: 30/60 | 10/60 ONLY				

Plastic Abrasives	MIL-DTL-85891B



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

LiteBlast™ Plastic Media

LiteBlast™ Available Sizes:

Grade	8/16	12/20	16/20	16/30	20/30	20/40
Microns	1180 - 2360	850 - 1700	850 - 1180	600 - 1180	600 - 850	425 - 850
Inch	0.046 - 0.092	0.033 - 0.067	0.033 - 0.046	0.023 - 0.046	0.023 - 0.033	0.016 - 0.033

Grade	30/40	40/60	60/80	60/100	70/100	100/270
Microns	425 - 600	250 - 425	180 - 250	150 - 250	150 - 212	53 - 150
Inch	0.016 - 0.023	0.009 - 0.016	0.007 - 0.009	0.006 - 0.009	0.006 - 0.008	0.002 - 0.006
TYPE VIII	AVAILABLE SIZES: 30/60 & 10/60 ONLY					

Other sizes available upon request, excluding Type VIII.

LiteBlast™ Packaging:

20kg Bags or Carton Boxes	125kg Fibre Drum

LiteBlast™ Ordering Information:

Stock Code	ALB-XYY-ZZW
Key	X - Product Type (II, III, V, VI, VIII) YY - Upper Mesh Size (e.g. 16 for Mesh 16/20) ZZ - Lower Mesh Size (e.g. 20 for Mesh 16/20) W - Product Grade C for Commercial Grade E for Electronic Grade P for Special P Grade W for W/O Antistatic



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

LiteBlast™
Cryogenic Deflash Media
KG • KC • BT

Fast Deflashing • Lower Cycle Time • High Efficiency



KG • Cryogenic Cylindrical Polycarbonate

- Cylindrical, white / opaque
- Rubber-part deflashing
- Low-temperature / high-RPM shot blast



KC • Cryogenic Cubical Polycarbonate

- Cubical, translucent
- Rubber-part deflashing
- Low-temperature / high-RPM shot blast



BT • Engineered Cylindrical

- Blue engineered plastic
- Rubber / plastic deflashing
- Metal deburring

Cryogenic Media — Available Sizes

KG grade	Inches (L × W × diagonal)	Millimeters
KG-150	.060 × .060 × .085	1.52 × 1.52 × 2.15
KG-114	.045 × .045 × .063	1.14 × 1.14 × 1.61
KG-100	.038 × .038 × .054	0.96 × 0.96 × 1.35
KG-075	.030 × .030 × .042	0.76 × 0.76 × 1.07
KG-050	.020 × .020 × .028	0.50 × 0.50 × 0.72
KG-040	.015 × .015 × .021	0.38 × 0.38 × 0.54

KC grade	Color	Inches	Millimeters
KC-50	Clear / no tint	.050 cube × .087	1.27 cube × 2.20
KC-45	Blue translucent	.045 cube × .078	1.14 cube × 1.99
KC-40	Blue translucent	.040 cube × .069	1.00 cube × 1.73
KC-30	Blue translucent	.030 cube × .050	0.76 cube × 1.30

BT grade	Inches (L × W × diagonal)	Millimeters
BT-60	.060 × .060 × .085	1.52 × 1.52 × 2.15
BT-45	.045 × .045 × .063	1.14 × 1.14 × 1.61
BT-38	.038 × .038 × .054	0.96 × 0.96 × 1.35
BT-30	.030 × .030 × .042	0.76 × 0.76 × 1.07
BT-20	.020 × .020 × .028	0.50 × 0.50 × 0.72

Cryogenic Deflashing Process Notes

The manufacturing-source literature describes cryogenic deflashing using turbine wheels at approximately **6,000–10,000 RPM**. Liquid nitrogen can bring process temperatures to about **–300°F / –184°C**, freezing flash at mold parting lines so media impact removes excess material. Typical source-stated cycle times are approximately **3–5 minutes**, after which parts return to room temperature without signs of flash or damage.

PB spherical polystyrene is identified by the source as the softest and most delicate cryogenic-grade option for sensitive rubber-molded parts, while **KG and KC** are positioned for broader rubber deflashing and high-speed cryogenic operation.



One Stop Local Supply Source
Global Products - Local Service
Pan Abrasives

LiteBlast™ Cryogenic Deflash Media

KG • KC • BT

Quick Selection Matrix

Application	Recommended LiteBlast™ families	Why
Delicate rubber deflashing	PB / KC	Soft cryogenic or cubical cryogenic options.
General rubber deflashing	KG / KC / BT	High-speed cryogenic operation.
Thermoset appearance parts	KA / PC	Engineered nylon or cylindrical polycarbonate options.
Sensitive small plastic parts	PB	Spherical, small, soft media.
Tougher plastic deflashing	PC / BT	Cylindrical engineered media.
Electronic resin bleed / flash	EG / MC / MS / WBM	Multiple nonmetallic cleaning grades.
Mold & die cleaning	MC / MB / AC / EG	Range of hardness and granulated sizes.
Feed screw cleaning	MC / MB	Granulated media for buildup removal.
Paint / powder stripping	MB / MS / AC	From broad-use to softer sensitive-substrate grades.
Light metal deburring	KA / BT / PC / WBM	Nonmetallic deburring with surface preservation.

Process Guidance from Manufacturing-Source Literature

Air blast: plastics deflashing can use nozzle pressures up to approximately 90 PSI / 6 bar.

Cryogenic: liquid nitrogen temperatures may reach approximately -300°F / -184°C in the source process description.

Wheel blast: high-speed turbines are cited up to approximately 6,000 RPM for plastics and up to 10,000 RPM in cryogenic rubber deflashing.

Cycle time: several deflashing and deburring examples are approximately 3–5 minutes, depending on part and process.

Important Technical Note

Pan-facing names KA, KG and KC are Pan Abrasives commercial designations. Internal source cross-reference is KA = PA/PAC, KG = CG and KC = CGTC. This brochure retains customer-facing LiteBlast™ branding while preserving supplier traceability for procurement, QA and technical validation.

Recommended Pan Abrasives Ordering Structure

Family	Example Pan stock-code pattern	Internal source anchor / example
KA	ALB-KA-[GRADE]	PA / PAC (example ALB-KA-100)
PB / PC / BT	ALB-[FAMILY]-[GRADE]	PB-2 / PC-45 / BT-30
KG	ALB-KG-[GRADE]	CG (example ALB-KG-050)
KC	ALB-KC-[GRADE]	CGTC (example ALB-KC-45)
AC / EG / MC / MS	ALB-[FAMILY]-[GRADE]	ALB-MC-3
MB / WBM	ALB-[FAMILY]-[GRADE]	ALB-MB-20/40

Brand architecture: all media should be presented publicly as **LiteBlast™** products. Supplier trade names are intentionally omitted from customer-facing pages; the technical grade code remains the cross-reference anchor for procurement, QA and traceability.



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

LiteBlast™ Deflash Media
PA, PB & PC

Product Description and Technical Data:



LiteBlast™ PA is a cubic shaped plastic media, which can be used for both normal and cryogenic applications.

LiteBlast™ PA is extensively used for mould cleaning, deflashing thermoset plastics and aesthetic parts. It is also used in aeronautical industries for cleaning intricate and dimension sensitive components.

LiteBlast™ PB is the smallest sized non-abrasive plastic blasting media available. LiteBlast™ PB is ideally suited for deflashing delicate and complicated shaped moulded rubber and plastic components. LiteBlast™ PB is non-toxic and it doesn't leave any post blast residue.

LiteBlast™ PC is a special purpose cryogenic blasting media stable even at very low temperatures. LiteBlast™ PC is extensively used in high speed wheel blast machines for deflashing rubber components like o-rings, bushing, oil seals, gaskets, syringe stoppers, spark plug boots etc.

LiteBlast™ PC is long lasting, non toxic and non-damaging to both the part that is being deflashed and the blasting equipment. It is also very widely used for deflashing thermoset plastic parts and machined intricate diecast components.

