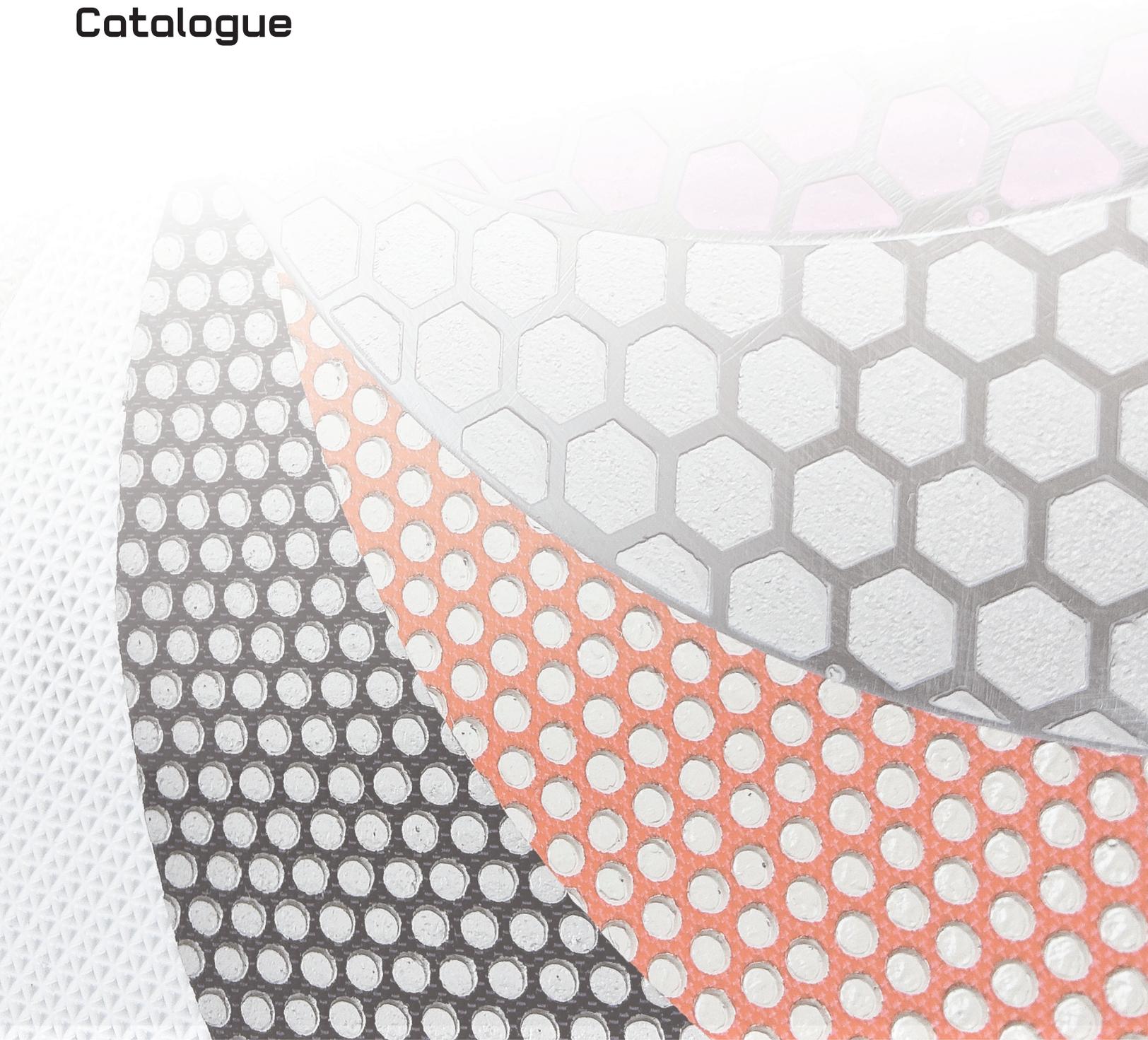


**Metallographic / Consumable
Catalogue**



**DIAMOND
MICRON POWDER**

**DIAMOND
COMPOUND**

**(NANO) DIAMOND
SLURRY**

**DIAMOND/Al₂O₃/CeO₂/SiO₂
GRINDING DISC**

**POLISHING
CLOTH**

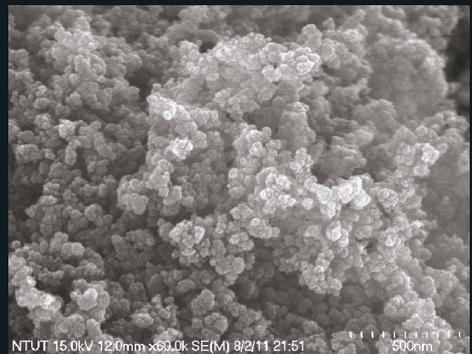
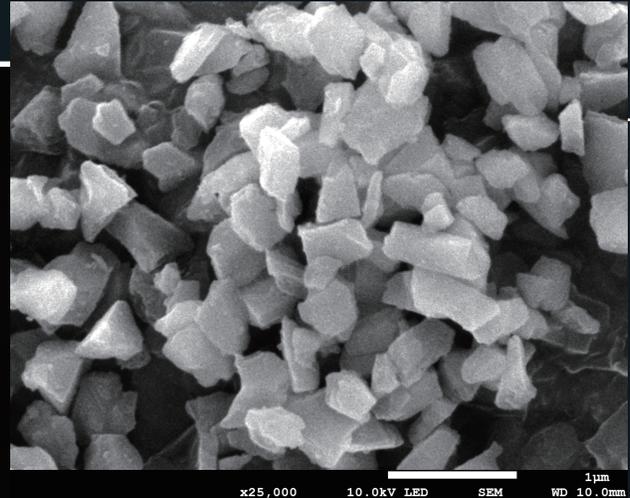
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Diamond Micron Powder/Paste/Slurry	多晶/單晶鑽石粉/膏/液...03
Al ₂ O ₃ /CeO ₂ /SiO ₂ Powder/Paste/Slurry	氧化鋁.鈰.矽拋光粉/膏/液...04
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Nanodiamond Powder/ Paste/Polishing Slurry



奈米鑽石粉/膏/拋光液

NANO DIAMOND SLURRY



M. ■ Monocrystalline	○. ■ Oily
P. ■ Polycrystalline	W. ■ Water
100nm / 300nm / 500nm / 800nm / 1000nm / Other	

Specification	
No.	Grit Size(nm)
#500000	30
#300000	50
#150000	100
#50000	300
#30000	500
#20000	800
#15000	1000

Spherical Nanodiamond Powder

Spherical nanodiamond powder is a kind of diamond polycrystals synthesized under ultra-high pressure, high temperature and transient conditions, with a microcrystalline size of only 3-10 nanometers, and polycrystalline particles bonded by unsaturated bonds, with good toughness. Spherical nanodiamond powder is different from ordinary static pressure monocrystalline diamond powder, its structure is very similar to natural Carbonado, and it has excellent grinding and polishing performance.

