

Machine brand name of Fuji Manufacturing who always pursues something new

PNEUMA-BLASTER®

Our machine brand name, PNEUMA-BLASTER, represents our strong will to keep on challenging on the new possibilities of blasting.

We will always pursue something new in every field and every industry, betting all of our resources on possibilities of blasting.

That is our pride to aim to be the best in the world.

We offer optimal solutions by blasting technology

Various challenges we daily get from production site such as "More added value, higher quality." We are to respond to new challenges for "more", by generating optimal processing ability utilizing our core technology of blasting, such as constant rate spray unit, nano-sized abrasive blasting technology and high performance classification system, as well as by our challenge for evolutions and various solution abilities by blasting.

Longer service life, improved slidability

- α processing
- WPC treatment
- Shot peening
- Formation of plateau structure surface
- Improvement of nano-crystallization
- Molybdenum disulfide shot processing

Polishing /micro burrs removal

- Sirius/SiriusZ
- Cemented carbide tool polishing
- AM product polishing
- Improvement of mold releasing property and durability
- Deburring of PPS plastic products
- Deburring of thin aluminum diecast products

Micro processing technology

- Nano-blaster
- VIA processing of PCB
- Maskless cutting
- Microscopic roughening of wafer to nano-level
- Emboss forming of electrostatic chucks
- Removal of micro burrs in narrow area

Surface improvement

- Gemini processing
- MKS processing
- GMT processing
- Improvement of resin flow or releasing property of molds
- Suppression of powder attachment
- Imparting hydrophily or water repellency

Tokyo headoffice 5-2-24 Matsue Edogawa-ku 132-0025 Japan
☎ **+81-3-3686-5104**

Nagoya sales office 8 Himewaka-cho Meitou-ku Nagoya-shi Aichi 465-0045 Japan
☎ **+81-52-703-2291**

Osaka sales office 11-17, Toyotsu-cho Suita-shi Osaka-fu 564-0051 Japan
☎ **+81-6-6190-2323**

Fuji Blastech (Thailand) Co.,Ltd. 979/3 Moo 2 T.Phraekkasa Mai, A.Muang Samutprakan, Samutprakan 10280 Thailand
☎ **+66-2-136-7474**

Contact by e-mail

✉ info@fujimfg.co.jp

 **Fuji Manufacturing Co.,Ltd.** 
<https://www.fujimfg.co.jp>

- * Specifications may be subject to change without notice.
- * If you would like to request a Safety Data Sheet (SDS) or investigate the chemical substances contained in the products listed in this catalog, please contact us from our website.

Sales agent Please contact the agent below or our company

Abrasive products General catalog

GENERAL CATALOG

Ceramics, Glass

- Fujirundum A
- Fujirundum WA
- Fujirundum C
- Fujirundum GC
- Glass beads
- Glass powder
- Zircon shot
- Zircon beads
- Zircon grit
- Zirshot HDC
- Microshot YZ
- Tosa Emery

Resin, Plant

- Nylon media
- Poly Extra
- Shave media Y
- Shave media M
- Envirostrip
- Envirostrip XL
- E-strip GPX
- Corn
- Walnut
- Apricot
- Peach

Metallic

- Reduced iron powder
- Steel shot
- Steel cut wire
- Steel round cut wire
- Steel beads
- Steel grit
- White cast iron grit
- Fuji Hard shot
- Stainless steel beads
- Stainless steel cut wire
- Stainless steel round cut wire
- Stainless steel grit
- Zinc shot