LiteBlast™ Abrasive Properties:

Type	PA	PB	PC
Chemical Material	Polyamide / Nylon	Polystyrene	Polycarbonate
Unique Property	Stable at Cryogenic Temperatures and Non Abrasive	Non Abrasive	High Density and Stable at Cryogenic Temperatures
Media Form / Shape	Cubical	Spherical	Cylindrical



PA - Polyamide/Nylon

- Cubical or cylindrical engineered plastic
- Thermoset appearance part deflashing
- Machined die-cast deburring



PB - Polystyrene Bead

- Spherical engineered plastic
- Soft / delicate cryogenic option
- Sensitive rubber and plastic parts
- Electronics deflashing



PC - Polycarbonate

- Cylindrical engineered plastic
- Thermoset-part deflashing
- Machined die-cast deburring
- Multiple nominal sizes



KG - Cryogenic Cyl. Polycarbonate

- Cylindrical, white / opaque
- Rubber-part deflashing
- Low-temperature / high-RPM shot blast



KC - Cryogenic Cubical Polycarbonate

- Cubical, translucent
- Rubber-part deflashing
- Low-temperature / high-RPM shot blast

One Stop Local Supply Source
Global Products - Local Service
Pan Abrasives

LiteBlast™ Deflash Media

LiteBlast™ PA — Polyamide/Nylon Cubical

Grade	Shape	Inches (cube × diagonal)	Millimeters (cube × diagonal)
PA-075	Cubical	.030 × .052	0.75 × 1.30
PA-100	Cubical	.040 × .069	1.00 × 1.73
PA-120	Cubical	.047 × .081	1.20 × 2.08
PA-150	Cubical	.060 × .104	1.50 × 2.60
PA-200	Cubical	.079 × .137	2.00 × 3.46

LiteBlast™ PA — Polyamide/Nylon Cylindrical

Grade	Shape	Inches (L × W × diagonal)	Millimeters (L × W × diagonal)
PA-030	Cylindrical	.030 × .030 × .042	0.76 × 0.76 × 1.07
PA-040	Cylindrical	.040 × .040 × .056	1.00 × 1.00 × 1.41
PA-050	Cylindrical	.050 × .050 × .070	1.27 × 1.27 × 1.78

PA is the Pan-facing family covering both cubical and cylindrical polyamide/nylon grades.

LiteBlast™ PC — Polycarbonate Cylindrical

Grade	Inches (L × W × diagonal)	Millimeters (L × W × diagonal)
PC-60	.060 × .060 × .085	1.52 × 1.52 × 2.15
PC-45	.045 × .045 × .063	1.14 × 1.14 × 1.61
PC-30	.030 × .030 × .042	0.76 × 0.76 × 1.07
PC-25	.025 × .025 × .035	0.625 × 0.625 × 0.875
PC-20	.020 × .020 × .028	0.50 × 0.50 × 0.72

LiteBlast™ PB — Spherical Polystyrene

Grade	Sieve size	Inches	Millimeters
PB-1	18/30	.039 / .024	0.99 / 0.61
PB-2	30/45	.024 / .014	0.61 / 0.36
PB-2.5	35/45	.020 / .014	0.50 / 0.36
PB-3	45/100	.014 / .006	0.36 / 0.15
PB-4	60/100	.010 / .006	0.25 / 0.15



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

LiteBlast™ BB Series

Product Description and Technical Data:

LiteBlast™ BB Series is a specialty engineered plastic blasting media family designed for removal of bonding adhesive squeeze-out, sealant, and selected coatings while helping preserve underlying substrates and protective coatings.

LiteBlast™ BB1 is specifically designed to remove bonding adhesive squeeze-out on bonded aerospace panels while helping leave the substrate and protective coatings such as primer, alodine, or anodizing intact. It delivers fast cleaning performance with low dust, low attrition, and minimal residual stress to the substrate.

LiteBlast™ BB2 is a custom-engineered virgin-resin grade developed for difficult metal bond adhesive squeeze-out removal. It is designed to remove bond adhesive flash while helping leave primer intact, using lower blast pressure and less media, and it can also assist in removal of elastomeric coatings and sealant.



LiteBlast™ BB1

- Multi-colored Engineered Plastic Media
- Adhesive Squeeze-Out Removal
- Preserves Coatings

LiteBlast™ BB2

- Clear Engineered Plastic Media
- Lower-Pressure Primer-Safe Cleaning
- Removes Adhesive Flash, Sealant & Elastomeric Coatings

LiteBlast™ Abrasive Properties:

Property	BB1	BB2
Chemical Nature	Inert	Inert
Appearance	Granular	Granular
Color	Multi-colored	Clear
Hardness	Barcol 34 – 42	Barcol 38 – 49
MOHS	3.0	3.0
Compressive Strength	600 – 13000 psi	600 – 13000 psi
Specific Gravity	1.15 – 1.25 gm/cm³	1.15 – 1.25 gm/cm³
Unique Property	Adhesive squeeze-out removal while preserving coatings	Lower-pressure primer-safe adhesive removal



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

LiteBlast™ BB Series

LiteBlast™ BB1 and BB2 Comparison Guide

Property	BB1	BB2
Typical Media Color	Multi-colored	Clear
Typical Cleaning Style	Fast adhesive squeeze-out removal	Lower-pressure primer-safe removal
Helps Preserve	Primer, alodine, anodizing	Primer and coated substrates
Typical Applications	Bonded aerospace panels, adhesive squeeze-out, selective coating removal	Metal bond adhesive flash, sealant, elastomeric coatings
Dust / Attrition Profile	Low dust and low attrition	Low dust and efficient media usage
Substrate Effect	Minimal detrimental residual stress	Gentle cleaning while leaving primer intact

LiteBlast™ Detailed Technical Properties

Property	BB1	BB2
Chemical Nature	Inert	Inert
Appearance	Granular	Granular
Color	Multi-colored	Clear
Hardness	Barcol 34 – 42	Barcol 38 – 49
MOHS	3.0	3.0
Compressive Strength	600 – 13000 psi	600 – 13000 psi
Izod Impact (1/8" specimen)	0.2 – 0.4 ft lb/in	0.2 – 0.4 ft lb/in
Explosibility – Minimum Explosive	0.045 oz/ft³	0.045 oz/ft³
Chlorine Content	Trace	Trace
Ash Content	2.0% by wt	2.0% by wt
Iron Content	0.05% by wt	0.05% by wt
Specific Gravity	1.15 – 1.25 gm/cm³	1.15 – 1.25 gm/cm³
Extract Content	5% by wt	5% by wt
pH	4 – 8	4 – 8
Conductivity	100 mho/cm	100 mho/cm
H2O Absorption	2% by wt	2% by wt
Heavy Particulate	0.02% by wt	0.02% by wt
Light Particulate	1.0% by wt	1.0% by wt
Ignition Temperature	440°F	440°F

Recommended Uses

- Bonded aerospace panel cleaning
- Adhesive squeeze-out removal
- Primer-safe cleaning
- Sealant and elastomeric coating removal
- Selective surface preparation

Key Benefits

- Helps preserve protective coatings
- Low dust generation
- Low attrition / long useful life
- Controlled cleaning performance
- Suitable for difficult adhesive-removal tasks

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

EnviroGrit™ Garnet

Product Description and Technical Data:

EnviroGrit™ Garnet is derived from mined Almandine mineral deposits. Almandine is the heaviest and hardest of all the garnet types in the garnet family group, resulting in an ideal abrasive grain for blasting applications.



Once extracted, the raw material is processed to remove chlorides and sulphates, magnetically screened to remove ferrous particulate and finally screened to the desired size range.

Being an inert, non-toxic mineral, containing less than 0.1% free silica, EnviroGrit™ is an environmentally safe, user friendly alternative to silica sand and other expendable abrasive.

EnviroGrit™ Garnet particles are sub-angular in shape resulting in extremely fast cutting rates and low abrasive consumption. The high specific gravity of the abrasive grains and the low breakdown rate, results in significantly reduced dust levels, thus ensuring good operator visibility and less risk to personnel or environmental contamination in surrounding areas. The low consumption rate and the recyclability, up to 5 times, also ensures the volume of waste generated for disposal is minimised.Being a naturally occurring mineral EnviroGrit™ is also a non-pollutant to the environment.

Blast cleaning production rates using EnviroGrit™ are greatly increased when compared to other expendable abrasives. This factor, along with the reduced amount of abrasive consumed can lead to significant cost savings per square meter blasted and often results in EnviroGrit™ Garnet being the most cost effective abrasive available for the blasting project.

EnviroGrit™ is processed under stringent quality control regulations to ensure the size and distribution of particles in the abrasive mix is maintained at the correct proportion. This ensures an accurate, consistent surface profile is maintained. A surface cleanliness of Class Sa3, even on heavily pitted and corroded steel, is easily achievable with EnviroGrit™, and abrasive embedment into the surface is minimal.

Containing minimal ferrous particles EnviroGrit™ can be utilised to blast corrosion resistant steels and non-ferrous products without the risk of ferrous contamination to the surface.

