

HARROT CARBIDE & DIAMOND CO., LTD.



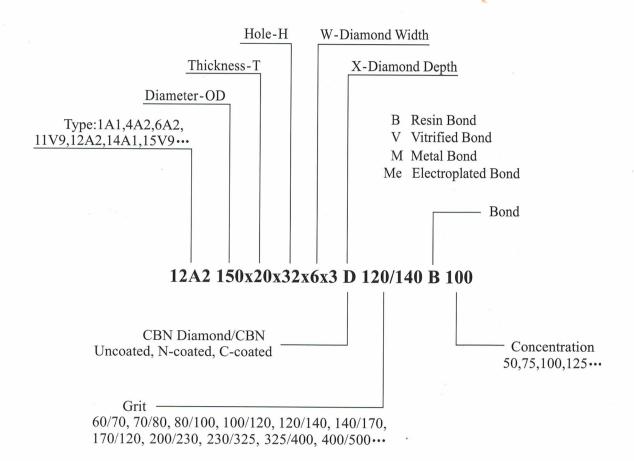


TYpes of Wheels



	WILLIAM VIIID	
Cone Wheel	12V9	3A1
Ball Wheel	15A2	14A1
DW	15V4	9A3
1A8	15V9	6A9
1A1	12B	6A2
	///// M M M M M M M M M M M M M M M M M	<u></u>
1E1	6A2H	1A1R
✓ ///////>	// ///// 	
1EE1	6A2C	11A2
1V1	2A2T	11V4
4A2P	HH1	11V9
1F1	HH2	12V2
	WILLIA VIII	
1FF1	12V4	1A6Q

Marking of Diamond & CBN wheels



Ordering information

More detailed for your description, more proper wheels you could get, please let us know:

Type such as 1A1, 1A1R, 6A2, 11V9

Size Diameter, Thickness Hole, Width and depth of abrasive layer, angle

Specification Abrasive (D or CBN), Grit, Bond, Concentration

Workpiece Material, Grinding processs (wet or dry)



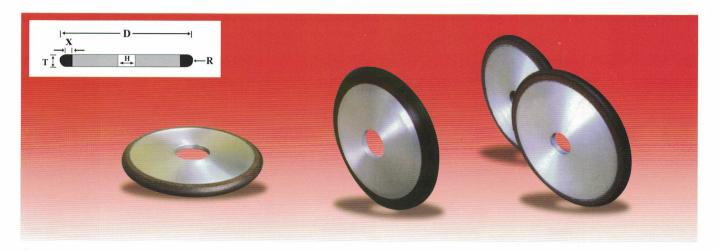
1A1



D	Т	Н	X
25	4,6,8,10,12,16,20		3
30	10,12,16,20		3
40	4,6,8,10,12,20		3
50	4,6,8,10,12,16,20	14 15	3
60	6,8,10,16,20		3,4,5,
75	3,4,6,8,10		3,4,5,
80	5,6,8,10,12,16,20		3,4,5,
100	3,4,5,6,8,10,12,16,20		3,4,5,6
125	3,4,5,6,8,10,12,15,16,20		3,4,5,6,8,10
150	3,4,5,6,8,10,12,15,16,20		3,4,5,6,8,10
175	5,8,10,12,16,20		3,4,5,6,8,10
200	5,6,8,10,12,15,16,20		3,4,5,6,8,10,15
250	5,8,10,12,15,16,20,25,40,50,60		3,4,5,6,8,10,15
300	8,10,12,16,20,25,32,40,50,60		3,4,5,6,8,10,15
350	12,15,16,20,25,32,40,50,60		3,4,5,6,8,10,15
400	10,12,15,16,20,25,32,40,50,60		3,4,5,6,8,10,15
450	12,15,20,40,50,60		3,4,5,6,8,10,15
500	12,15,20,40,50,60		3,4,5,6,8,10,15



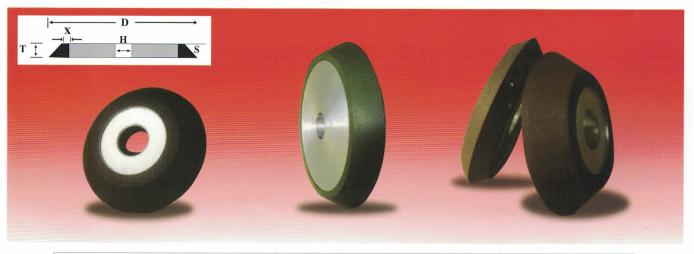
■ 1F1



D	T/R	Н	X
60	4/2		4
75	4.2/2.1		5
80	6/3		6
100	3/1.5,6/3,8/4,10/5	***************************************	3,5,6,7
125	3/1.5,6/3		3,6

Any other size available upon request

■ 1V1



D	Т	Н	V
150	1.6		15°
150	3		20°
150	6		10°



■ 1A1R



_	T/E					
D	0.8/0.6	1.0/0.6	1.2/0.8	1.4/1.0	^	
60	\ \ \				5	
80	\ \				5	
100	√	~	√	√	5	
150	√	~	√	√	6	
200	\ \ \	\ \	√	~	6.8	

Any other size available upon request

3A1



D	T	Н	J	U	X
75	6		50	1.0	3
100	6		75	1.6	3
125	6	***************************************	100	1.6	3
150	6		125	1.6	3
180	6		150	1.6	3
200	6		180	1.6	3

Any other size available upon request



14A1



D	Т	Н	J	Х	U
75	6		50	3	1,2
100	6,8		70	3	3
125	6,8,10,12		100	3	3
150	10,12		120	3	3
175	12,15		140	3	1,3,6
200	12,15,20		160	3	3,5,6