Special types

- Molybdenum disulfide
- Dry ice
- Baking soda

	Material	Product name	Hardness Revised Mohs hardness	Specific gravity (typical value)		Shape	Typical usage						Packing unit		
				Absolute specific gravity	Bulk specific gravity		Pretreatment, scale removal	Foreign matter removal	Deburring	Matte finish, decorative finish	Shot peening	Cutting or roughening of and to machine material		Slidability improvement	
Ceramics, Glass	Alumina Silicon carbide	Fujirundum A	12	3.94	1.95	Polygon	●	●	●						20kg • 4kg(Some are excluded)
		Fujirundum WA	12	3.93	1.76	Polygon	●	●	●			●			20kg • 4kg(Some are excluded)
		Fujirundum C	13	3.22	1.58	Polygon						●			20kg
		Fujirundum GC	13	3.22	1.58	Polygon						●			20kg
	Glass	Glass beads	6.5	2.5*	1.6*	Spherical	●	●	●	●					20kg • 4kg(Some are excluded)
		Glass powder	6.5	2.5	1.4	Polygon	●	●							20kg • 3kg
	Zircon Zirconia	Zircon shot	7.5	3.85	2.25	Spherical				●	●				20kg • 4kg
		Zircon beads	7.5	3.85	2.25	Spherical	●	●	●	●					20kg • 4kg
		Zircon grit	7.5	3.85	2.25	Polygon	●	●							20kg • 4kg
		Zirshot HDC	11	6.2	3.8	Spherical	●			●	●				20kg • 4kg
Microshot YZ		11	6	3.6	Spherical	●			●	●				5kg	
Other ceramics	Tosa Emery	12	3.78	1.71	Polygon	●	●	●						20kg	
Resin, Plant	Resin	Nylon media	2	1.15	0.55	Cylindrical			●						20kg(Some are excluded) • 10kg • 4kg
		Poly Extra	3	1.2	0.74	Polygon		●	●						20kg • 4kg(Some are excluded)
		Shave media Y	3.5	1.5	0.95	Polygon		●	●						20kg • 4kg(Some are excluded)
		Shave media M	4	1.5	0.95	Polygon		●	●						20kg • 4kg(Some are excluded)
	Plant	Envirostrip	2	Approx. 1.45	Approx. 0.69	Polygon		●							10kg • 3kg
		Envirostrip XL	2	Approx. 1.45	Approx. 0.69	Polygon		●							10kg • 3kg
		E-strip GPX	2	Approx. 1.4	Approx. 0.69	Polygon		●							10kg • 3kg
		Corn	2	1.15	0.53	Polygon		●	●						20kg
		Walnut	3	1.28	0.58	Polygon		●	●						20kg
		Apricot	3.5	1.4	0.7	Polygon		●	●						20kg
Peach	4	1.41	0.74	Polygon		●	●						20kg		
Metallic	Steel	Reduced iron powder	4.5	7.2	3.5	Polygon	●			●					25kg
		Steel shot	6	7.5	4.4	Spherical	●	●	●		●				20kg
		Steel cut wire	6	7.6	Approx. 4.5	Cylindrical			●						20kg
		Steel round cut wire	6.5	7.6	Approx. 4.5	Spherical	●	●	●		●				20kg
		Steel beads	8	7.6	4.3	Spherical	●		●		●				20kg
		Steel grit	8	7.6	3.9	Polygon	●	●	●						20kg
		White cast iron grit	8	7.5	3.8	Polygon	●	●	●						20kg(Some are excluded)
		Fuji Hard shot	11	7.4	3.9	Spherical	●				●				15kg • 4kg
	Stainless steel	Stainless steel beads	4.5	7.6	4.3	Spherical	●	●	●		●				20kg • 4kg(Some are excluded)
		Stainless steel cut wire	6	7.6	Approx. 4.5	Cylindrical			●						20kg
		Stainless steel round cut wire	6	7.6	Approx. 4.5	Spherical	●	●	●		●				20kg
		Stainless steel grit	8	Approx. 7.9	4.1	Polygon	●	●	●						15kg • 4kg
	Other metallic	Zinc shot	2	7.1	4.3	Spherical		●	●	●					20kg
Special	Special	Molybdenum disulfide	1	4.8	-	Polygon							●		20kg
		Dry ice	2	1.56	-	Cylindrical		●	●						Subject to vary by region
		Baking soda	2.5	2.2	1.15	Polygon	●	●							25kg

* Soda lime glass (2.4 / 1.5 for borosilicate glass)

ALUMINA

Outline	Hardness	Specific gravity (typical value)	Chemical composition	Specification (wt%)
Fujirundum A (Brown fused alumina)  Brown fused alumina abrasive that have high hardness with moderate ductility. Widely and generally used with its good cutting power. Pretreatment, scale removal Foreign matter removal Deburring	Revised Mohs hardness	Absolute specific gravity	Al ₂ O ₃ ^{※1}	≥94.5
	12	3.94	TiO ₂	1.5 ~ 4.0
	Knoop hardness	Bulk specific gravity	SiO ₂	1.5 ≥
	HK2020	1.95	Fe ₂ O ₃	0.50 ≥
Fujirundum WA (White fused alumina)  High purity white fused alumina abrasive. Optimal to use for product that should avoid residue of iron or color change. Pretreatment, scale removal Foreign matter removal Deburring Cutting or roughening of and to machine material	Revised Mohs hardness	Absolute specific gravity	Al ₂ O ₃ ^{※2}	≥99.0
	12	3.93	Na ₂ O	0.18 ≥ ~ Grain size 90 0.53 ≥ Grain size 100 ~
	Knoop hardness	Bulk specific gravity	SiO ₂	0.1 >
	HK2050	1.76	Fe ₂ O ₃	0.3 ≥

Values in the above table are specification of compositions of Fujirundum A of grain size 16 to 220 or Fujirundum WA of grain size 16 to 220
 ※1 Specification of grain size of Al₂O₃ is in the range of 240 to 3000 ≥ 87.5
 ※2 Specification of grain size of Al₂O₃ is in the range of 240 to 3000 ≥ 98.0/4000 to 8000 ≥ 96.0

SILICON CARBIDE

Outline	Hardness	Specific gravity (typical value)	Chemical composition	Specification (wt%)
Fujirundum C (Black silicon carbide)  High purity black silicon carbide abrasive. Used when grinding ability is required to be stronger than alumina. Cutting or roughening of and to machine material	Revised Mohs hardness	Absolute specific gravity	SiC ^{※1}	≥97.0
	13	3.22	Fe ₂ O ₃	0.50 ≥
	Knoop hardness	Bulk specific gravity	FC	0.50 ≥
Fujirundum GC (Green silicon carbide)  High purity green silicon carbide abrasive. Used for cutting or roughening of brittle materials. Cutting or roughening of and to machine material	Revised Mohs hardness	Absolute specific gravity	SiC ^{※2}	≥98.0
	13	3.22	Fe ₂ O ₃	—
	Knoop hardness	Bulk specific gravity	FC	0.40 ≥

※1 Specification of grain size of SiC is in the range of 240 to 2000 ≥ 92.0
 ※2 Specification of grain size of SiC is in the range of 240 to 3000 ≥ 96.0

Usage Pretreatment for painting or adhesion

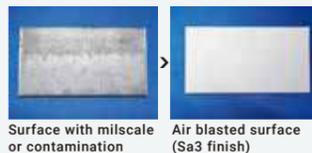
Abrasive with high hardness and cutting power for grinding off stain or contaminant from the surface as well as forming uniform and miniature bumps and dips of sophisticated shapes without directional property. Contamination will be removed as well as the increased surface area may contribute to have better adhesion, to prevent unevenness of painting and to suppress internal corrosion.

