

Standard abrasive      Abrasive for fine powder

(Packing form Minimum packing volume: 25 kg)

**Shot** **Hardness: approx. Hv 450 to 600**

Nominal number	#20	#30	#40	#60	#70	#80	#100	#120	#140	#170	#200	#240	#280
Particle size (μm)	125~300	180~355	300~500	425~710	600~850	710~1000	850~1180	1000~1400	1180~1700	1400~2000	1700~2360	2000~2800	2360~3350

This is made of grainy particles and referred to as steel shot, which is suited for removal of rust, scales and burrs, or shot peening.



(Packing form Minimum packing volume: 25 kg)

**Grid** **Hardness: approx. Hv 400 to 950**

Nominal number	#20	#30	#50	#70	#100	#120	#140	#170	#200	#240
Particle size (μm)	125~300	180~425	300~710	425~1000	710~1180	1000~1400	1180~1700	1400~2000	1700~2360	2000~2800

This is made of polygonal particles and features high grinding and cleaning ability, which is suited for pretreatment for paint and coatings, removal of rust, scales, and burrs. There are cast iron and cast steel grids.



(Packing form Minimum packing volume: 20 kg)

**Stainless cut wire** **Hardness: approx. Hv 500 (SUS304) (SUS430)**

Nominal number	0.3mm	0.4mm	0.5mm	0.6mm	0.7mm	0.8mm	1.0mm	1.2mm	1.5mm	2.0mm	2.5mm	3.0mm
Average particle size (μm)	300	400	500	600	700	800	1000	1200	1500	2000	2500	3000

This is made of stainless wire cut into the size of its wire diameter. This abrasive features corrosion and acid resistance, which is suited for grinding and cleaning of aluminum die casts, castings, and stainless products.



(Packing form Minimum packing volume: 20 kg)

**Pure aluminum cut wire** **Hardness: approx. Hv 45 to 60**

**Aluminum alloy cut wire** **Hardness: approx. Hv 120**

Nominal number	0.6mm	0.8mm	1.0mm	1.2mm	1.5mm	2.0mm	2.5mm	3.0mm
Average particle size (μm)	600	800	1000	1200	1500	2000	2500	3000

Pure aluminum cut wire is used for burr removal, polishing, or providing a smooth surface finish. Aluminum alloy cut wire is used for removal of burrs and slight stains and providing a satin surface finish.



**Glass beads** **Hardness: Mohs 5.5**

Nominal number	#30	#36	#46	#54	#60	#70	#80	#90	#100	#120
Particle size (μm)	500~710	425~600	300~425	250~355	212~300	180~250	150~212	125~180	106~150	90~125
Nominal number	#150	#180	#220	#320	#400	#800				
Particle size (μm)	63~106	53~90	45~75	38~75	45以下	38以下				

This is made of spherical glass particles that are mainly made of SiO<sub>2</sub>, which is suited for a satin surface finish, scale removal, and small-sized burr removal.



(Packing form Minimum packing volume: 25 kg)

**Iron powder** **Hardness: approx. Hv 100**

Nominal number	#60	#80	#100	#120	#150
Particle size (μm)	150~355	105~250	75~180	63~150	45~125

This is made of spongy, porous iron powder, which is suited for partial satin finishing and pre-treatment for painting aluminum.



(Packing form Minimum packing volume: 25 kg)

**Baking soda** **Hardness: approx. Mohs 2.5**

Nominal number	EB 10	EB 20	EB 60	EB 80	EB 100
Particle size (μm)	2	1	0.3	0.2	0.1

Because this is soluble in water, this will dissolve when washed with water if left or caught in the work or machine. Moreover, baking soda is widely used as a food additive and can be washed with water, which is suited for cleaning units.



(Packing form Minimum packing volume: 25 kg)

**Ceramic beads** **Hardness: Mohs 7.5**

Nominal number	B-20	B-30	B-40	B-60	B-120
Particle size (μm)	600~850	425~850	250~425	125~250	70~125

This is made of spherical ceramic particles that are mainly made of ZrO<sub>2</sub> used for a satin surface finish, pretreatment for dacro-tizing, and the final finish for product surfaces.



(Packing form Minimum packing volume: 20 kg)

**Copper cut wire** **Hardness: approx. Hv 110**

Nominal number	1.7mm	2.0mm	2.5mm
Average particle size (μm)	1700	2000	2500

This is made of copper wire cut into the size of its wire diameter. This abrasive is mainly used for paint removal.



(Minimum packing volume: 30 or 33.3 kg)

**Silica sand** **Hardness: approx. Mohs 6.0 to 7.0**

Nominal number	3号	4号	5号	6号	7号	8号
Particle size (μm)	425~700	300~1180	106~600	75~425	53~212	38~150

Silica sand features high machinability and is used for rust and scale removal. This abrasive is increasingly used and disposed of in outdoor work.