EnviroGrit™ is also utilised as a cutting media in water jet cutting and as a filtration media.

Garnet	ISO 11126-10



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

EnviroGrit™ Garnet

EnviroGrit™ Abrasive Properties:

Shape	Angular Free - flowing Grit
Hardness (Moh Scale)	7.5 - 8.0
Bulk Density (kg/m³)	2400
Particle S.G.	4.1
Colour	Dark Pink
Conductivity (ms/m)	< 25
Radioactivity (Limit 10Bq/kg)	Undetected
Size Standard	ASTM

Typical Chemical Composition:

Almandine Garnet %	97 - 98
Ilmenite %	1 - 2
Quartz %	< 0.5
Zircon %	< 0.2

EnviroGrit™ Available Sizes:

Grade	BR1	CB1	CB2	SB1	PB1	PF1	PF2	PF3
Microns	150	180	250	200 - 500	250 - 600	425 - 850	850 - 1180	850 - 2000
Inch	0.006	0.007	0.009	0.008 - 0.020	0.009 - 0.023	0.016 - 0.033	0.033 - 0.046	0.033 - 0.078

Other sizes available upon request.

EnviroGrit™ Packaging:

25kg Bags, 1 Tonne Bulk Bag (40 x 25kg Bags)	2 Tonne Bulk Bag
	1 Tonne Bulk Bag

EnviroGrit™ Ordering Information:

Stock Code	AGG-GNXXX-YYY
Key	XXX - Code for Garnet Grade YYY - Packing Blank for 25kg Bags B1T for 1 mt Bulk Bag B2T for 2 mt Bulk Bag



Silica Sand

Product Description and Technical Data:

Silica Sand is an economical granular abrasive product. It has many viable applications including use as a water filtration media, as an antiskid compound mix, as a plastering compound mix and also occasionally for water jet blasting.

Due to its low cost, some people use silica sand for abrasive blasting (hence the original term sand blasting). However, use of silica sand for abrasives blasting poses severe and often fatal, long term operator health risks, even with the use of operator safety equipment.

Pan Abrasives does not recommend the use of silica sand for any abrasive blasting applications.

All data provided herein is for information/comparison purposes only.



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

Silica Sand

Silica Sand Abrasive Properties:

Colour	Brown to Off-White	Typical Chemical Composition	
Bulk Density (kg/m³)	Approx. 1500	**SiO_2 %**	> 98
Particle S.G.	2.65	**Fe_2O_3 %**	Max. 0.08
Hardness (Moh Scale)	5.0 - 6.0	**Al_2O_3 %**	Max. 0.8

Silica Sand Available Sizes:

Grade	10/20	20/40	20/80	40/80
Microns	850 - 1000	450 - 850	180 - 850	180 - 450

Other sizes available upon request.

Silica Sand Packaging:

50kg Bags	1 Tonne Bulk Bags

Silica Sand Ordering Information:

Stock Code	AOT-OASSXX-YY
Key	XX - Upper Mesh Size (e.g. XX = 10 for Mesh 10/20) YY - Lower Mesh Size (e.g. YY = 20 for Mesh 10/20)



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

EnviroGlass™ Crushed Glass

Product Description and Technical Data:

EnviroGlass™ Angular blast media is manufactured from 100% recycled bottle and plate glass material and will produce an excellent finish and profile leaving the surface contamination free.

A low cost expendable blast cleaning media containing neither free silica nor heavy metals, EnviroGlass™ does not pose health hazards such as could be created by silica sand or slag media.

The sharp cutting angular edges provide a fast cleaning action at lower pressures producing an excellent surface profile preparation and yet is environmentally safe and user friendly.

Available in two different mesh grade sizes, EnviroGlass™ is one of the most economical expendable abrasives for cleaning surfaces where recovery and reuse is not practical or possible.

EnviroGlass™ is processed under stringent quality control procedures to ensure the size and distribution of particles in the abrasive mix is maintained at the correct proportion. This ensures an accurate, consistent surface profile is maintained.


EnviroGlass™

EnviroGlass™ Abrasive Properties:

Shape	Angular
Hardness (Moh Scale)	6
Bulk Density (kg/m³)	1300
Particle S.G.	2.5
Colour	Mixed
Conductivity (gm/cc)	2.46 - 2.49
PH (TLCP)	8.50



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

EnviroGlass™ Crushed Glass

EnviroGlass™ Typical Chemical Composition:

$Na_2O + K_2O + Li_2O$ %	12 - 15
CaO + MgO %	10 - 13
Al_2O_3 %	1 - 2
Other Oxides (Except SiO_2) %	0 - 1
SiO_2 (bound) %	Balance
Contains no free Silica	

Not classified as Hazardous according to criteria of WorkSafe Australia.

EnviroGlass™ Available Sizes:

Grade	1.5	0.850
Microns	1500 - 850	850 - 300
Inch	0.060 - 0.033	0.033 - 0.012

Other sizes available upon request

EnviroGlass™ Packaging:

1.5 Tonnes Bulk Bags

EnviroGlass™ Ordering Information:

Stock Code	AOT-GCXX-YYYY
Key	XXX - Product Size (e.g. 085 for 0.85mm) YYYY - Packing B15T for 1.5 Tonnes Bulk Bags



Linked in
www.linkedin.com/company/pan-abrasives

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

HardCut™ Silicon Carbide

Product Description and Technical Data:

HardCut™ Silicon Carbide is an extremely hard, sharp and aggressive abrasive. It is formed inside electric furnaces, at a temperature of 2200°C and produced from quartz and petroleum coke. It is chemically stable, has high resistance to oxidation and is also unaffected by acids and will only react to alkali at very high temperatures. As an abrasive, it is surpassed in hardness only by diamond, cubic boron nitride and boron carbide.

Being so hard HardCut™ is extremely fast cutting and can be used to clean and etch very hard surfaces that would otherwise not be possible with any other softer abrasives. Products manufactured from Tungsten Carbide may also be cleaned with HardCut™.

HardCut™ is harder and sharper than Aluminium Oxide but is more friable, therefore prone to breaking down at a faster rate.

HardCut™ is available in 2 types, HardCut™ Type G and HardCut™ Type B.

Type G is the purest form of commercially available Silicon Carbide. It is used in many applications ranging from blast cleaning and glass etching, manufacture of bonded and coated abrasives through to refractory and ceramic applications. It is most suited for surface finishing non-ferrous materials such as cemented carbides, optical glass and ceramics.

Type B is used for surface finishing applications requiring a fast cutting action without leaving any ferrous residue on the blast surface. It is also extensively used in the manufacture of coated and bonded abrasives (e.g. sand paper, grinding stones and wheels), in refractory products and for glass etching.



Silicon Carbide	ANSI B74.12

HardCut™ Abrasive Properties:

Property	Typical Value	Typical Chemical Composition						
			Type B			Type G		
Shape	Angular	Grade	12 - 90	100 - 180	220 - 240	12 - 90	100 - 180	220 - 240
Hardness (Moh Scale)	9.15							
Bulk Density (kg/m³)	1760	SiC %	> 98.5	98	97	> 99	98.5	97.5
Particle S.G.	3.2	FC %	< 0.2	< 0.3	< 0.3	< 0.2	< 0.25	< 0.25
Colour	Type B - Crystalline Black Type G - Semi Transparent Dark Green	Fe_2O_3 %	< 0.6	< 0.8	< 1.2	< 0.2	< 0.5	< 0.7
Size Standard	ASTM							

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

HardCut™ Silicon Carbide



HardCut™ Available Sizes:

Grade	Microns	Inch	Grade	Microns	Inch	Grade	Microns	Inch	Grade	Microns	Inch
4	4750 - 5600	.187 - .220	14	1400 - 1700	.055 - .066	40	425 - 500	.016 - .019	100	125 - 150	.005 - .006
5	4000 - 4750	.157 - .187	16	1180 - 1400	.046 - .055	46	355 - 425	.013 - .016	120	106 - 125	.004 - .005
6	3350 - 4000	.131 - .157	20	1000 - 1180	.039 - .046	54	300 - 355	.011 - .013	150	75 - 106	.003 - .004
7	2800 - 3350	.110 - .131	22	850 - 1000	.033 - .039	60	250 - 300	.009 - .011	180	63 - 90	.0025 - .0035
8	2360 - 2800	.092 - .110	24	710 - 850	.027 - .033	70	212 - 250	.008 - .009	220	53 - 75	.002 - .003
10	2000 - 2360	.078 - .092	30	600 - 710	.023 - .027	80	180 - 212	.007 - .008	240	45 - 53	.001 - .002
12	1700 - 2000	.066 - .078	36	500 - 600	.019 - .023	90	150 - 180	.006 - .007			

Other sizes available upon request

HardCut™ Packaging:

25kg Bags	1 Tonne Pallet (40 x 25kg Bags)

HardCut™ Ordering Information:

Stock Code	AOT-SCXXX
Key	XXX - Mesh Size (e.g. XXX = 008 for Mesh 8)



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

NaturalGrit™ Organic Abrasives

Product Description and Technical Data:

NaturalGrit™ Organic Abrasives are a family of abrasives manufactured and processed from natural agricultural fibers, to produce a soft blasting media conforming to international standards such as SAE and JIS.