Craftsmanship

- Synthesis: Conversion of high-quality graphite into spherical nanodiamonds under specific conditions.
- Processing: Remove impurities such as graphite through extraction and other methods.
- Classification: Utilize specialized classification techniques to classify the mixed powders into nano- and micron-sized dispersions.
- Post-processing: Settling, drying and packaging.

Structural Features

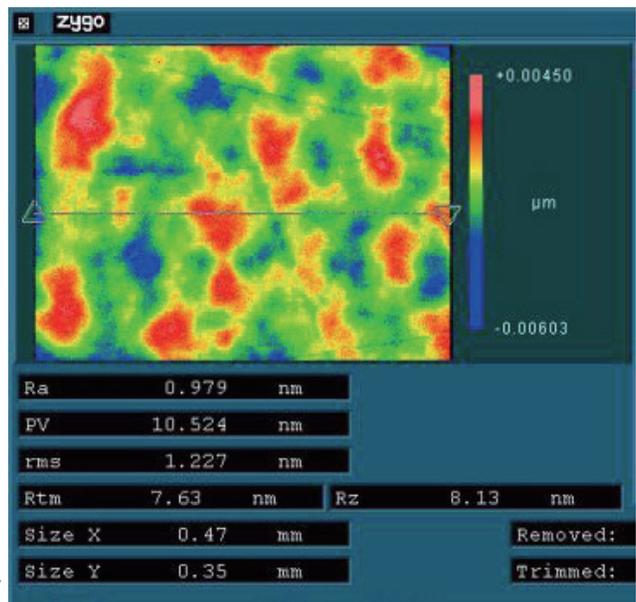
The monocrystal size is 3-10 nm, through unsaturated bonding monocrystal synthesized nano- or micron-sized polycrystalline powder particles. This kind of ultrafine diamond powder is isotropic and has no cleavage surface, so there is no weakness like monocrystalline diamond powder which easily brittle fracture along cleavage planes.

Performance Features

1. There is no brittle fracture in the polishing process, make it less likely to scratch the surface of the workpiece, and has a longer lifespan.
2. The nano particles fall off during the grinding process, making it self-sharpening.

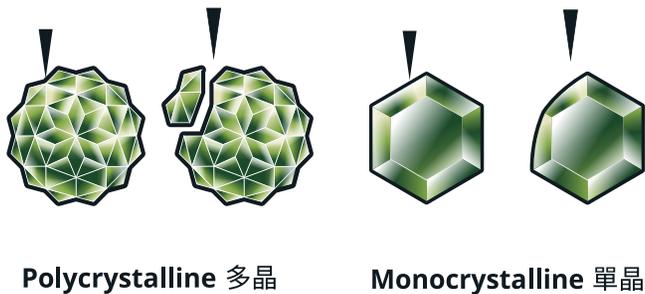
Application

Surface polishing of wafers, ultra-precision molds, gemstones, ceramics, and alloys at the nanometer and angstrom level (below the nanometer level).



Specification		Color	Applications
No.	Grit Size(μm)		
#300000	0.05 (0-0.1)	Red·Golden	Ultra-precision polishing 超精密拋光 ▲ The above are non-specification products. ▲ For more details, please contact us.
#140000	0.1 (0-0.25)	Blue·Golden	
#60000	0.25 (0-0.5)	Golden	
#28000	0.5 (0-1)	Grey	Precision finishing 超鏡面拋光
#14000	1 (0-2)	White	
#8000	3 (2-4)	Yellow	
#5000	4.5 (3-6)	Light Brown	Finishing 精密拋光
#3000	6 (4-8)	Orange	
#2000	8 (5-10)	Light Purple	
#1800	9 (6-12)	Green	
#1500	13 (10-16)	Pink	Pre-polish lapping /Preparatory 一般亮度
#1200	15 (10-20)	Blue	
#1000	17.5 (15-20)	Dark Green	
#800	25 (20-30)	Brown	Stock removal 粗拋研削
#600	35 (30-40)	Red	
#400	45 (40-50)	Purple	
#200	55 (50-60)	Black	

Diamond Grit Size Chart



Differences

- Polycrystalline diamond consists of numerous small grains in a random structure.
- This gives the toughness in all directions resulting in less surface damage.

- *Ultra Fast Polishing
- *Better Surface Finishes
- *Self Sharpening Particles



Spherical polycrystalline diamond powders are less likely to scratch the workpiece than monocrystalline diamond powders.

Diamond Micron Powder/ Paste/Polishing Slurry



多晶/單晶鑽石粉/膏/液



DIAMOND COMPOUND POLYCRYSTALLINE MONOCRYSTALLINE



Pictures are for reference only, please refer to the actual product.

DIAMOND SLURRY



Diamond Compound Instructions

- The standard product is 5 grams of oil-based, if water-based is needed, please specify customization.
- It can be used in jewellery, gemstone, steel, hard metal, and other materials, not recommended for used on coated and painted surface.

Diamond Slurry
鑽石拋光液

單晶M.□ 多晶P.□			油性O.□ 水性W.□			
0.1μm	0.25μm	0.5μm	1μm	3μm	4.5μm	6μm
9μm	15μm	25μm	35μm	45μm	55μm	Other

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Polycrystalline Diamond Micron Powder



Monocrystalline Diamond Micron Powder

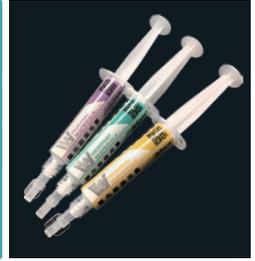
Alumina(Al₂O₃) Polishing Powder/Paste/Slurry

Alumina Polishing Paste

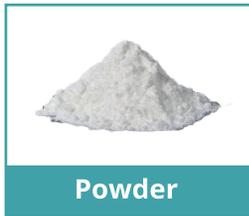
Scope of Application:

Suitable for final surface cleaning and final polishing of various metals, molds, sapphires, Al alloys and ceramics spherical alumina is not only cost-effective but also capable of repairing polish scratches and reducing surface roughness It is advised to use a grade of the same or finer than the last diamond past applied.(For more advanced result nanodiamond series product are available.)