(Packing form Minimum packing volume: 20 kg Nominal number may change depending on the type.)

Corn/walnut/peach												Hardness: approx. Mohs 2.5 to 3.0			
Nominal number	#5	#8	#10	#12	#14	#16	#20	#24	#30	#36	#46	#60	#80		
Particle size (μm)	3300~4760	2200~2830	1680~2380	1410~2000	1190~1680	1000~1410	840~1190	590~840	500~710	420~590	297~420	210~297	149~210		
Nominal number	#100	#180													
Particle size (μm)	105~149	~125													



This is made of ground ear cores of corn, walnuts, or peach seeds and features durability and elasticity. Moreover, this soft abrasive permits grinding and polishing without impairing or oxidizing the target work.

(Packing form Minimum packing volume: 20 kg)

Zinc shot	Hardness: approx. Hv 40 to 60					
Nominal number	Z-4	Z-6	Z-8	Z-10	Z-12	Z-15
Particle size (μm)	355~710	500~910	600~1000	710~1180	850~1400	1200~2000

Two types of Zn injection materials are available. One is zinc shot with a round shape; another is zinc cut wire with a cylindrical shape. Zn materials are suited for burr and coating removal.



(Packing form Minimum packing volume: 20 kg)

Zinc cut wire	Hardness: approx. Hv 45		
Nominal number	1.7mm	2.0mm	2.5mm
Average particle size (μm)	1700	2000	2500



### Brownish alumina A Hardness: approx. Mohs 9.0

This is made of crushed and size-selected alumina ore refined by melting or sintering with an electric furnace. Featuring high abrasiveness, this abrasive is suited for grinding of scales on steel products or special alloy work pieces and providing a satin surface finish.



### White alumina WA Hardness: approx. Mohs 9.0



### Green silicon carbide GC/Black alumina carbide C Hardness: approx. Mohs 9.0

This is a crushed and size-selected ingot made of carbon materials and silicon stones through heat reaction with an electric furnace. The applications are the same as those of alumina but this abrasive features harder and stronger abrasiveness.



Nominal number	#12	#14	#16	#20	#24	#30	#36	#46	#54	#60	#70	#80	#90		
Particle size (μm)	1400~2000	1180~1700	1000~1400	850~1180	600~850	500~710	425~600	300~425	250~355	212~300	180~250	150~212	125~180		
Nominal number	#100	#120	#150	#180	#220	#240	#280	#320	#360	#400	#500	#600	#700		
Particle size (μm)	106~150	90~125	63~106	53~90	45~75	73.5~87.5	62.0~73.5	52.5~62.0	44.0~52.5	37.5~44.0	31.0~37.0	26.0~31.0	26.0~22.0		
Nominal number	#800	#1000	#1200	#1500	#2000	#2500	#3000	#4000	Fine powder is minimum packing volume. 25 kg with small packets						
Particle size (μm)	18.0~22.0	14.5~18.0	11.5~14.5	8.9~11.5	7.1~8.9	5.9~7.1	4.7~5.9	2.5~3.5							

(Packing form Minimum packing volume: 20 kg)

### Melamine plastic shot Hardness: approx. Mohs 3 to 4

Nominal number 1	#30	#40	#60	#80				
Nominal number 2	#20-30	#30-40	#40-60	#60-80				
Average particle size (μm)	600~850	425~600	250~425	150~250				



(Packing form Minimum packing volume: 20 kg)

Urea plastic shot	Hardness: approx. Mohs 3 to 4			
Nominal number 1	#30	#40	#60	#80
Nominal number 2	#20-30	#30-40	#40-60	#60-80
Particle size (μm)	600~850	425~600	250~425	150~250



(Packing form Minimum packing volume: 20 kg)

Acrylic plastic shot	Hardness: approx. Mohs 3 to 4			
Nominal number 1	#30	#40	#60	#80
Nominal number 2	#20-30	#30-40	#40-60	#60-80
Particle size (μm)	600~850	425~600	250~425	150~250

(Packing form Minimum packing volume: 20 kg)

Polycarbonate shot	Hardness: approx. Mohs 3 to 4		
Nominal number	0.5mm	0.8mm	1.2mm
Average particle size (μm)	500	800	1200

The shape of the abrasive is cylindrical and uniform. This abrasive is suited for deburring resin, rubber, lead frames, die castings and non-metal products, or stain removal.

(Packing form Minimum packing volume: 20 kg)

Nylon shot	Hardness: approx. Mohs 3 to 4					
Nominal number	0.2mm	0.3mm	0.4mm	0.6mm	0.8mm	1.0mm
Average particle size (μm)	200	300	400	600	800	1000

#### \* Unit of particle size for abrasive

The unit of particle size for the abrasive is currently not uniform. Therefore, be careful that the unit depends on the abrasive type.

\* Picture color and actual color may differ depending on the particle size.

\* The Mohs hardness has 10 scales.