➤ Pretreatment for painting large steel structure components



Achievement of high degree of rust removal

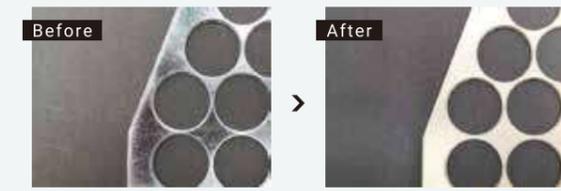
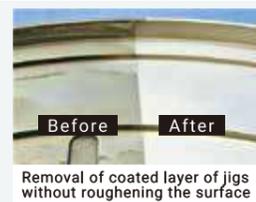
Air blasting can remove mill scale or contamination to meet the highest requirement of various rust resistance standards with ease.



Usage Cleaning, rebuilding

Removal of coated layer or refurbishment of jigs for vacuum deposition system

Used for cleaning or refurbishing of jigs or parts for spattering systems or vacuum deposition systems. Used in various industries and applications as effective and safe cleaning method as cleaning is available in shorter time than hand work with less operator hazard compared to chemical processing.



Grain size	100% pass (1 tier)		Rated value or less (2 tiers)		Rated value or more (3 tiers)		Total is at the rated value or more (3 tiers and 4 tiers)		Pass up to 3% (5 tiers)		Available						
	μm	wt%	μm	wt%	μm	wt%	μm	wt%	μm	wt%	A	WA	C	GC			
	●: In stock ○: available																
16	2,000	0.0	1,400	20	1,180	45	1,180	~ 1,000	70	850	≤3.0	●	—	●	—	○	○
20	1,700	0.0	1,180	20	1,000	45	1,000	~ 850	70	710	≤3.0	●	○	●	—	●	○
24	1,180	0.0	850	25	710	45	710	~ 600	65	500	≤3.0	●	○	●	○	●	○
30	1,000	0.0	710	25	600	45	600	~ 500	65	425	≤3.0	●	○	●	○	●	○
36	850	0.0	600	25	500	45	500	~ 425	65	355	≤3.0	●	○	●	○	●	○
46	600	0.0	425	30	355	40	355	~ 300	65	250	≤3.0	●	○	●	○	●	○
60	425	0.0	300	30	250	40	250	~ 212	65	180	≤3.0	●	○	●	○	●	○
80	300	0.0	212	25	180	40	180	~ 150	65	125	≤3.0	●	○	●	○	●	○
100	212	0.0	150	20	125	40	125	~ 106	65	75	≤3.0	●	○	●	○	●	○
120	180	0.0	125	20	106	40	106	~ 90	65	63	≤3.0	●	○	●	○	●	○
150	150	0.0	106	15	75	40	75	~ 63	65	45	≤3.0	●	○	●	○	●	○
180	125	0.0	90	15	63	40	63	~ 53	65	—	—	●	○	●	○	●	○
220	106	0.0	75	15	53	40	53	~ 45	60	—	—	●	○	●	○	●	○

Conforming to JIS R 6001-1:2017 (Sieving test)

Grain size	Maximum grain size μm	Grain size at 3% cumulative height μm	Grain size at 50% cumulative height μm	Grain size at 94% cumulative height μm	Available					
					A	WA	C	GC		
240	127 or less	103 or less	57.0 ± 3.0	40 or more	○	—	○	—	○	○
280	112 or less	87 or less	48.0 ± 3.0	33 or more	○	—	○	—	○	○
320	98 or less	74 or less	40.0 ± 2.5	27 or more	○	—	○	—	○	○
400	75 or less	58 or less	30.0 ± 2.0	20 or more	○	—	●	—	○	○
500	63 or less	50 or less	25.0 ± 2.0	16 or more	○	—	○	—	○	○
600	53 or less	43 or less	20.0 ± 1.5	13 or more	○	—	●	—	○	○
700	45 or less	37 or less	17.0 ± 1.3	11 or more	○	—	○	—	○	○
800	38 or less	31 or less	14.0 ± 1.0	9.0 or more	○	—	●	—	○	○
1000	32 or less	27 or less	11.5 ± 1.0	7.0 or more	○	—	●	—	○	○
1200	27 or less	23 or less	9.5 ± 0.8	5.5 or more	○	—	○	—	○	○
1500	23 or less	20 or less	8.0 ± 0.6	4.5 or more	○	—	○	—	○	○
2000	19 or less	17 or less	6.7 ± 0.6	4.0 or more	○	—	○	—	○	○
3000	13 or less	11 or less	4.0 ± 0.5	2.0 or more	○	—	○	—	○	○
4000	11 or less	8.0 or less	3.0 ± 0.4	1.3 or more	—	—	○	—	—	○
6000	8 or less	5.0 or less	2.0 ± 0.4	0.8 or more	—	—	○	—	—	—
8000	6 or less	3.5 or less	1.2 ± 0.3	0.6 or more*	—	—	○	—	—	—

* Grain size at 75% cumulative height Conforming to JIS R 6001-1:2017 (Electrical resistance test method)

Usage Patterning cut, micro roughening

Processing on PC boards

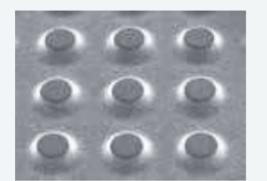
Air blasting can perform processing for vias (boring), counter bores(not through hole), cavities(grooving) and for the same processing area processing time may be the same even for increased number of bores so that we can say "the more holes per area, the more processing advantage by air-blasting."