Color	Grit Size (um)
Yellow	0.3
Tiffany	0.5
Purple	1
Red	3



Alumina Polishing Slurry/Powder



No.	Grit Size (μm)	Application	Powder	Polishing Slurry
#300000	0.05	Ultra-precision polishing 超精密拋光	●	●
#60000	0.3		●	●
#28000	0.5	Precision finishing 超鏡面拋光	●	●
#14000	1		●	●
#8000	3		●	●
#3000	5	Finishing 精密拋光	●	●

Cerium Oxide(CeO₂) Polishing Slurry/Powder



Scope of application:

Suitable for scratch removal and oil stain cleaning on various types of glass. for scratch removal,it is recommended to pair a wool wheel with electric or pneumatic tools, operating at low speed for restoration For large areas such as windshields , a wax machine or vibration polisher can be used. If only oil stain removal is required, a wool wheel or sponge can be applied manually .

NO.	Type	Grit Size (um)	Suitable for use with polishing pads				
			Soda-lime glass	Optical glass	Alkali-free Glass	Optical lenses	Blue Glass
RA-05	White powder/Slurry	D50/0.5			●	●	
RA-10	White powder/Slurry	D50/0.8			●	●	
RA-08	White powder/Slurry	D50/1.0		●	●	●	
RA-01	White powder/Slurry	D50/1.5	●	●	●		
RA-12	White powder/Slurry	D50/2.0	●				
HAT-1205	Red powder/Slurry	D50/1.2				●	●
HAT-1805	Red powder/Slurry	D50/1.8	●	●			
RGB-1935	Slurry	D50/0.5				●	●
RGB-1938	Slurry	D50/0.8				●	●

SiO₂ Polishing Slurry

Scope of application:

SIO2-80 is a high-purity colloidal silica polishing slurry specifically developed for polishing electronic material substrates such as LiTaO₃, LiNbO₃, sapphire, as well as metal materials and ceramics. The slurry features excellent particle uniformity and dispersion, enabling efficient polishing with a damage-free surface.

NO.	Type	Grit Size (μm)	Applicable
SO-80	Slurry	0.08	Sapphire CaF ₂ BGO LiTaO ₃ LiNbO ₃

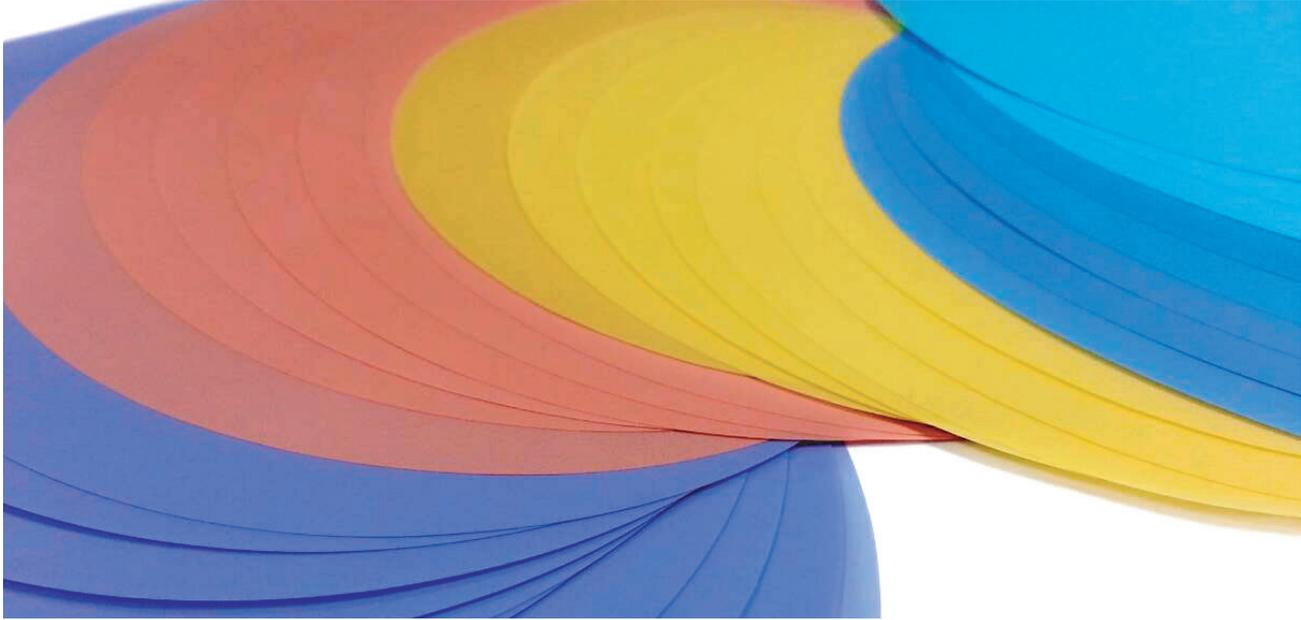
Diamond/Al₂O₃ Lapping Film /Diamond Indenter

氧化鋁 (鋅) 拋光粉 / 膏 / 液

Diamond/Al₂O₃ Lapping Film

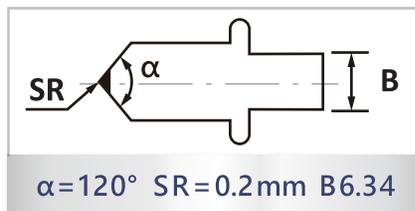
Overview: This precision abrasive tool is manufactured by coating micron or nano-grade diamond (or aluminum oxide) powder, mixed with a high-performance polymer binder, onto a PE (polyethylene) or PET (polyester) film backing.

Applications: Specifically designed for polishing operations requiring extreme precision and superior surface finish quality. Ideal applications include fiber optic connectors, hard drive magnetic heads, and precision instruments.



Oder no.	Abrasive	Shape	Backing	Grit (um)
HW-261X	Al ₂ O ₃	Disc / Sheet / Roll	Polyester Film	0.3 / 3 / 5 / 9 / 12 / 30
HW-266X	Al ₂ O ₃	Disc / Sheet / Roll	PSA	0.3 / 3 / 9 / 12 / 30
HW-661X	Diamond	Disc / Sheet / Roll	Polyester Film	0.1 / 0.5 / 1 / 3 / 6 / 9 / 15 / 30
HW-662XW	Diamond	Disc / Sheet / Roll	Polyester Film	0.5 / 1 / 1.5 / 3 / 6 / 9
HW-263X	Diamond	Disc / Sheet / Roll	Polyester Film	3 / 30 / 45 / 60

Diamond Indenter



Application

Used for measuring workpiece hardness.

- Suitable for: Rockwell Hardness Testing
- Custom sizes and premium grades available. Please contact our sales team for details.