NaturalGrit™ is produced in 3 types, Type A - Apricot; Type C - Corn Cob and Type W - Walnut. The major advantage NaturalGrit™ has over more aggressive abrasives is that fragile components can be cleaned or deflashed without incurring any damage or etching on the underlying surface. The low oil content of NaturalGrit™ makes it an ideal abrasive for deflashing electronic components when no oil residue is permitted to remain on the parts.

The low oil content, along with its low combustion temperature, also makes NaturalGrit™ ideally suited for removing burnt on deposits from automobile super chargers and turbine blades, as an expendable blasting abrasive; the product simply burns off after blasting without leaving any residue. As such, the product finds applications in power generation stations, turbine overhaul factories and in the aerospace industry.

Both Types A and W, the heaviest and the lightest respectively, of NaturalGrit™ are widely used for cleaning moulds, motor armatures and motor drives prior to rewinding. Type C NaturalGrit™ is high absorbent and its main use is mass finishing processes for drying and absorbing water, oil or wax from processed parts and also for fine polishing or brightening of parts.

Being a naturally occurring agricultural product, no hazardous waste is produced by the abrasive, thus environmental concerns and disposal costs are negated.



NaturalGrit™ Abrasive Properties:

NaturalGrit™	Apricot Type A	Corn Cob Type C	Walnut Type W
Fibre Content %	92.2	94.4	90.4
Oil Content %	0.1	0.2	0.4
Water Content %	7.7	5.4	8.7
Hardness (Moh Scale)	3.0 - 4.0	2.0 - 2.5	2.5 - 3.0
Specific Gravity	1.4	1.15	1.28
Bulk Density (kg/m³)	725	600	725
Acidity pH	4 - 6	5 - 7	4 - 6



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

NaturalGrit™ Organic Abrasives

NaturalGrit™ Available Sizes:

Grade	6/8	12/20	20/30	20/40	30/40	40/60
Microns	2360 - 3350	850 - 1700	600 - 850	425 - 850	425 - 600	250 - 425
Inch	0.090 - 0.131	0.033 - 0.066	0.023 - 0.033	0.016 - 0.033	0.016 - 0.023	0.009 - 0.016
Type	C	A, C	A, C	A, C	A, C	A, C

Grade	8	10	12	16	20	36	46
Microns	2360	2000	1700	1180	850	425	355
Inch	0.093	0.079	0.067	0.046	0.033	0.016	0.014
Type	W	W	W	W	W	W	W

Other sizes available upon request

NaturalGrit™ Packaging:

20kg Bags	0.5 Tonne Pallet (25 x 20kg Bags)

NaturalGrit™ Ordering Information:

Stock Code	AXX-YY-ZZ
Key	XX - AG for Type A Apricot Grit XX - OT for Type C Corn Cob XX - WS for Type W Walnut YY - Upper Mesh Size (e.g. YY = 06 for Mesh 6/8) ZZ - Lower Mesh Size (e.g. ZZ = 08 for Mesh 6/8) - Blank for Single Mesh



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

MillRite™ Milling Beads

Product Description and Technical Data:

MillRite™ is used for dispersion, microcrushing and mixing of dyes, pigment, paint and magnetic materials.

The product has a high degree of roundness - greater than 85% and finds extensive applications in the manufacturing process of dyes and paints, powdered chemical blending and manufacture, selected food industries, architectural or decorative usage, etc...

MillRite™ has a high compressive strength, making it suitable for mixing of magnetic materials in ball mills and is used extensively in the resin manufacturing industries for blending of resins, pigments, etc...

It also is used for fiber filtration and chemical waste fluid filtration.

MillRite™ is chemically inert but may react to highly concentrated hydrofluoric and sulfuric acids.


MillRite™

MillRite™ Abrasive Properties:

Shape	Powder
Hardness (Moh Scale)	> 6.0
Refractive Index	> 1.5
Particle S.G.	2.5
Colour	White
Compressive Strength (kg/mm²)	58

Typical Chemical Composition

SiO_2 %	> 70
CaO %	7 - 12
MgO %	1.0 - 4.5
Al_2O_3 %	0.8 - 1.0
R2O %	13 - 15
Magnetic Particles %	< 0.1
Roundness %	> 85



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

MillRite™ Milling Beads

MillRite™ Available Sizes:

Grade	JM-20	JM-30	JM-40	JM-50	JM-60	JM-70	JM-80
Size (mm)	0.85 - 1.18	1.00 - 1.40	1.40 - 2.00	1.70 - 2.40	2.00 - 3.00	2.40 - 3.40	3.00 - 4.00
Size (Mesh)	20 - 14	16 - 12	12 - 9	10 - 8	9 - 7	8 - 6	6 - 4

MillRite™ Packaging:

25kg Bags	1 Tonne Pallet (40 x 25kg Bags)

MillRite™ Ordering Information:

Stock Code	AGB-JMXX
Key	XX - Product Grade (e.g.XX = 20 for JM-20)

Precision Performance In Every Bead



Linked in
www.linkedin.com/company/pan-abrasives

CleanBlast™ Zinc Shot

Product Description and Technical Data:

CleanBlast™ Zinc Shot is a soft metallic abrasive, used primarily in the die-casting and gravity casting industries for the deburring and deflashing of aluminium and zinc alloy castings.

CleanBlast™ Zinc Shot is an ideal abrasive for blasting corrosion resistant steels and non-ferrous products, when the risk of ferrous contamination to the surface cannot be tolerated.

CleanBlast™ Zinc Shot is manufactured from virtually pure zinc. This enables it to be used in applications where there is a high risk of explosion if an aluminium shot were to be used. This is typically applicable when deflashing aluminium components with aluminium shot. The high volume of dust generated can lead to an explosive atmosphere. Aluminium shot is approximately 10 times more explosive than CleanBlast™ Zinc Shot, so the use of CleanBlast™ Zinc Shot greatly reduces the risk of explosion.

CleanBlast™ Zinc Shot is approximately 2.5 times denser than aluminium shot. This feature permits CleanBlast™ Zinc Shot to be used for deflashing or deburring components that would ordinarily not be deflashed or deburred adequately with aluminium shot. The high density of CleanBlast™ Zinc Shot enables it to remove burrs up to 40% in size of the shot's diameter.

CleanBlast™ Zinc Shot will remove burrs 0.5mm thick, whilst an equivalently sized aluminium shot will remove a burr only 0.3mm thick.



CleanBlast™ Abrasive Properties:

Shape	Spherical	**Size Standard**	ASTM
Hardness (HV)	35 - 55	**Zinc %**	> 99.0
Bulk Density (kg/m³)	4200	**Lead %**	< 0.007
Particle S.G.	7.1	**Iron %**	< 0.005
Colour	Grey	**Cadmium %**	< 0.004

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

CleanBlast™ Zinc Shot

CleanBlast™ Available Sizes:

Grade	AZ - 20	AZ - 15	AZ - 12	AZ - 10
Microns	1410 - 3360	1000 - 2000	710 - 1410	590 - 1000
Inch	0.055 - 0.130	0.039 - 0.078	0.028 - 0.055	0.02 - 0.039

Grade	AZ - 08	AZ - 06	AZ - 04
Microns	500 - 1000	350 - 840	297 - 710
Inch	0.019 - 0.039	0.013 - 0.033	0.011 - 0.028

Other sizes available upon request.