Blind via hole processing (Φ100μm)

Usage Emboss processing on electrostatic chuck (pin forming)

Our unique system controls abrasive spray rate to achieve high precision emboss processing (pin forming). Our technology provides processing of emboss diameter of 50 microns at minimum and emboss height of 11 microns, with precision of ±0.5microns in height, in order for improved quality of electrostatic chucks.



SEM picture of pin forming result

OTHER CERAMICS

Tosa Emery (Artificial emery)	Grain size	Center grain size μm						
Abrasive with high hardness and moderate ductility. Crystal structure is unique to have self-generating Pretreatment, scale removal Foreign matter removal Deburring	#24	850 ~ 600	#50	425 ~ 300	#100	180 ~ 125	#200	90 ~ 53
	#30	710 ~ 500	#60	355 ~ 250	#120	150 ~ 106	#220	75 ~ 45
	#36	600 ~ 425	#80	300 ~ 212	#150	125 ~ 90		
	#40	500 ~ 355	#90	250 ~ 180	#180	106 ~ 63		

GLASS

ASG : Absolute specific gravity
BSG : Bulk specific gravity

Outline	Product number	Chemical composition	Hardness	Specific gravity (typical value)
Glass beads (Soda lime glass / Borosilicate glass) Being spherical particles, soft luster or matte texture will be achieved almost without grinding or cutting on the processing surface. Pretreatment, scale removal Foreign matter removal Deburring Matte finish, decorative finish	FGB-30 ~ FGB-600	Soda lime glass	Revised Mohs hardness 6.5 Vickers hardness 550HV	ASG 2.5 BSG 1.6
	FGB-800H ~ FGB-1500H	Borosilicate glass	Revised Mohs hardness 6.5 Vickers hardness 580HV	ASG 2.4 BSG 1.5

● : In stock ○ : available

Grain size	100% pass (1 tier)		Rated value or less (2 tiers)		Total is at the rated value or more (3 tiers and 4 tiers)		Max pass (5 tiers)		Total amount of defects such as twins, flat or sharp edged particles	Available FGB	
	μm	wt%	μm	wt%	μm	wt%	μm	wt%		20kg	4kg
30	1,000	0	850	≤3	710 ~ 500	80	425	≤5	≤25	●	○
40	710	0	600	≤3	500 ~ 355	80	300	≤5	≤25	●	○
50	600	0	500	≤3	425 ~ 300	80	250	≤5	≤25	●	○
60	500	0	425	≤3	355 ~ 250	80	212	≤5	≤20	●	○
80	355	0	300	≤5	250 ~ 180	80	150	≤5	≤20	●	○
100	250	0	212	≤5	180 ~ 150	70	125	≤5	≤20	●	○
120	212	0	180	≤5	150 ~ 125	70	106	≤7	≤20	●	○
150	180	0	150	≤5	125 ~ 106	70	90	≤7	≤20	●	○
180	150	0	125	≤5	106 ~ 90	70	75	≤7	≤20	●	○
200	125	0	106	≤5	90 ~ 75	70	63	≤7	≤20	●	○
240	106	0	90	≤5	75 ~ 63	70	53	≤7	≤20	●	○
300	90	0	75	≤5	63 ~ 53	70	45	≤7	≤15	●	○
320	75	0	63	≤5	53 ~ 38	70	38	≤30	≤15	●	○
400	75	0	63	≤5	≤53*	80	-	-	≤15	●	○
600	63	0	53	≤5	≤45*	80	-	-	≤15	●	○
800H	53	0	45	≤5	≤38*	70	-	-	≤15	●	○
1000H	45	0	38	≤3	≤30*	80	-	-	≤15	○	-
1200H	45	0	38	≤1	≤25*	80	-	-	≤15	○	-
1500H	45	0	38	-	≤20*	80	-	-	≤15	○	-

* 3rd tier pass

Usage Matte finish

Matte finish is a method to produce non-directional micro bumps and dips on the surface to apply the surface with soft glare by diffused reflection of light and frosty appearance.

Decorative matte finish

Wide variation can be achieved by blasting various types of abrasive of different sizes or materials.

> Stainless steel welded parts



Welding burn temper color can be removed and beautiful appearance can be applied for stainless steel welding parts. Blasting also conceals scratches that are made in the previous process to contribute to improved yield.

Functional matte finish

Non-directional micro bumps and dips will provide improved heat dissipation, anti-glare effect, or improved slidability.

> Chute components for food producing machines



Multi stage surface processing (Gemini treatment) imparts sliding functionality on the target objects. Used at site with strict rules for contamination such as food factories and pharmaceutical factories.

Related abrasive

Glass powder (Soda lime glass)	Pretreatment, scale removal Foreign matter removal	Revised Mohs hardness 6.5	Abrasive grain size	Product number	Center grain size μm	Product number	Center grain size μm
				FGP-50	850 ~ 600	FGP-150	≤150
FGP-100	≤250	FGP-200	≤106				

* Fuji Manufacturing is a domestic sole distributor of Zircon beads made by Sant Go-Bain.