When ordering, please specify the following matters:

1. Code & Shape & Size of the disc : Ex. Tel-200D \ Dotted200D
2. Abrasive : Diamond . Al . SiC . Ce
3. Grit size : Ex. #150
4. Quantity & Delivery date :
5. Spindle speed & grinding conditions :

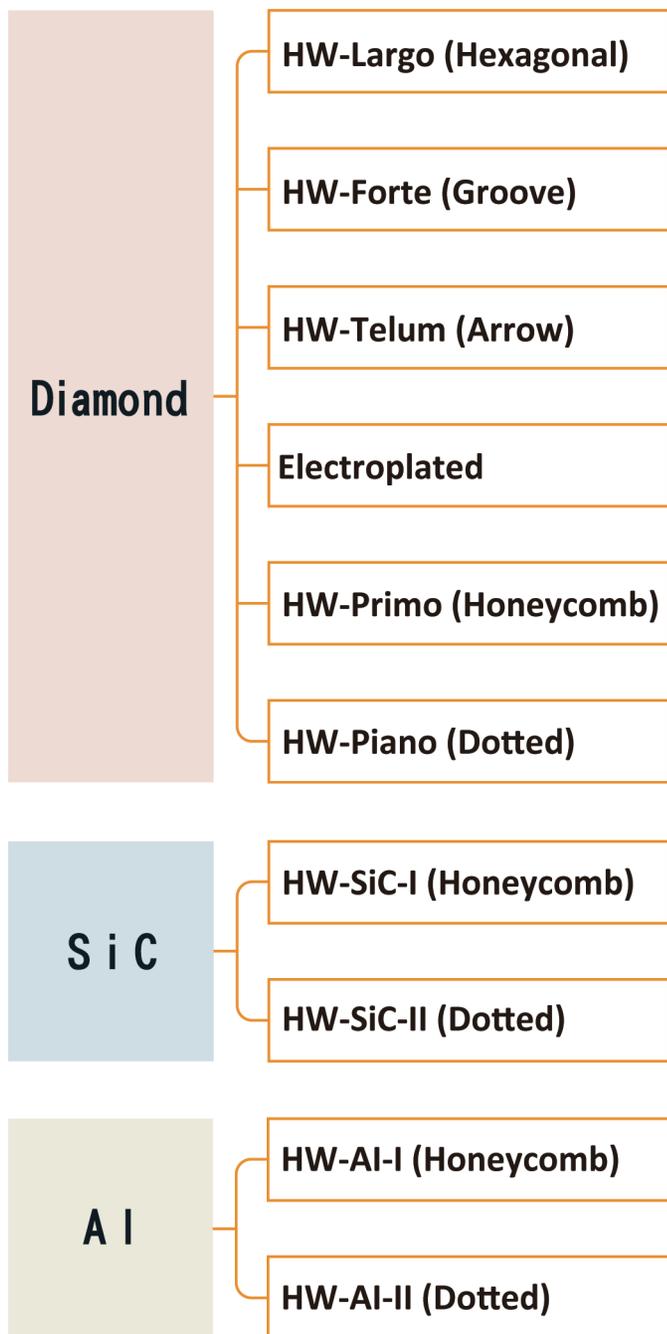
Lar	D	I 20	200D		Magnetic Rubber
Shape	Abrasive	Grit Size	Size		Back plate
Lar :Hexagonal(Largo) P :(Electroplated) Tel :Arrow(Telum) Pia :Dotted(Piano) Pri :Honeycomb(Primo) For :Groove(Forte)	D :Diamond Al :Aluminum oxide SiC :Silicon Carbide Ce :Cerium Oxide	#60	(mm)	(inch)	<ul style="list-style-type: none"> • Stainless Steel Plate (Magnetic) • Magnetic Rubber • Rubber Backed Iron (magnetic) • PSA Adhesive Backed
		#80	Ø200	Ø8	
		#120	Ø220	Ø8.6	
		#180	Ø230	Ø9	
		#240	Ø250	Ø10	
		#320	Ø300	Ø12	
		#400	Ø350	Ø14	
		#600	Ø380	Ø15	
		∴	∴	∴	

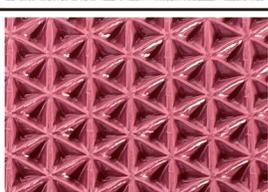
※ Some abrasive shapes are only available in "Stainless Steel Plate" backing, please contact our sales representative for ordering.

Choosing Grinding disc or Polishing pad/cloth ?		
DISC	RA	Application materials/fields
Grinding disc	RA1.0 ~ RA0.009	＊ Materials : <ul style="list-style-type: none"> • Metal: High speed steel, Alloy steel, Carbide, Tungsten steel, Mold steel, etc. • Non-metals: Glass, Ceramics, Agate, Stone, Jade, Gemstones, Quartz glass, Magnetic materials, Polycrystalline & Monocrystalline silicon, Titanium carbide, etc. ＊ Industry : <ul style="list-style-type: none"> • Metallography. Precision optical instruments, Semiconductors, Aerospace technology, Energy, Materials science, Automobiles, Manufacturing, Electronic components, Medical machinery, PCB process, etc.
Fine grinding disc	RA0.04 ~ RA0.004	
Polishing pad/cloth	< RA0.055	

Metallographic Grinding Disc Introduction

研磨盤類型介紹



Surface Design	Photo	Shore
Hexagonal		80±2 (D)
Groove		90±2 (D)
Arrow		90±2 (D)
Electroplated		
Honeycomb		87±2 (D)
Dotted		90±2 (D)

Introduction:

Grinding is a very important step in metallography, polishing pre-treatment, and parts processing. Proper grinding can remove damage on the material surface while minimizing new deformation, which facilitates subsequent polishing steps.

Specification:

*According to the abrasive type, it can be divided into: diamond, SiC, Al grinding disc, etc. It can also be customized according to the abrasive requirements.