CleanBlast™ Packaging:

20kg Bags	500kg Steel Drums (25 x 20kg Bags)

CleanBlast™ Ordering Information:

Stock Code	AAL-0AZCSXX
Key	XX - Product Grade (e.g. 06 for AZ - 06)

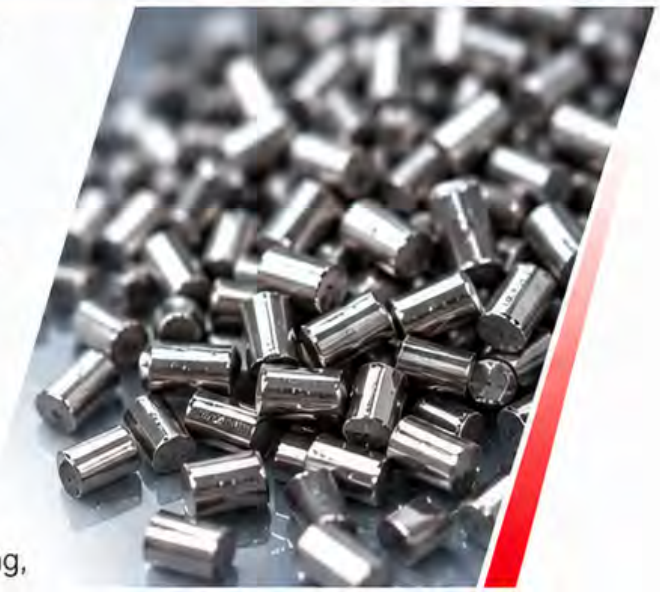


One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

WireBlast™ Cut Wire (As Cut)

For Blasting & Surface Finishing

Product Description and Technical Data:



WireBlast™ Cut Wire (As Cut) is a high performance metallic abrasive used for blasting, cleaning and surface finishing applications. It effectively removes rust, scale, coatings, weld spatter, burrs and other surface contaminants while providing a consistent and controlled surface finish.

As-cut wire is manufactured from wire strand, cut to lengths equal to its diameter. This produces cylindrical particles with sharp cut edges and a high consistency of size, shape, hardness and density, resulting in predictable blasting performance and uniform surface finishes.

WireBlast™ Cut Wire is widely used for cleaning, deburring, stain removal and polishing of metallic components. It is suitable for a range of industries including general engineering, automotive, aerospace, foundry, fabrication and maintenance applications.

Aluminium and zinc cut wire are particularly suited to softer-impact blasting where minimal base material removal is required, making them ideal for delicate components, mould cleaning and cosmetic surface finishing. Carbon steel and stainless steel cut wire provide durable, high-performance metallic abrasives for demanding cleaning and surface preparation applications, offering excellent service life and consistent results.

The close size range of WireBlast™ particles ensures uniform blasting action and repeatable surface finishes. The cylindrical as-cut form provides aggressive yet controlled cleaning action, making it effective for both heavy-duty surface preparation and precision finishing.

This brochure covers the as-cut blasting form of WireBlast™ cut wire. Conditioned and peening forms of WireBlast™ are available and covered in separate brochures.



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

WireBlast™ Cut Wire (As Cut)

WireBlast™ Abrasive Properties:

	Aluminium 1070	Carbon Steel	Stainless Steel SUS 304	Stainless Steel SUS 430	Zinc
Hardness (HV)	40 - 60	400 - 500	400 - 600	300 - 450	35 - 55
Density (g/cc)	2.7	7.6	7.6	7.6	7.1
Bulk Density (kg/l)	1.5	4.4	4.4	4.4	4.1
Ferrous / Non Ferrous	NF	F	F	F	NF
C %	/	0.4 - 0.7	< 0.08	< 0.12	/
Si %	< 0.2	0.15 - 0.35	< 1	< 0.75	/
Mn %	< 0.03	0.6 - 0.9	< 2	< 1	/
P %	/	< 0.04	< 0.045	< 0.04	/
S %	/	< 0.04	< 0.03	< 0.03	/
Ni %	/	/	8 - 10.5	N/A	/
Cr %	/	/	18 - 20	16 - 18	/
Cu %	< 0.04	/	/	/	/
Fe %	< 0.25	/	/	/	< 0.005
Mg %	/	/	/	/	/
Zn %	< 0.04	/	/	/	> 99.99
Pb %	/	/	/	/	< 0.007
Cd %	/	/	/	/	< 0.004

WireBlast™ Available Sizes:

Grade	0.3	0.4	0.5	0.6	0.7	0.8	1.0	1.2	1.5	1.7	2.0	2.3	2.5
Microns	300	400	500	600	700	800	1000	1200	1500	1700	2000	2300	2500
Inch	0.011	0.015	0.019	0.023	0.027	0.031	0.039	0.047	0.059	0.066	0.078	0.090	0.098
Al1070	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Steel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SS304	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SS430	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Zn	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Other sizes and AMS specification available upon request

WireBlast™ Packaging:

25kg Bags in Drum

WireBlast™ Ordering Information:

Stock Code	AOT-CWAXXX-YYG1
Key	XXXX - Product Material A1070 for Aluminium 1070 C62B, C72A or C82B for Carbon Steel S5304 for Stainless Steel 304 S5430 for Stainless Steel 430 ZN for Zinc YY - Product Size (e.g. 0.6mm, YY = 06) G1 - Form Code G1 for As Cut Conditioned forms for peening applications are covered in a separate WireBlast brochure.

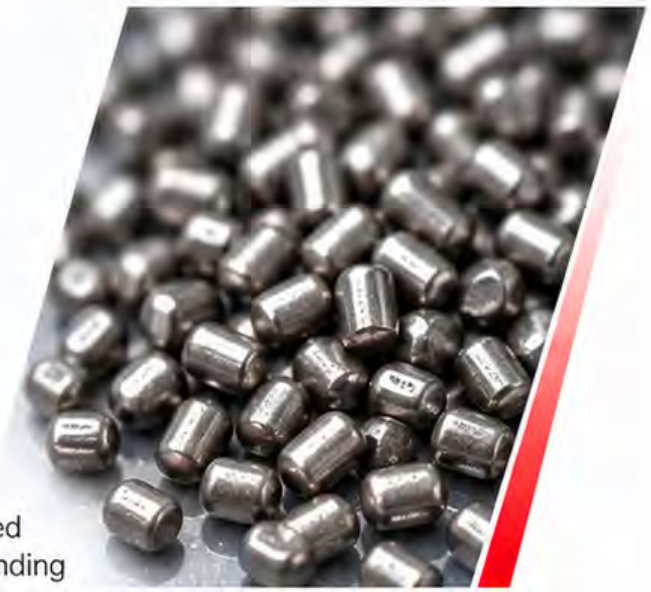
Linked in
www.linkedin.com/company/pan-abrasives

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

WireBlast™ Conditioned Cut Wire

For Peening Applications

Product Description and Technical Data:



WireBlast™ Conditioned Cut Wire is a premium peening media produced from cut wire and then conditioned to remove sharp edges and produce smooth, rounded or semi-rounded particles. It is specifically designed for shot peening applications where consistent performance, controlled surface impact and long media life are required.

Conditioning the cut wire particles reduces sharp corners and irregular shapes, resulting in media with improved flow characteristics, lower dust generation and reduced risk of surface damage. This allows for a more stable Almen intensity and highly repeatable peening results over an extended service life.

WireBlast™ Conditioned Cut Wire is available in semi-conditioned (partially rounded) and fully conditioned (spherical) forms, depending on the requirements of the application. During the conditioning process the cut wire particles are uniformly rounded to produce media with consistent size, shape, hardness and density, ideally suited for peening purposes.

For repeatable and reliable peening results, the ideal peening media should contain particles of identical size, shape, hardness and density. WireBlast™ Conditioned Cut Wire delivers these characteristics, ensuring uniform surface coverage, consistent residual stress and superior process control.

WireBlast™ Carbon Steel Conditioned Cut Wire is widely used for peening springs, gears, fasteners, forgings, castings and other fatigue-critical components. It is valued for its high durability, long service life and excellent peening performance.

WireBlast™ Stainless Steel Conditioned Cut Wire offers a non-ferrous alternative for peening stainless steel, aluminium and other non-ferrous materials, and is also used where ferrous contamination cannot be tolerated. It provides the same excellent conditioning, flow and repeatability as carbon steel grades.

WireBlast™ Conditioned Cut Wire is trusted by manufacturers worldwide for delivering consistent, high-quality peening results in demanding aerospace, automotive, energy and general industrial applications.