ZIRCON / ZIRCONIA

ASG : Absolute specific gravity
BSG : Bulk specific gravity

● : In stock ○ : available

Outline	Hardness	Specific gravity (typical value)	Product number	Center grain size μm	Available		Product number	Center grain size μm	Available	
					20kg	4kg			20kg	4kg
Zircon beads (Electrofusion zircon) Thanks to durability being 10 times or more of glass beads, time, effort and cost for industrial waste can be reduced. Pretreatment, scale removal Foreign matter removal Deburring Matte finish, decorative finish	Revised Mohs hardness 7.5 Vickers hardness 650 ~ 800HV	ASG 3.85 BSG 2.25	FZB-20	850 ~ 600	●	○	FZB-120	125 ~ 63	●	○
			FZB-30	600 ~ 425	●	○	FZB-170	90 ~ 45	●	○
Zircon shot (Electrofusion zircon) Used for shot peening of aircraft and automobile parts because of high sphericity and no worry for rust stains. AMS specification products (AMS 2431 et 2431/7) Matte finish, decorative finish Shot peening	Revised Mohs hardness 7.5 Vickers hardness 650 ~ 800HV	ASG 3.85 BSG 2.25	FZB-40	425 ~ 250	●	○	FZB-205	<63	●	○
			FZB-60	250 ~ 125	●	○	FZB-400	30 ~ 63	●	○
Microshot YZ (Yttria stabilized zircon) Used for fine particle shot peening with high sphericity and extremely smooth surface. Good for shot peening on high hardness material such as carburized components. Pretreatment, scale removal Matte finish, decorative finish Shot peening	Revised Mohs hardness 11 Vickers hardness 1200HV	ASG 6.0 BSG 3.6	FZB-80	250 ~ 180	●	○	FZB-505	30 ~ 10	●*	○
			FZB-100	180 ~ 125	●	○	* FZB-505 is supplied as 25kg in a package			
Zirshot HDC (Ceria stabilized zirconia) Smooth surface and high sphericity, with high density, high hardness and long service life. Good for shot peening on high hardness material and stainless steel. Available to produce uniquely beautiful matte finish as well. Pretreatment, scale removal Matte finish, decorative finish Shot peening	Revised Mohs hardness 11 Vickers hardness 1100 ~ 1300HV	ASG 6.2 BSG 3.8	FZS-850	1180 ~ 850	●	○	FZS-210	300 ~ 210	●	○
			FZS-600	850 ~ 600	●	○	FZS-150	210 ~ 150	●	○
Zircon grit (Electrofusion zircon) White, high density with sharp angular shape. Used when softer cutting power than alumina or silicon carbide is required avoiding iron.	Revised Mohs hardness 7.5	ASG 3.85 BSG 2.25	FZS-425	600 ~ 425	●	○	FZS-100	150 ~ 100	●	○
			FZS-300	425 ~ 300	●	○				
Zircon grit (Electrofusion zircon)	Revised Mohs hardness 7.5	ASG 3.85 BSG 2.25	YZ300	355 ~ 250	-	●*	YZ50L	75 ~ 38	-	●*
			YZ200	250 ~ 200	-	●*	YZ30	45 ~ 25	-	●*
Zircon grit (Electrofusion zircon)	Revised Mohs hardness 7.5	ASG 3.85 BSG 2.25	YZ150	200 ~ 150	-	●*	YZ20L	45 ~ 20	-	●*
			YZ100	125 ~ 90	-	●*	YZ20	32 ~ 20	-	●*
Zircon grit (Electrofusion zircon)	Revised Mohs hardness 7.5	ASG 3.85 BSG 2.25	YZ50	75 ~ 45	-	●*	* Microshot is supplied as 5kg in a package			
			ZC-400	600 ~ 400	●	○				
Zircon grit (Electrofusion zircon)	Revised Mohs hardness 7.5	ASG 3.85 BSG 2.25	ZC-600	800 ~ 600	●	○				
			ZC-900	1100 ~ 900	●	○				

Usage Shot peening

Shot peening is a technology to bombard high speed spherical particle to workpiece to impart dimples by plastic deformation on the surface in order for surface improvement such as suppression of crack growth by imparted compressive residual stress and improved abrasion resistance by increased surface hardness. It is utilized in wide area of industries such as automotive parts, aircraft parts or springs which require to be light weight and long life time, steel structure such as bridges, of products, molds, tools. etc. as it provides various effect such as improvement of abrasion resistance or fatigue strength, prevention of stress corrosion cracking with its easy and low cost features among various surface modification methods.

> Example of shot peening, including WPC treatment, a Processing



Related abrasive

Zircon grit (Electrofusion zircon)	Pretreatment, scale removal Foreign matter removal	Revised Mohs hardness 7.5	Abrasive grain size	Product number	Center grain size μm
				FZG-120	125 ~ 63
FZG-205	<63				

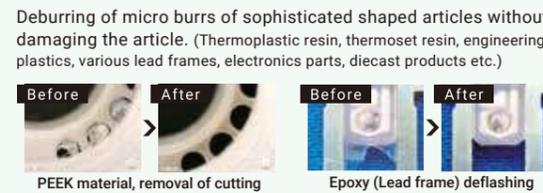
RESIN

ASG : Absolute specific gravity
BSG : Bulk specific gravity
● : In stock ○ : available