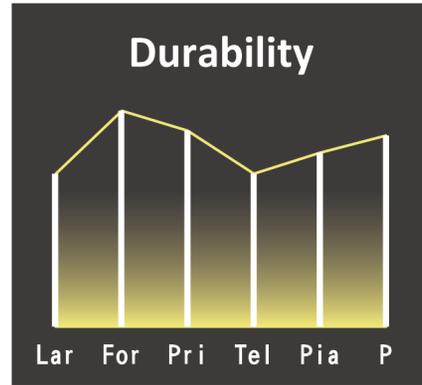
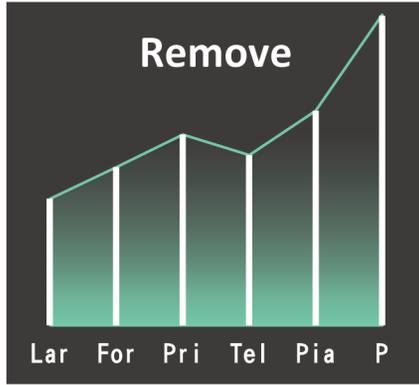
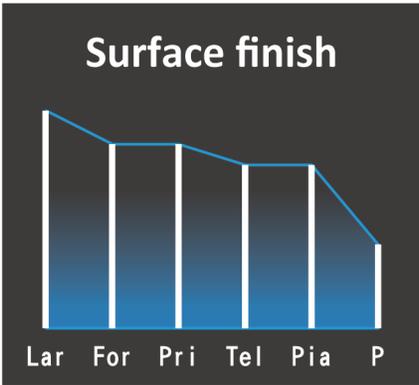
*Outer diameter: Φ127.Φ150.Φ200.Φ230.Φ250.Φ300.Φ350.Φ380 (mm), etc. Other sizes can be customized.

*Outer diameter: Φ5. Φ8.Φ8.6.Φ9.Φ10.Φ12.Φ14.Φ15 (inch), etc. Other sizes can be customized.

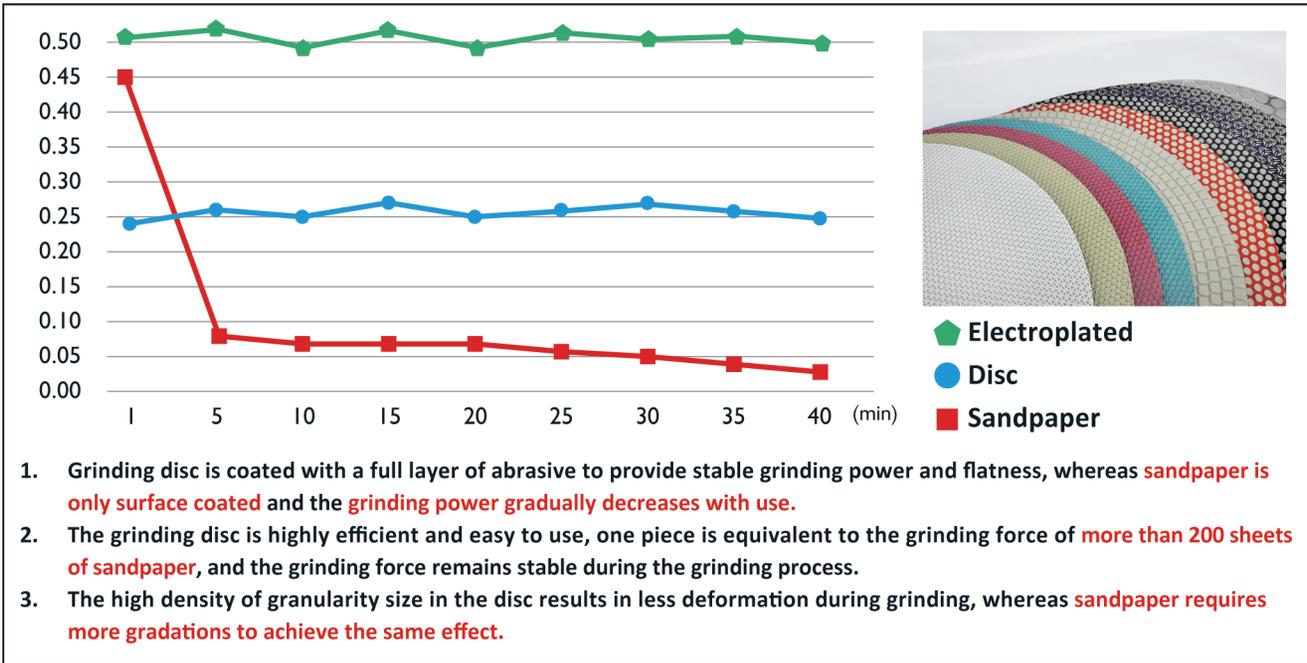
※ The back plate is shipped with a stainless steel plate (magnetic suction).

※ Different back plates are convenient for customers to choose.

Each grinding disc performance under the same condition of abrasive grain size, machine parameters and workpiece material.



Grinding performance between sandpaper and disc under the same condition of same abrasive grain size and workpiece material.



How to choose the grit size of abrasives: The specific application depends on the hardness of the workpiece material and your current actual process.

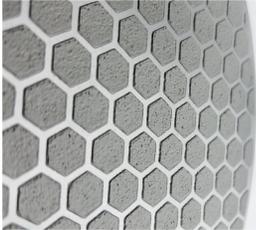
How to use: Place the grinding disc directly on the magnetic machine tray, you can use tap water to do the grinding work directly.

- ✘ For very sensitive workpieces, a non-corrosive liquid can be used as a lubricant instead of water.
- ✘ In order to make the sample flat and consume the disc evenly, protrude the sample a few millimeters from the fixture.

Instructions:

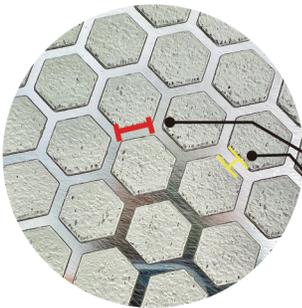
- In order to achieve higher flatness, please do not put labels on the bottom of the disc.
- The contact surface between the disc and the machine must be kept very flat, clean and dry to avoid affecting the flatness of the workpiece.
- Remove carefully after use, rinse with water and dry.
- Do not bend the disc to damage it.
- Please be careful when installing and removing the disc to attraction to pinch hands.

Fine Grinding



- Simplify the process** Complete back-end grinding and front-end polishing in one operation to improve efficiency.
- Highly efficient polishing** Flexible carrier and high quality abrasives reduce scratches.
- Wide application** Wide range of abrasives and grits for different hardness materials.
- High flatness** Evenly fine grinding to avoiding rounded corners and chamfer, ensure flatness.
- High quality and high efficiency** Grid design reduces debris build-up and improves removal rate.