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

WireBlast™ Conditioned Cut Wire

WireBlast™ Abrasive Properties:

	Carbon Steel	Stainless Steel SUS 304	Stainless Steel SUS 430
Hardness (HV)	400 - 500	400 - 600	300 - 450
Density (g/cc)	7.6	7.6	7.6
Bulk Density (kg/l)	4.4	4.4	4.4
Ferrous / Non Ferrous	F	F	F
C %	0.4 - 0.7	< 0.08	< 0.12
Si %	0.15 - 0.35	< 1	< 0.75
Mn %	0.6 - 0.9	< 2	< 1
P %	< 0.04	< 0.045	< 0.04
S %	< 0.04	< 0.03	< 0.03
Ni %	/	8 - 10.5	N/A
Cr %	/	18 - 20	16 - 18
Cu %	< 0.04	/	/
Fe %	> 99	/	/
Mg %	/	/	/
Zn %	/	/	/
Pb %	/	/	/
Cd %	/	/	/

WireBlast™ Available Sizes:

Grade	0.2	0.3	0.4	0.5	0.6	0.7	0.8	1.0	1.2	1.5	1.7	2.0
Microns	200	300	400	500	600	700	800	1000	1200	1500	1700	2000
Inch	0.008	0.011	0.015	0.019	0.023	0.027	0.031	0.039	0.047	0.059	0.066	0.078
Carbon Steel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SS304	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SS430	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Other sizes and AMS specification available upon request

WireBlast™ Packaging:

25kg Bags in Drum

WireBlast™ Ordering Information:

Stock Code	AOT-CWXXXX-YYZZ
Key	XXXX - Product Material C62B, C72A or C82B for Carbon Steel SS304 for Stainless Steel 304 SS430 for Stainless Steel 430 YY - Product Size (e.g. 0.6mm, YY = 06) ZZ - Conditioned Form G2 for Semi Rounded & Conditioned G3 for Fully Rounded & Conditioned

Note: As-cut blasting products (G1) are covered in a separate WireBlast Cut Wire brochure.



Linked in
www.linkedin.com/company/pan-abrasives

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

PaintMix™ Line Marking Beads

Product Description and Technical Data:

PaintMix™ is used for road marking and striping highways and runways the world over. Its usage results in much better visibility of the traffic markings and road signs leading to safer night driving conditions.

Beads with higher refractive index are used for road safety signs.

PaintMix™ is available in three types - Drop On (Type D), Intermix (Type N) and Premix (Type P). PaintMix™ Type P and N beads are mixed with the paint prior to the striping of the roads.

As the paint layers wear, the beads are exposed, giving enhanced visibility to road markings. PaintMix™ Type D beads are dropped on the freshly striped paint surfaces on the roads to give immediate enhanced visibility to night drivers. Normally all the three PaintMix™ Type N, D and P beads are used in conjunction with each other.

PaintMix™ Type D beads are available in three versions - normal, moisture-proof and flotation types.



PaintMix™ Abrasive Properties:

Roundness	> 80 %	SiO_2%	> 70
Hardness (Moh Scale)	5.5 - 6.0	CaO + MgO %	> 8
Bulk Density (kg/m³)	1600	$Na_2O + K_2O + Al_2O_3 + Fe_2O_3$%	< 18
Particle S.G.	2.5	Quartz (Free Silica) %	< 0.5
Hue / Tint	Clear	Magnetic Particles %	< 0.1
		Size Standard	ASTM

Refractive Index	
Normal	> 1.5
Runways / Highway Signs	> 1.9



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

PaintMix™ Line Marking Beads

PaintMix™ Available Sizes:

Grade	Type D	Type N	Type P
Microns	150 - 600	425 - 1180	75 - 150
Inch	0.006 - 0.023	0.017 - 0.047	0.003 - 0.006

PaintMix™ Packaging:

25kg Bags	1 Tonne Pallet (40 x 25kg Bags)

PaintMix™ Ordering Information:

Stock Code (Type D)	AGB-T1503
Stock Code (Type N)	AGB-INTERMIX
Stock Code (Type P)	AGB-PREMIX



Linked in
www.linkedin.com/company/pan-abrasives

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

SatinBlast™ Stainless Steel Shot

Product Description and Technical Data:

SatinBlast™ Stainless Steel Shot is one of the longest lasting most durable abrasives available. Produced from 300 Series Cast Stainless Steel, SatinBlast™ will provide repeatable, consistent performance for thousands of cycles, a critical factor when using for shot peening purposes.

During use, and because of the continuous impacting, SatinBlast™ will work harden itself, its internal structure changing from austenitic to martensite. This transformation enables SatinBlast™ to withstand up to 5000 impacts.

As produced, SatinBlast™ has a hardness of approximately 200 HV. With continuous use the hardness will increase to approximately 530 HV after 2000 cycles. Due to its exceptionally low break down rate, virtually no dust is produced from the abrasive itself.

The high density of SatinBlast™, along with it not shattering on impact, also delivers very high impact energies to the work piece, resulting in faster cleaning rates.

SatinBlast™ is used for applications where residue on the blasted component is undesirable and/or when a very bright surface finish is required. The abrasive will leave no ferrous residue or staining on the work piece. SatinBlast™ is widely used on magnesium, aluminium, nickel and chromium based alloy components and other non-ferrous parts.



SatinBlast™ Abrasive Properties:

Property	Value	Property	Value
Shape	Round	**Size Standard**	ASTM
Hardness (HV) New / Unused	300	**Chromium %**	16 - 20
Hardness (HV) Approx. 2000 Cycles	450	**Nickel %**	12 - 14
Bulk Density (kg/m³)	4500	**Silicon %**	< 3
Particle S.G.	> 7.0	**Manganese %**	< 2
Colour	Silver Grey	**Carbon %**	< 0.25

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

SatinBlast™ Stainless Steel Shot

SatinBlast™ Available Sizes:

Grade	S040	S070	S110	S170	S230
Microns	45 - 250	75 - 425	150 - 600	425 - 1000	600 - 1180
Inch	0.002 - 0.009	0.003 - 0.016	0.006 - 0.023	0.016 - 0.039	0.023 - 0.046

Grade	S280	S390	S460	S660	S780
Microns	710 - 1400	850 - 1700	850 - 2000	1180 - 2800	1700 - 4000
Inch	0.028 - 0.055	0.033 - 0.067	0.033 - 0.078	0.046 - 0.110	0.067 - 0.157

Other sizes available upon request.

SatinBlast™ Packaging:

25kg Bags

SatinBlast™ Ordering Information:

Stock Code	AOT-OASBXXXX
Key	XXXX - Product Grade (e.g. S110 for S110)



One Stop Local Supply Source
Global Products - Local Service
Pan Abrasives

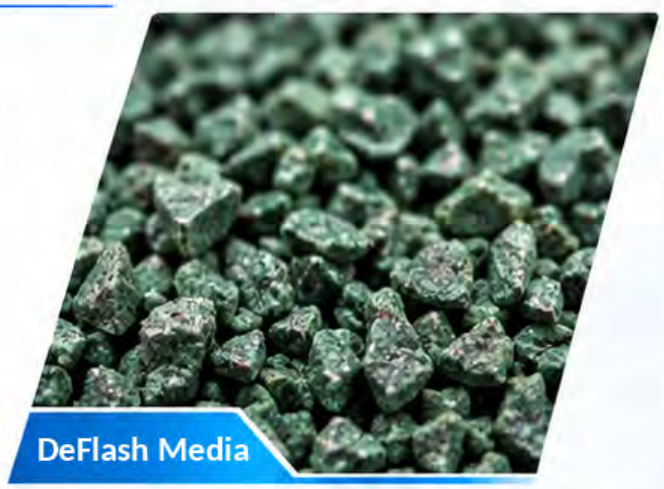
DeFlash Media

Product Description and Technical Data:

DeFlash Media is an abrasive originally designed for use in the semiconductor manufacturing industry for deflashing IC leadframes.

Due to low production rates or warpage problems caused by using glass beads and soft abrasives, DeFlash Media was developed as an alternative.

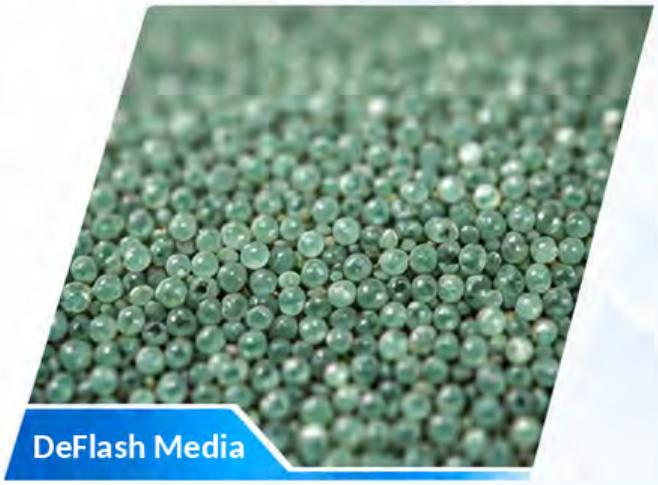
The abrasive is a mixture of both QuickCut™ Aluminium Oxide and BrightBlast™ Glass Beads. This combination allows IC leadframes to be deflashed providing a smooth surface finish, as achievable with glass beads, but at a higher production rate.