Outline	Specific gravity (typical value)	Outer diameter × length mm	Product number Orange No anti-static property	Available		Product number Blue Anti-static property applied	Available	
				10kg	4kg		20kg	10kg
Nylon media (Nylon resin)  Low hardness to give very few damages to processing objects. Mainly used for deburring of formed resin products. There are 3 types in media colors, orange, blue and white. (Product name: Nylon beads) Blue products are anti-static treated to suppress generation of electrostatics. Revised Mohs hardness 2 Shape Cylindrical Deburring	ASG 1.15	φ0.12 × 0.12L	—	—	—	FNM-120S	—	●
	BSG 0.55	φ 0.2 × 0.2L	FNM-200D	●	○	FNM-200S	●	●
	Abrasive grain size	φ 0.3 × 0.3L	FNM-300D	●	○	FNM-300S	●	○
		φ 0.4 × 0.4L	FNM-400D	●	○	FNM-400S	●	○
		φ 0.6 × 0.6L	FNM-600D	●	○	FNM-600S	●	○
		φ 0.8 × 0.8L	FNM-800D	●	○	FNM-800S	●	○
φ 1.0 × 1.0L	—	—	—	FNM-1000S	●	○		

Outline	Specific gravity (typical value)	Product number	Center grain size μm	Available		Product number	Center grain size μm	Available	
				20kg	4kg			20kg	4kg
Poly Extra (Unsaturated polyester resin)  Good for soft metal products with its lower hardness than melamine of urea resin abrasives. Deburring Foreign matter removal Revised Mohs hardness 3 Shape Polygon 0.74	ASG 1.2	PE16-20	1180~850	○	—	PE60-80	325~180	●	○
	BSG 0.74	PE20-30	850~600	○	—	PE80-100	180~106	○	—
	Abrasive grain size	PE30-40	600~425	●	○	PE100PASS	150 or less	○	—
		PE40-60	425~250	●	○				
Shave media Y (Urea resin)  Effective if M type may scratch. Electrostatic generation is suppressed by anti-static treatment. Deburring Foreign matter removal Revised Mohs hardness 3.5 Shape Polygon 0.95	ASG 1.5	Y-20	1180~850	○	—	Y-60	425~250	●	○
	BSG 0.95	Y-30	850~600	●	○	Y-80	250~180	●	○
	Abrasive grain size	Y-40	600~425	●	○				
Shave media M (Melamine resin)  Stable quality with higher durability than botanic abrasives. Electrostatic generation is suppressed by anti-static treatment. Deburring Foreign matter removal Revised Mohs hardness 4 Shap Polygon 0.95	ASG 1.5	M-20	1180~850	●	○	M-60	425~250	●	○
	BSG 0.95	M-30	850~600	●	○	M-80	250~180	●	○
	Abrasive grain size	M-40	600~425	●	○				

Usage Deburring of formed resin parts



Related products Anti-static agent (Seiden Cleaner)

Having effect to prevent dust attaching by suppression of electrostatic generation during blasting. Create the ion neutralized layer by inducing counter ion from air to maintain lon-term effect to remove electrostatics and to control generation of electrostatics.



PLANT

Media for paint removal of aircraft body	Envirostrip (Wheat)	Envirostrip XL (corn)	E-strip GPX (Corn and acrylic resin)
Paint removal can be achieved by our machines without damaging the base. ▶ On-time processing on critical area is available regardless of operator's skill ▶ Environment friendly with no chemical hazard ▶ Remarkable time saving can be achieved	Revised Mohs hardness 2 For processing of aircraft body and aircraft parts. • Boeing Spec BAC5725 approved • A lot of actual record such as Delta, United, etc.	Revised Mohs hardness 2 The abrasive is modification of Envirostrip to have remarkably improved advantages such as improved water resistance and increased number of reuse.	Revised Mohs hardness 2 Abrasive consist of Envirostrip with a bit mixture of acrylic resin. • Mil Spec Mil-P-85891 approved • Used by US Airforce, Navy
	Nominal size(mesh) Center grain size (mm) 30/50 mesh 0.6~0.3	Nominal size(mesh) Center grain size (mm) 16/60 mesh 1.18~0.25	Nominal size(mesh) Center grain size (mm) 20/50 mesh 0.85~0.3

Corn (Corn cob) Revised Mohs hardness 2 Dried and crushed corn cob. Low hardness abrasive even in botanic abrasives. Used for cleaning of light metal and resin.	Walnut (Walnut shell) Revised Mohs hardness 3 Crushed walnut shell. Hardness is lower than most resin type abrasive so no scratch is made on the object. Used for deburring and cleaning.	Apricot (Apricot seed) Revised Mohs hardness 3.5 Crushed apricot seed. Hardness is between walnut and peach. Used for deburring of electronics parts as fats and oil contents are very low.	Peach (Peach seed) Revised Mohs hardness 4 Hardest abrasive in botanic type abrasives to be used for cleaning of molds, removal of contamination and deburring of formed resin products taking advantage of its cutting power and impact force.
---	--	--	--

STEEL

ASG : Absolute specific gravity
BSG : Bulk specific gravity
● : In stock ○ : available

Outline	Hardness	Specific gravity (typical value)	Chemical composition (wt%)	Specification (wt%)	Product number	Center grain size	Available	
							20kg	4kg
Steel beads  Fine spherical abrasive made by nitrogen gas atomization. Harder than general steel shot and smaller in diameter. Pretreatment, scale removal Deburring Shot peening Revised Mohs hardness 8 Vickers hardness 700HV or more	ASG 7.6	C	0.9~1.1	Abrasive grain size	SB-50H	300~150	○	—
	BSG 4.3	Si	1.3≥		SB-80H	200~100	○	—
	ASG 7.4	Mn	1.0≥		SB-150H	150~50	○	—
Fuji Hard shot  High hardness spherical fine particle. High density and high corrosion resistance by contained chromium. Pretreatment, scale removal Shot peening Revised Mohs hardness 11 Vickers hardness 1100~1300HV	ASG 7.4	Cr	5~10	Abrasive grain size	FHD-40	355~180	●	—
	BSG 3.9	B	5~10		FHD-80	250~150	●	—
	ASG 7.5	Mn	1.0≥		FHD-150	150~63	●	—
	BSG 4.4	Fe	Remainder		FHD-300	63~25	●	—