HW-Largo Specification



Abrasive design:

Hexagonal Side Length	7 mm
Between Shapes	2.5 mm
Abrasive thickness:	0.5-0.6 mm
Disc thickness:	0.5-0.6 mm

Abrasive shape	Material	Grit (um)	Size (mm)	(inch)
Hexagonal	Diamond	0.5	Ø127	Ø5
		1.0	Ø200	Ø8
	Al	2.0	Ø220	Ø8.6
		3.0	Ø230	Ø9
		6.0	Ø250	Ø10
	SiC	9.0	Ø300	Ø12
		0.5	Ø350	Ø14
	Ce	1.0	Ø380	Ø15
		2.0		
		3.0		

Grinding

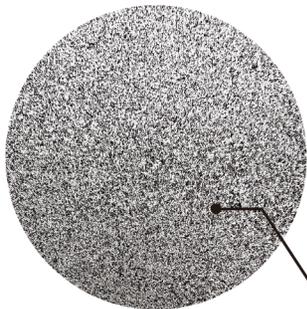
Replaces the polishing step of metallographic sandpaper. The working layer of the abrasive disc is designed to provide a continuous supply of lubricant and to minimize chips accumulation. Ensures better flatness of all samples.

- The main abrasive is high performance diamond. Different options are available for HV40-2000 hard materials.
- Metal: High Speed Steel, Alloy Steel, Tungsten steel, Mold steel, etc.
- Non-metallic: Glass, Ceramic, Titanium Carbide, Agate, Monocrystalline silicon, Jade, Quartz Glass, Polycrystalline silicon, Gemstone, Magnetic materials, Stone, etc.



HONWAY Electroplated Specification

Grinding : For HV40-2000



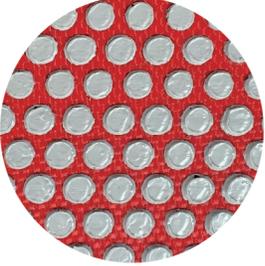
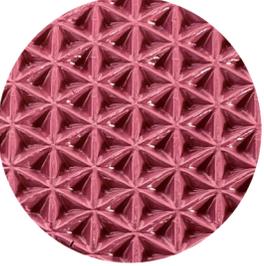
Abrasive design:

Electroplated
Abrasive : Electroplated
Disc thickness: 0.5-0.7 mm

Abrasive shape	Abrasive No.	Grit (um)	Size (mm)	(inch)
Electroplated	#60	240	Ø200	Ø8
	#80	188		
	#100	150		
	#120	125		
	#150	100		
	#240	58		
	#320	46		
	#400	35		
	#600	26		
	#800	18		
	#1000	15		
	#1200	12.5		
	#1500	10.0		
	#1800	8.0		
	#2000	7.5		
	#3000	5.0		

※Customized #35-#3000 available on request.

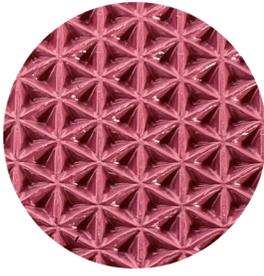
Diamond Specification

HW-Telum (Arrow)	HW-Piano (Dotted)	HW-Primo (Honeycomb)	HW-Forte (Groove)
			
For HV150-2000	For HV150-2000	For HV40-2000	For HV250-2000
Abrasive design: Between Shapes 1.5 mm Rectangular 4.8 X 1.3 mm Isosceles triangle 3.8 X 3.8 X 6.5 mm Abrasive thickness: 0.4-0.5 mm Buffer thickness: 0.4-0.5 mm Disc thickness: 0.5-0.7 mm	Abrasive design: Dotted diameter $\varnothing 5.0$ mm Dotted centre distance 7.5 mm Abrasive thickness: 0.4-0.5 mm Buffer thickness: 0.4-0.5 mm Disc thickness: 0.5-0.7 mm	Abrasive design: Beam is equilateral triangle Beam length 4.0 mm Abrasive thickness: 0.7-0.8 mm Buffer thickness: 1.1-1.2 mm Disc thickness: 0.5-0.7 mm	Abrasive design: Square Edge Length 0.7 mm Square Partition 1.5 mm Abrasive thickness: 1.0-1.1 mm Buffer thickness: 0.7-0.9 mm Disc thickness: 0.5-0.7 mm
Back Plate: <input checked="" type="checkbox"/> Stainless Steel Plate (Magnetic) <input checked="" type="checkbox"/> Rubber Backed Magnets <input checked="" type="checkbox"/> Rubber Backed(magnetic) <input checked="" type="checkbox"/> PSA Adhesive Backing	Back Plate: <input checked="" type="checkbox"/> Stainless Steel Plate (Magnetic) <input checked="" type="checkbox"/> Rubber Backed Magnets <input checked="" type="checkbox"/> PSA Adhesive Backing	Back Plate: <input checked="" type="checkbox"/> Stainless Steel Plate (Magnetic)	

Abrasive shape	Abrasive No.	Grit (um)	Size (mm)	(inch)
Arrow Dotted Honeycomb Groove	#60	240	Ø200 Ø220 Ø230 Ø250 Ø300 Ø350 Ø380	Ø8 Ø8.6 Ø9 Ø10 Ø12 Ø14 Ø15
	#80	188		
	#120	127		
	#180	78		
	#240	58		
	#320	46		
	#400	35		
	#600	26		
	#800	22		
	#1000	18		
	#1200	15		
	#1500	12		
	#2000	9.0		
	#2400	6.0		
	#4000	3.0		
#7000	0.5			

Metallographic SiC/Al Grinding Disc

碳化矽 / 氧化鋁 研磨盤

SiC Specification		Al Specification																																																																	
HW-SiC-I (Honeycomb)	HW-SiC-II (Dotted)	HW-Al-I (Honeycomb)	HW-Al-II (Dotted)																																																																
																																																																			
Abrasive design: Beam is triangular in shape Beam length 4.0 mm Abrasive thickness: 0.7-0.8 mm Buffer thickness: 1.1-1.2 mm Disc thickness: 0.5-0.7 mm		Abrasive design: Dotted diameter Ø5.0 mm Dotted centre distance 7.5 mm Abrasive thickness: 0.4-0.5 mm Buffer thickness: 0.4-0.5 mm Disc thickness: 0.5-0.7 mm																																																																	
Abrasive design: Beam is triangular in shape Beam length 4.0 mm Abrasive thickness: 0.7-0.8 mm Buffer thickness: 1.1-1.2 mm Disc thickness: 0.5-0.7 mm		Abrasive design: Dotted diameter Ø5.0 mm Dotted centre distance 7.5 mm Abrasive thickness: 0.4-0.5 mm Buffer thickness: 0.4-0.5 mm Disc thickness: 0.5-0.7 mm																																																																	
Back Plate: <input checked="" type="checkbox"/> Stainless Steel Plate (Magnetic)		Back Plate: <input checked="" type="checkbox"/> Stainless Steel Plate (Magnetic) <input checked="" type="checkbox"/> Rubber Backed Magnets <input checked="" type="checkbox"/> PSA Adhesive Backing																																																																	
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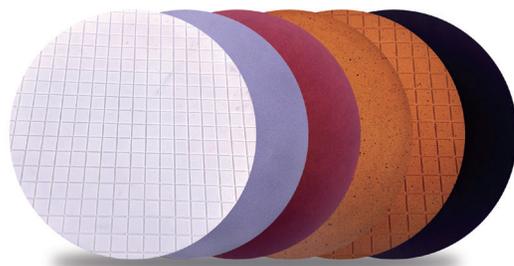
When ordering polishing cloth, Please specify the following matters :