DeFlash Media

The angular QuickCut™ also aids in the removal of tightly adhered flash, that would not normally be removed by glass beads alone.

By altering the proportion of each abrasive type, DeFlash Media can be fine tuned to suit individual requirements depending on the application.

Due to the versatility of the proportions of QuickCut™ Aluminium Oxide and BrightBlast™ Glass Beads in the abrasive mix, DeFlash Media may also be used for deflashing or surface finishing a variety of components where the use of the individual abrasive does not achieve the desired result or finish.


DeFlash Media

In order to ensure consistency within individual batches, DeFlash Media is produced by a vibratory mixing process to provide thorough mixing and even particle distribution. DeFlash Media is widely used in, and suitable for both dry and wet deflashing/blasting processes.

One Stop Local Supply Source
Global Products - Local Service
Pan Abrasives

DeFlash Media

DeFlash Abrasive Properties:

QuickCut™ Aluminium Oxide	
Shape	Angular
Hardness (HRC min)	9
Bulk Density (kg/m³)	2400
Particle S.G.	3.9 - 3.94
Colour	Brown
Al_2O_3	> 94.0 %
Fe_2O_3	< 0.16 %
TiO_2	< 3.6 %
SiO_2	< 1.3 %
CaO	0.5 %
Na_2O	N/A

BrightBlast™ Glass Beads	
Shape	Spherical
Hardness (HRC min)	5.5
Bulk Density (kg/m³)	1500
Particle S.G.	2.45 - 2.5
Colour	Clear
Free Silica %	0



DeFlash Available Sizes:

Grade	31 - IC		41 - IC	
Component	QuickCut™ #120	BrightBlast™ GB10	QuickCut™ #120	BrightBlast™ GB10
Microns	125	90 - 150	125	90 - 150
Inch	0.004	0.003 - 0.006	0.004	0.003 - 0.006

DeFlash Packaging:

25kg Bags	1 Tonne Pallet (40 x 25kg Bags)

DeFlash Ordering Information:

Stock Code	AOT-OADMXX
Key	XX - Product Grade (e.g. 31 for 31- IC)



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

FastBlast™ Chilled Iron Grit

Product Description and Technical Data:

FastBlast™ Chilled Iron Grit is a sharp, hard, angular, metallic abrasive ideally suited for extremely fast blast cleaning of steel and iron components.

The friability of FastBlast™ results in it breaking down to form smaller particles, inheriting the same sharp, angular properties and shape as the original particles. This unique feature contributes to the superior rapid cleaning rates and high productivity.

As the particle shape is constantly maintained, the abrasive is also suitable when a repeatable, consistent surface profile and finish is required.

FastBlast™ is ideally suited for compressed air blasting applications especially when a high production rate is required. Being lower in cost, FastBlast™ is an economical alternative to steel abrasives, in situations where 100% of the abrasive cannot be retained for recycling.

If recycling facilities can be utilised, FastBlast™ also offers a viable alternative to copper slag or other expendable abrasives, as it may be recycled up to 50 times.

FastBlast™ can also be used as a high aggregate in marine ballast applications. These high-density aggregates are also used for hazardous radiation shielding purposes.



FastBlast™ Abrasive Properties:

Shape	Sharp, Angular	Foreign Matter %	< 1.0
Hardness (HRC min)	62	Total Carbon %	2.50 - 3.00
Bulk Density (kg/m³)	3990	Silicon %	1.40 - 1.80
Particle S.G.	7.0	Manganese %	0.30 - 0.50
Colour	Silvery, Light Brown	Sulphur %	0.14 - 0.20
Size Standard	BSS	Phosphorus %	0.50 - 1.00



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

FastBlast™ Chilled Iron Grit

FastBlast™ Available Sizes:

Grade	G02	G05	G07	G12	G17	G24
Microns	120	120 - 130	180 - 420	300 - 710	420 - 850	600 - 1000
Inch	.004	.004 - .011	.007 - .016	.011 - .027	.015 - .033	.023 - .039

Grade	G34	G39	G47	G55	G66	G80
Microns	850 - 1180	1000 - 1400	1180 - 1700	1400 - 2000	1700 - 2360	2000 - 2800
Inch	.033 - .046	.039 - .055	.046 - .066	.055 - .078	.066 - .092	.078 - .110

FastBlast™ Packaging:

25kg Bags or Drums of 750kg/800kg	1 Tonne Pallet (40 x 25kg Bags) or Drums

FastBlast™ Ordering Information:

Stock Code	ASA-CIGXXX
Key	XXX - Product Grade BSS (e.g. 017 for G17)



Linked in
www.linkedin.com/company/pan-abrasives

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

FastBlast™ Chilled Iron Shot

Product Description and Technical Data:

FastBlast™ Chilled Iron Shots are manufactured from hypo-eutectic composition iron to produce a structure of iron carbide in a martensite matrix.

Iron abrasives are hard and break down in a manner which ensures continual exposure of new sharp cutting edges. It is this mechanism which provides their characteristic rapid cleaning action and a silvery, sharp edged profile to surfaces after blast treatment.

Chilled Iron Shots are made in accordance with technical specification of BS 2451.

Spherical particle shaped, available in a wide range of sizes from 8mm down and including all the shot grades contained in BS 2451 specification, which are generally used in non-abrasive applications.

Ferroden (R)/Ballast-Pak (R) - specially blended forms of iron abrasives, both round and angular designed to satisfy individual requirements in high density aggregate and shielding type applications.

Other typical applications include: vibration and noise suppression, wear resistant surfaces, roll etching, stone sawing, etc..


Chilled Iron Shots

FastBlast™ Abrasive Properties:

Shape	Spherical	Total Carbon %	2.50 - 3.00
Hardness (HRC min)	62	Silicon %	1.40 - 1.80
Bulk Density (kg/m³)	4250	Sulphur %	0.14 - 0.20
Particle S.G.	7.0	Manganese %	0.30 - 0.50
Size Standard	BSS	Phosphorus %	0.50 - 1.00



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

FastBlast™ Chilled Iron Shot

FastBlast™ Available Sizes:

BSS (BS2451)	S070	S120	S170	S240	S340
Mesh Size (mm)	0.18 - 0.42	0.30 - 0.60	0.42 - 0.85	0.60 - 1.00	0.85 - 1.40
MIN% between sizes shown	80%	80%	85%	85%	85%

BSS (BS2451)	S390	S470	S550	S660	S800
Mesh Size (mm)	1.00 - 1.70	1.18 - 2.00	1.40 - 2.00	1.70 - 2.36	2.00 - 2.80
MIN% between sizes shown	85%	85%	85%	85%	85%

FastBlast™ Packaging:

25kg Bags or Drums of 750kg/800kg	1 Tonne Pallet (40 x 25kg Bags) or Drums

FastBlast™ Ordering Information:

Stock Code	ASA-CISXXX
Key	XXX - Product Grade BSS (e.g. 170 for S170)



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

JetBlast™ Copper Slag

Product Description and Technical Data:

JetBlast™ Copper Slag is a by-product produced in the manufacture of copper. During the smelting and quenching process, in the copper smelter, mineral slag is converted to Iron Silicate, thus producing raw copper slag. The raw copper slag is then processed at up to 90 tonnes per hour, to produce JetBlast™. JetBlast™ is produced from 100% raw copper slag and is not mixed with recycled copper slag or tin slag. Additions of either of these two products can significantly increase levels of Radioactivity and Conductivity.

JetBlast™ is a low cost expendable material suited for open blast cleaning and due to its low silica content does not pose the health hazards created by silica sand. Its sharp, hard cutting edges provide a fast cleaning action and excellent surface profile preparation. JetBlast™ is one of the most economical expendable abrasives available for cleaning steel surfaces where recovery and reuse are not practical.

Coarse grade JetBlast™ is used predominantly in shipyards for the removal of heavy corrosion and coatings leaving a typical surface profile of up to 120 microns. Medium grade JetBlast™ is used for cleaning mill scale and medium rust removal, creating a typical surface profile of 60 to 100 microns. Fine grade JetBlast™ is used on new steel to remove mill scale and light rust resulting in a typical surface profile of 40 microns. For low-end applications, where blasting cost is a major factor, a general grade material is available.