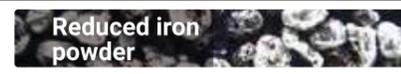
※ Contains P, S at 0.05 or higher ※ Fuji Hard shot is supplied as 15kg in a package

Related abrasive

Outline	Revised Mohs hardness	ASG	BSG	Abrasive grain size	Grain size number	Center grain size μm	Grain size number	Center grain size μm	Grain size number	Center grain size μm
					Steel shot  Spherical particles are available in a variety of hardness levels, including a hard type with a hardness of 630 to 770HV. Pretreatment, scale removal Foreign matter removal Deburring Shot peening	6	7.5	4.4	280	4000~2360
7.5	240	3350~2000	120	1400~1000		60	710~425			
4.4	200	2800~1700	100	1180~850		40	500~300			
	170	2360~1400	80	1000~710		30	355~180			

Outline	Revised Mohs hardness	ASG	BSG	Abrasive grain size	Nominal size mm	Center grain size mm	Nominal size mm	Center grain size mm
					Steel round cut wire  Spheroidized steel cut wire. Sharp grain size distribution with superb durability. Available in 3 types, 550~650HV type, 650~750HV type, and 770~850HV type for shot peening. Pretreatment, scale removal Foreign matter removal Deburring Shot peening	6.5	7.6	4.5
7.6	0.4	φ0.4×0.4L	1.0	φ1.0×1.0L				
4.5	0.6	φ0.6×0.6L						

Outline	Revised Mohs hardness	ASG	BSG	Abrasive grain size	Grain size number	Center grain size μm	Grain size number	Center grain size μm	Grain size number	Center grain size μm
					Steel grit  Angular shaped abrasive with high hardness and high specific gravity. Used for descaling or pretreatment for painting with its strong cleaning power. Pretreatment, scale removal Foreign matter removal Deburring	8	7.6	3.9	240	2800~2000
7.6	200	2360~1700	120	1400~1000		50	710~300			
3.9	170	2000~1400	100	1180~710		30	425~180			
					20	300~125				

Reduced iron powder  Mainly used for pretreatment of alumite treatment due to the property that it melts in the acid treatment in the post process. Finish will be calm with less glare compared with glass beads. Low consumption is another feature.	Revised Mohs hardness 4.5
	ASG 7.2
	BSG 3.5
	Shape Polygo

Steel cut wire  Abrasive made by cutting the hard steel wire in the same length with the wire diameter. As it is hard and with sharp edges, it has strong cutting power. There are two types, 400 to 500HV type and 500 to 600HV type.	Revised Mohs hardness 6
	ASG 7.6
	BSG Approx. 4.5
	Shape Cylindrical

Related products Anti combustion agent

As there is a risk of combustion for dust generated by using steel abrasive, exclusive dust-collector is required. Use of anti-combustion agent (calcium carbonate powder) is recommended to use in addition. (Inject the agent twice in weight of generated dust)



STAINLESS STEEL

ASG : Absolute specific gravity
BSG : Bulk specific gravity
● : In stock ○ : available

Outline		Chemical Specification composition (wt%)		Product number	Center grain size μm	Available	
※ Specific values are typical values						20kg	4kg
Stainless steel beads  Spherical particle abrasive equivalent with SUS304. As it is ductile material, when it hits material it deforms itself and it does not wear much. Used for descaling of stainless steel or aluminum parts and shot peening.	Revised Mohs hardness	4.5	C 0.2~0.3	SUS304-40	600~355	○	—
	Vickers hardness	240~350HV	Si 1.3≥	SUS304-50	355~180	●	○
	ASG	7.6	Mn 2.0≥	SUS304-80	250~106	●	○
	BSG	4.3	Cr 18~20	SUS304-150	125~45	●	○
	Shape	Spherical	Ni 8.0~10.5	SUS304-300	75 or less	●	○
			Fe Remainder*				
Stainless steel grit  Stainless steel abrasive that has composition of approximately 30% of chromium and approximately 2% of carbon. It has strong cutting power due to high hardness and sharp edges, high durability due to ductility and hard to stain feature of stainless steel. It maintains corrosion resistance because it is reproduced if it wear due to chrome that makes passivation layer on surface.	Revised Mohs hardness	8	Cr 35>	VG-30	500~200	●*	○
	Vickers hardness	800HV±40	C 5>	VG-20	315~90	●*	○
	ASG	Approx. 7.9	Mn 1>	VG-10	200~50	●*	○
	BSG	4.1	Si 1>	VG-05	50 or less	●*	○
	Shape	Polygon	Ni 1>	※FZB-505 is supplied as 25kg in a pack			
			Fe Remainder				

* Contains P, S at 0.05 or higher

Usage Removal of casting sand, casting core sand

Removal of casting sand, casting core sand by air blasting can be performed without damaging the cast product even in narrow apertures or holes. It also has methodological superiority as effectiveness of work, cost reduction and operational safety compared to chemical treatment.