Lar (Polishing Cloth Material)	N (Groove)	200D (Size)		No Adhesive Backed (Back plate)
HW305 : Silk HW306 : Short fiber HW403 : Leathers HW304 : Faux Suede HW402 : PU HW303 : Nylon HW302 : Gold velvet ● HW601 : CO PU HW301 : Flocking ● HW401 : Microfiber ● HW350 : ZrO2 PU HW351 : Woollen HW352 : Canvas	N (Not Grooving) Y (Grooving) :	(mm) Ø127 Ø150 Ø200 Ø230 Ø250 Ø300 Ø350 Ø380 :	(inch) Ø5 Ø6 Ø8 Ø9 Ø10 Ø12 Ø14 Ø15 :	No Adhesive Backed Adhesive Backed Magnetic Rubber

● Optional grooving or not grooving

Other Product	HONWAY Product Benefits	
Polished Fabric Double-sided adhesive layer Release paper layer 3 LAYER ONLY	Polished Fabrics Functional Layer Reinforcement Layer Double-sided adhesive layer Release paper layer	<ul style="list-style-type: none"> ✓ Wrinkle-free ✓ Waterproof ✓ Not easy to peel off ✓ High flatness

5-LAYER DESIGN GIVES YOU HIGHER DURABILITY



Purchase Notice :

- △ No Adhesive Backed > Work Disc
- △ Adhesive Backed = Work Disc
- △ Magnetic Rubber = Work Disc

Introduction: Polishing is performed to remove the fine scratches and grind marks on the specimen, resulting in a bright, flawless and mirror surface for more accurate observation.

Can be used with: HONWAY Monocrystalline/Polycrystalline diamond polishing slurry / diamond polishing Compound. Cerium oxide polishing slurry. Aluminium oxide polishing slurry.

Specification :

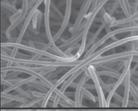
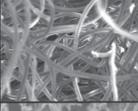
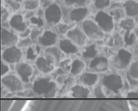
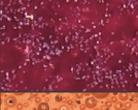
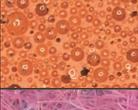
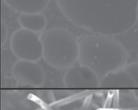
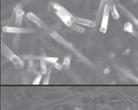
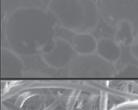
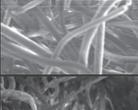
***SIZE :** In addition to the above sizes, other sizes can be customised.

***Different back plate are available for customers to choose from without affecting the quality of the product.**

Metallographic Polishing Cloth / Adsorption Pad

拋光墊 / 吸附墊

Polishing Cloth Specification

Specification	Material	Polish	Grit	Suitable	Picture	SEM
HW305	Silk	Mirror	≤0.5um	Oxides, Ferrous metals, Non-ferrous metals, Plating, Plastics, Polymers, Soft and medium hard materials, etc.		
HW306	Short fiber	Mirror	≤0.5um	Various materials		
HW403	Leathers	Mirror	≤0.5um	Suitable for all kinds of electrodes, Precision glass, Optical glass, Optical lenses, Precision Electronics, Instrumentation, Semiconductor, Metallographic slices, Crystal, Jewellery, etc.		
HW304	Faux Suede	High	≤1.5um	Glass, Carbon fibre, Gold, Platinum and metal electrodes, etc.		
HW402	PU	High	≤1.5um	GOLD/Silver/Platinum, Graphite etc. Electrode polishing, Fibre optic, Soft metal, Optical glass, Electronic semiconductor, Precision optical lenses, Crystals, gemstones, jade, Metallographic slices, etc.		
HW303	Nylon	High	≤2um	Glass electrodes, Carbide, Non-metallic metallographic sections, etc.		
HW302	Gold velvet	High	≤3um	Oxides, Ferrous metals, Non-ferrous metals, Plating, plastics, Polymers, Soft and medium hard materials, etc.		
HW601	● CO PU	High	≥2um	Optical Mirror. Precision optical instruments. Glass lenses. Silicon. Gemstone. Crystal glass components. Precision optical lens. Watch cases and other glass materials, etc.		
HW301	Flocking	Medium	2-7um	Final polished steel, Metal alloys, Non-metals, Electronic components, Polymers, Ceramics, Heat-treated surfaces, Metallographic sectioning, etc.		
HW401	● Microfiber	Medium	2-7um	Stainless steel, Metal alloy materials, Precision chemical lenses, Optical lenses, Mirror polishing of optical lenses, Glass scratch polishing and mobile phone panels, etc.		
HW350	● ZrO2 PU	Medium	6-9um	Optical Mirror, Precision Optical Instruments, Gemstone, Silicon, Crystal glass components, Watch cases and other glass materials, Precision Optical Lens, Glass lenses, etc.		
HW351	Woollen	Low	7-14um	Steel, Aluminium, Copper, Magnesium, etc.		
HW352	Canvas	Low	≥14um	First polishing of non-ferrous metals, Hard alloys, Steel materials, etc.		

● Optional grooving or not grooving is available

Adsorption Pad Specification

Specification	Name	Use	Suitable	Pictures
HW001	Adsorption Pad	Fixed workpiece (Cuttable)	Used for adsorption and securing workpiece, applied to TFT/STN, Plain glass, Quartz photomasks, Panel displays, Optical glass, Optical industry and other glass-related polishing applications.	

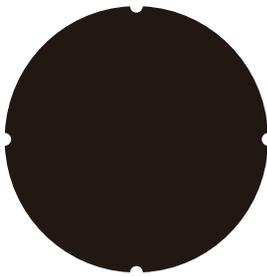
Magnetic System

Introduction: Hongway magnetic conversion method belongs to 1+N magnetic rapid conversion system.

It is composed of one magnetic disk and multiple anti-stick disks to achieve rapid conversion of different grinding and polishing media. It can achieve magnetization upgrade to traditional clamp-type grinding and polishing machines.

Magnetic Disc (attached to the work disc)

Introduction: Magnetic disc use high quality adhesive backing on the back of the pads, which can make the working aluminium discs of the existing grinding and polishing machines strongly magnetic, and can make the magnetic grinding discs, polishing pads and the working aluminium discs tightly bonded.



size (mm)	(inch)
Ø200	Ø8
Ø220	Ø8.6
Ø230	Ø9
Ø250	Ø10
Ø300	Ø12
Ø350	Ø14
Ø380	Ø15

Feature:

Powerful Magnetic

Instantly provides strong magnetic attraction to existing grinding and polishing machine discs.