JetBlast™ Abrasive Properties:

Shape	Sharp, Angular
Hardness (Moh Scale)	6 - 7
Bulk Density (kg/m^3)	1900
Particle S.G.	3.4
Colour	Shiny Black
Size Standard	ASTM
Conductivity	< 25ms/m

Fe_2O_3 %	> 45	Tin %	0.08
SiO_2 %	> 31	Antimony %	0.07
Al_2O_3 %	> 4	Chromium %	0.02
Zn %	< 1	Cobalt %	0.02
CaO %	< 7	Nickel %	0.02
Cu %	< 1	Cadmium %	0.004
MgO %	> 1.5	Arsenic	Not Detected
TiO_2 %	< 2	Beryllium	Not Detected
Free Silica %	< 1	Trace Elements %	< 0.5
Lead %	0.1	Moisture %	< 1



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

JetBlast™ Copper Slag

JetBlast™ Available Sizes:

Grade	30/60	16/30	12/30	10/30	8/30	G. Grade
Microns	250 - 600	250 - 1180	600 - 1700	600 - 2000	600 - 2360	0 - 5000
Inch	0.009 - 0.023	0.009 - 0.046	0.023 - 0.060	0.023 - 0.078	0.023 - 0.092	0 - 0.195

JetBlast™ Packaging:

50kg Bags	2.0 Tonnes Pallet (40 Bags)
2.0 Tonnes Bulk Bag	1.5 Tonnes Pallet (30 Bags)
	1.0 Tonne Pallet (20 Bags)

JetBlast™ Ordering Information:

Stock Code	ACS-XXXX-YY-ZZ
Key	XXXX - Product Grade (e.g. 8/30, XXXX = 0830) YY - Product Weight (e.g. 2T, YY = 20) YY - 00 when packing in Bulk or Loose Bags ZZ - Packing AO for Bulk BA for Loose Bags CP for Bulk Bag CX for Jungle Box DA for Shrink Wrap



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

PanaCut™ Granite Cutting Grit

Product Description and Technical Data:

PanaCut™ is a steel abrasive produced specifically to meet the requirements of stone cutting facilities utilising gang saws for the cutting of granite blocks into slabs. The abrasive is suspended in a slurry and is continuously fed between traversing saw blades and the granite block, thus abrading away the granite. The arduous requirements of this application render standard steel grit and chilled iron grit unsuitable for the application.

PanaCut™ is manufactured from cast steel shots crushed to granular grit form and subsequently tempered to a hardness unique to granite cutting applications. PanaCut™ is produced under a controlled manufacturing process to achieve a product of uniform hardness, density and microstructure; coupled with good toughness for durability. These unique characteristics provide superior blade down speeds and decreased abrasive consumption without affecting cut slab finish or quality.

PanaCut™ is available in all size ranges conforming to SAE and JIS specifications. Standard grade materials are formulated to meet the general requirements of a typical operation cutting a wide variety of blocks.

Customised special cutting grades (with unique hardness and/or size specifications and/or mixed with shots) are also available upon request.

Our customisation program allows our customers to have the best product for their process as each stone cutting factory has its own unique characteristics depending on the gang saw equipment, cutting speed and pressure, mix of granite blocks being cut etc.



PanaCut™
Granite Cutting Grit

PanaCut™ Abrasive Properties:

Hardness (HRC)	63 - 67	Micro Structure	> 85% Martensite
Shape	Angular	Total Carbon %	0.8 - 1.2
Bulk Density (kg/m³)	3700	Silicon %	0.4 - 1.2
Particle S.G.	7.6	Manganese %	0.5 - 1.2
Colour	Silvery Grey	Sulphur %	< 0.05
Size Standard	SAE and JIS	Phosphorus %	< 0.05

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

PanaCut™ Granite Cutting Grit

PanaCut™ Available Sizes:

Grade	PC - 12H	PC - 11H	PC - 10H	PC - 7H	PC - 4H
Grade	PC - 12HS	PC - 11HS	PC - 10HS	PC - 7HS	PC - 4HS
Microns	710 - 1400	710 - 1400	425 - 1180	300 - 1000	180 - 710
Inch	0.027 - 0.055	0.027 - 0.055	0.016 - 0.046	0.011 - 0.039	0.007 - 0.027

Other sizes available upon request
PC-H designates grit only. PC-HS designates grit with shot addition, 2-15% depending on requirements.

PanaCut™ Packaging:

25kg Bags or Drums of 750kg/800kg	1 Tonne Pallet (40 x 25kg Bags) or Drums

PanaCut™ Ordering Information:

Stock Code	ASA-STCPC-XXX or XXXX
Key	XXX - Product Grade (e.g. 04H for PC-4H) XXXX - Product Grade (e.g. 12HS for PC-12HS)



One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

ProFinish™ Olivine

ProFinish™ Olivine is non-hazardous, non-toxic and chemically inert; so it is safe for open blasting use, and for use around water. Being virtually silica free (less than 1%) and heavy metals free, it is an environmentally safe alternative to silica sand and other expendable abrasives such as slags.

Olivine rock deposits are usually harder than surrounding rock and stands out as distinct ridges in the terrain. These ridges are often dry with little soil. Such deposits are mined, and material is subsequently crushed, screened and further processed to produce ProFinish™ Olivine. The sub-angular shape enables rapid cleaning and low abrasive consumption. It offers an excellent cost/performance ratio especially when used in conjunction with an abrasive recycling system, as the material can be recycled 3-4 times prior to disposal.



ProFinish™ Olivine is available in several sizes to suit a myriad of blasting applications. Ultra-fine sizes may be used for non-ferrous blasting or ferrous applications requiring a lower surface profile. Larger grain sizes may be used with new steel to produce 76-102 microns profile, and up to 102-127 microns profile for heavily painted or rusted steel with deep cavities.

The abrasive material is classified as SSPC Grade 4 for surface profile (76 to 127 microns) and Class A for crystalline silica content (less than 1.0%). It also meets US NAVY requirements for ship hull blast cleaning under MIL-A-22262b (SH) and low dust emission requirements for California Air Resource Board (California Code of Regulation, Title 17, Section 92530).

Environmentally Safe
Virtually silica free (< 1%) and heavy metals free

Non-Hazardous & Non-Toxic
Safe for open blasting use and around water

Recyclable
Can be recycled 3-4 times prior to disposal

ProFinish™ Abrasive Properties:

Shape	Angular Free-Flowing Grit
Hardness (Moh Scale)	7.0 - 7.5
Bulk Density (kg/m³)	1250 - 1314
Particle S.G.	2.72 - 2.94
Colour	Brown
Conductivity (ms/m)	< 25
Chloride	0.016%
TENORM (< 1Bq/g)	0.0666
Radioactivity (< 0.25 uSv/hr)	Undetected
Size Standard	ASTM

One Stop Local Supply Source
Global Products - Local Service
PanAbrasives

ProFinish™ Olivine

ProFinish™ Typical Chemical Composition:

Magnesium Oxide MgO %	38 - 42
Silicon Dioxide SiO_2 (*) %	39 - 47
Iron Oxide Fe_2O_3%	7 - 10
Aluminium Oxide Al_2O_3%	0.3 – 1.3
Calcium Oxide CaO %	0.8 – 1.0
Others	1 - 2
(*) In silicate form with less than 1% free silica	

ProFinish™ Available Sizes:

Grade	PA1	PA2	PA2.5	PA3
Microns	1000 -3000	400-1200	300-1000	200-500
Inch	0.039 - 0.118	0.016 - 0.047	0.012 - 0.039	0.008 - 0.020

ProFinish™ Packaging:

25kg Bags or 1360kg Bulk Bags	1.4 Tonnes Pallet (56 x 25kg Bags), Bulk Bag

ProFinish™ Ordering Information:

Stock Code	AOT-PROXXX-YY
Key	XXX – Code for Olivine Grade YY – Packing BA for Loose 25kg Bags CP for 1360kg Bulk Bags Blank for 1.4 Tonnes Pallet (56 x 25kg Bags)





Pan Abrasives

Global Products - Local Service

www.pan-abrasives.com

Singapore

Pan Abrasives Pte Ltd
2 Woodlands Sector 1
#05-06 Woodlands Spectrum I
Singapore 738068

Tel : 65-6861-6988
Fax : 65-6861-0919

Malaysia

Pan Abrasives Sdn Bhd
Kompleks Hamodal 6,
Lot 3291, 5 ½ Miles, Jalan Kapar,
42100 Klang, Selangor Darul Ehsan.

Tel : 60-3-3290-3518
Fax : 60-3-3290-2187