Precision mechanical parts



Aircraft parts (Turbine blades)



Related abrasive

Stainless steel cut wire	Revised Mohs hardness	6	Abrasive grain size	
			Nominal size mm	Center grain size mm
Abrasive made by cutting stainless steel wire that is good in corrosion resistance and acid resistance. Reduction of running cost is available due to its superb durability.	Deburring		0.3	Φ0.3×0.3L
			1.0	Φ1.0×1.0L
Abrasive that spheroidized stainless cut wire. Reduction of running cost is available due to its high durability.	Deburring	Shot peening	0.4	Φ0.4×0.4L
			1.2	Φ1.2×1.2L
Abrasive that spheroidized stainless cut wire. Reduction of running cost is available due to its high durability.	Deburring	Shot peening	0.5	Φ0.5×0.5L
			1.5	Φ1.5×1.5L
Abrasive that spheroidized stainless cut wire. Reduction of running cost is available due to its high durability.	Deburring	Shot peening	0.6	Φ0.6×0.6L
			2.0	Φ2.0×2.0L
Abrasive that spheroidized stainless cut wire. Reduction of running cost is available due to its high durability.	Deburring	Shot peening	0.8	Φ0.8×0.8L

OTHER METAL

Zinc shot	Revised Mohs hardness	2	Abrasive grain size	
			Nominal size mm	Center grain size μm
As lower explosive limit of dust concentration is high enough, the product can be used with low risk.	Deburring	Matte finish, decorative finish	0.4	710~355
			0.6	850~425
			0.8	1000~600
			1.0	1180~710

Usage Deburring of thin aluminum diecast product

Deburring is available on thin wall aluminum diecast products without distortion by using zinc shot. Air blasting enables processing on the area that need to be blasted only, avoiding processing on the area that should not be processed.



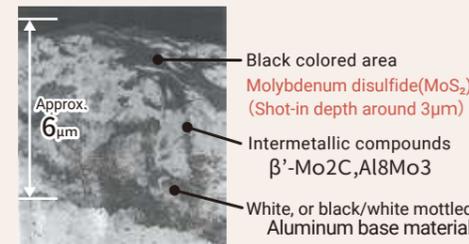
SPECIAL

Molybdenum disulfide		Revised Mohs hardness		1		Abrasive grain size	Kinds	Center grain size
Solid lubricant with prominent low friction coefficient effective even under the harsh conditions such as inside automobile engines. Spraying the molybdenum disulfide with high speed on the low-melting point metal, it may be interfused into the base material to be strong from peeling and wearing to provide long lasting improvement of slidability.		Absolute specific gravity		4.8			Molybdenum disulfide (MoS ₂)	Nominal particle diameter will be chosen after test processing
		Shape		Polygon		※ Specially designed machine is required to use molybdenum disulfide(MoS ₂)		
		Slidability improvement						

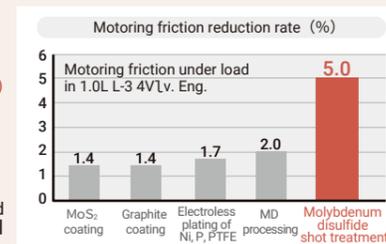
Usage Remarkable improvement of slidability

Slidability can be remarkably improved without significant change of dimensions, shapes or surface roughness by the method of spraying the fine particles of molybdenum disulfide with high speed on the processing surface to form the molybdenum disulfide layer on the outmost surface. In addition, in case of low melting point metal such as aluminum, surface layer may be softened and melted by instantaneous high heat generation at the impact, heat diffusion may occur to penetrate several microns from surface to form solid lubricant layer. So, there is no need to concern about peeling off as coatings.

Shot-in condition of molybdenum disulfide (MoS₂)



Comparison of reduction rates of sliding resistance of various surface treatments



Appearances of piston before and after processing



Dry ice		Revised Mohs hardness		2		Abrasive grain size	Kinds	Center grain size mm
Dry ice has a property to become gas in normal temperature and when it hits processing object it sublimates to expand 750 times in volume. Contamination cleaning or deburring are effectively performed by the volume expansion energy and heat shrink because the processing surface is rapidly cooled.		Absolute specific gravity		1.56			Dry ice pellets	Φ3
		Shape		Cylindrical				
		Foreign matter removal		Deburring				

Usage Contamination removal and cleaning with no media

Mold cleaning (Removal of burn or releasing agent)

Working time can be saved as cleaning can be performed with the mold installed on the machine without cooling down. And, in addition, cleaning as the hot mold is still hot, cleaning by heat shock can be also expected.

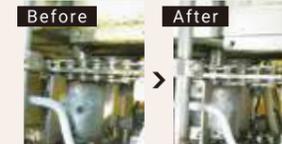
Releasing agent removal for rubber mold dies



Food factory line cleaning

Cleaning is available on the parts in the production line as they are without disassembling, without residue to protect contamination by utilizing dry-ice advantage to sublime in the room temperature. And, as the hardness is low cleaning can be performed without scratching the processing objects.

Food factory line cleaning



Abrasive Dry ice pellets

Fuji Manufacturing provides two types of dry ice blast machines, soft type and hard type. The dry ice used here is the pellets made from CO₂ that is generated naturally as sub-product in industries, so it can be used for cleaning as environment friendly processing.

Soft types



0.3mm of size (Adjustable) For removal of fine burrs

Hard types



0.5~2mm of size For decontamination or mold cleaning

Baking soda		Revised Mohs hardness		2.5		Abrasive grain size	Product number	Center grain size mm
High safety and water soluble. Used for cleaning in food factories or rebuilding of machine parts as it is soft with revised Mohs hardness 2.5 so it seldom scratches the surface of processing objects.		Shape		Polygon			Specific gravity (typical value) ASG 2.2 BSG 1.15	EB-60
		Pretreatment, scale removal		Foreign matter removal		EB-80		0.2
						EB-100		0.1