Saving Time

Machines fitted with magnetic discs allow for easy changeover of grinding and polishing processes.

- Clean up any residual glue, oil and other foreign matter on the surface of the working tray before sticking.
- The surface of the magnetic disc is self-adhesive, so it can be directly stuck on the working tray to improve working efficiency.
- Other special sizes and specifications can be customised, please contact our sales department.

Adhesive Disc (bonded to polishing consumables)

Turns into a magnetic backplane in seconds

Combined with an adhesive disk, it is easy to change sandpaper and polishing cloth with different adhesive backing.

Easy to pick up without leaving glue residue

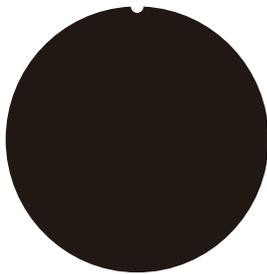
Fixed to the table with the adhesive disk, and improve the stability during grinding and polishing.

Save money on consumables

Combined with the adhesive tray, the consumables can be reused until they are no longer usable.

- Say goodbye to traditional fixing methods and improve work efficiency.
- Two options are provided for the adhesive plate according to customer needs: Teflon (anti-stick plate) and Stainless steel.
- In order to maintain high-quality polishing effect, please do not bend the adhesive plate when placing and taking it.

Teflon(Anti-stick plate)



size (mm)	(inch)
Ø200	Ø8
Ø220	Ø8.6
Ø230	Ø9
Ø250	Ø10
Ø300	Ø12

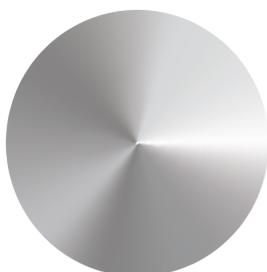
Structural design:



Introduction: Adhesive-backed sandpaper or polishing cloth can be easily removed from the anti-stick disc.

- To protect the coating on the anti-stick plate, **do not hit the coating with hard or sharp objects.**
- **Please stick to the Teflon coated surface when pasting.**

Stainless steel



size (mm)	(inch)
Ø200	Ø8
Ø220	Ø8.6
Ø230	Ø9
Ø250	Ø10
Ø300	Ø12
Ø350	Ø14
Ø380	Ø15

Structural design:



Introduction: Provides a variety of size options, and other special sizes can be customized.

- Please contact sales if customization is needed.

Metallographic Cutting Sheet /Diamond Indenter

金相切割片 / 鑽石硬度針

Ultra-Thin Diamond Cutting Disc



Sharp Cutting : High quality diamond particles

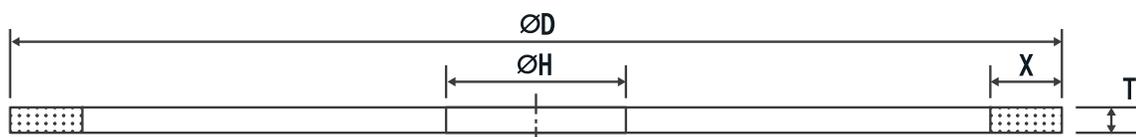
Product Focus : Cutting all kinds of hard materials

Ultra-thin : Meets the expectations of precision cutting

Application Range : Covering more than 20 industrial categories

Application

Glass. Ceramic	Glass Tubes, Optical Glass, Quartz Glass, Glass Products, Microcrystalline Glass, Crystals, Gemstones, Black Ceramics, Ceramic Tube Shells, Ceramic Tubes, Refractories, etc.
Superhard Metal	High speed steel, mold steel, alloy steel, carbide tube, carbide tungsten steel, etc.
Magnetic material	Magnetic cores, magnetic sheets, rare-earth NdFeB, permanent magnets, etc.
Optoelectronic material	Silicon carbide, silicon wafer, germanium wafer, IED, LCD, CD, etc.



Specification						Unit: mm
Model	Bond	ØD	ØH	T	T TOL	X
HW-6012703	Metal	60	12.7	0.3	±0.02	5.0
HW-10012702		100	12.7	0.2	±0.02	4.0
HW-10012705		100	12.7	0.5	±0.02	4.0
HW-11012707		110	12.7	0.7	±0.02	5.0
HW-12512703		125	12.7	0.3	±0.02	4.5
HW-12512705		125	12.7	0.5	±0.02	4.5
HW-15012705		150	12.7	0.5	±0.02	7.0
HW-17512707		175	12.7	0.7	±0.02	6.0
HW-20032009		200	32.0	0.9	±0.02	10.0
HW-25032015		250	32.0	1.5	±0.05	10.0

※ Due to the fact that metal bonding agent has three times longer lifespan than resin agent, Honway mainly deals with metal bonded diamond cutting blades, if you need resin bonded diamond cutting blades, please contact our sales representative for more information.

※ Other special sizes and specifications can be customized. For custom products, the minimum order quantity is 5 piece, ensuring that the product's performance better aligns with your expectations.

Tungsten steel

Photo	Polishing disc	Additive	Time(min)	Head(rmp)	Disc(rmp)	Pressure(MPa)	Roughness(Ra)
	Grinding Disc P #60	Water	5	100	200	1	0.164
	Grinding Disc P #320	Water	7	100	200	1	0.108
	Grinding Disc P #1000	Water	10	100	100	1	0.072
	Grinding Disc Pri #1000	Water	10	50	100	0.8	0.017
	HW601	Diamond Slurry 9um	5	50	50	0.8	0.015
	HW306	Diamond Slurry 1um	5	50	50	0.8	0.012

※The actual polishing process may vary slightly depending on the material you use and the supplier, the illustrations are only to show the effect of each process.

Ni

Photo	Polishing disc	Additive	Time(min)	Head(rmp)	Disc(rmp)	Pressure(MPa)	Roughness(Ra)
	Grinding Disc #400	Water	3	100	100	1	0.087
	Grinding Disc #1000	Water	3	100	100	1	0.048
	HW601	Diamond Slurry 15um	10	100	200	1.2	0.029
	HW601	Diamond Slurry 6um	3	50	50	1	0.019
	HW301	Diamond Slurry 6um	25	100	100	1.2	0.01
	HW306	Diamond Slurry 0.5um	5	50	80	1	0.008

※The actual polishing process may vary slightly depending on the material you use and the supplier, the illustrations are only to show the effect of each process.



HONWAY MATERIALS



Official Website

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