Any other size available upon request

4A2,4A2P



D	Т	Н	J	W	Х
150	10	12	57	3	1.5
150	10		57	6	3
150	10		57	10	1.5
200	10		100	6	1.5
250	13		125	6	1.5

HR

■ 6A2



D	Т	Н	E	W	Х
50	13		6	3,5,6	1.5
75	20		10	3,5,6,10	3
100	20		10	6,10,12	3
125	20		10	6,10,12,15,20	1.5
125	20		10	6,10,12,15,20,25	3
150	20		12	5,6,10,12,15,20,25,30	3
175	20		12	5,6,10,15,20,25	1.5
175	20		12	5,6,10,15,20,25	3
200	20		12	10,15,20,25	3

Any other size available upon request

9A3



D	Т	Н	E	W	X
125	12		8	5	2
150	16		12	5	2
175	16		10	6	3
175	16		12	5	2
230	12		8	10	2



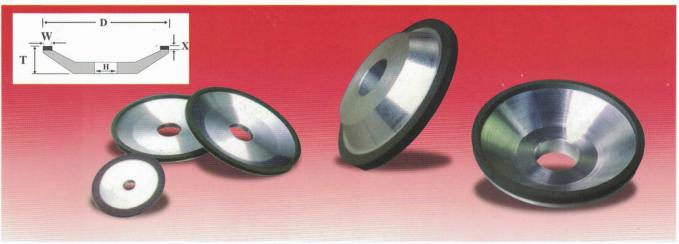
■ 11V9, 12V9



D	Т	Н	E	K	S	U	X
50	25		6	12		5	1.5,2,3
75	32		1 / 4	12	60	5,7	2,3
90	35		10	56		7, 10	2,3
100	40		10	56	70	7, 10	2,3
125	40,45		13	80		7, 10	2,3
150	40,45		13	80		7, 10	2,3

Any other size available upon request

12A2



D	Т	Н	E	K	S	U	Х
50	25	3	6	12		5	1.5,2,3
75	32		1 / 4	12	60	5,7	2,3
90	35	a Auto	10	56		7, 10	2,3
100	- 40		10	56	70	7, 10	2,3
125	40,45		13	80		7, 10	2,3
150	40,45		13	80		7, 10	2,3



Diamond/CBN wheels for CNC grinders

Applications: Diamond wheels for carbide or carbide/steel; CBN wheels for HSS, Joinalloy, or Stellite

Wheels are available for the grinders:

Walter, Weinig, Anca, Guhring, Reineker, Schneeberger, Rollomatic, Wadkin, Foley, SCMI, Star, Unison, United, Tigra, Andi, Nielson

Diameters: 6", 8", 10", 150mm, 200mm, 250mm

Thickness: 1/16", 1/8", 1/4", 1.5mm, 2mm, 3mm, 4mm, 5mm

Grit: 100/120 to 325/400 **Concentration:** 100, 125



Diamond wheels for 5-Axis

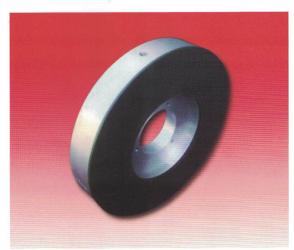
Double-disc Surface CBN Weels

Applications: Resin bond CBN wheels can be used for double-disc surface grinding of compressor parts, precision springs, vane pump vanes and rotors, washers, transmission gears, the inner and outer race surfaces of bearings, etc.

Available for the materials: HSS, bearing steel, carbon tool steel, spring steel, die steel, cast iron, sintered ferrous metal, etc.

Features:

High stock removeal
High grinding quality
Short grinding duration
Long life time
Continuous grinding performance
Optimized cooling



Double-disc Surface CBN wheels for compressor parts



Ultra Thin and Ultra Precision Diamond Discs:

Applications: It is suited for: High-tech electronic parts and related products such as magnetic head, IC, LSI, optical fiber, semiconductor, electronic lead frame and etc, require high precision disc wheel with high precision, efficiency Cutting, Slicing, Dicing, Wafering, Grooving, Slotting, Cross Sectioning, Gang Sawing, Slabbing, etc.

Available for the materials: All kinds of resin materials used in Electronic and Optical fields, Quartz, Glass, Ceramics, Yag, Sapphire, Agate, Granite, Marble, etc.



Ultra thin & ultra precision discs for different application

Features:

Ultra Precision: Size precision can reach to \pm 0.002mm High Rigidity: Good rigidity prevent the operation from slant and vibration

Long Life Time: New technology keeps the disc's long life time

Usage in Group: 10 or 12 in group makes high efficient operation

Vitrified CBN Wheels:

Features: High machining precision and efficiency, little deformation, high fragility and sharpness, high Chemical Stability. The wheels can be applied to a wide variety of materials, including cemented steel, carbon steel, bearing steel, Heat Resistant Steel, sintered alloy, etc.

Typical Application:

- 1. For the grinding of camshafts and Crankshafts
- 2. For the grooving of vane pump rotors and synchromesh ball-joints and the forming injection parts, etc.



Vitrified CBN wheel for Crankshaft





Vitrified CBN wheels for internal grinding

3. For internal grinding of various auto parts, including transmission gears, injection nozzles, cross joint caps, and connecting rods CVJ outer races and raceways, spherical surfaces. They are also used for internal grinding of bearing inner races, and compressor and pump parts

Vitrified Diamond Wheels For PCD/PCBN



Features:

- PCD/PCBN Specifically designed for Polycrystalline Diamond and CBN
- High stock removal
- Excellent cutting edges
- Long life performance
- Reduced cycle times
- Fine to Micro Grits

Diamond/CBN Wheels for Woodworking & MetalWorking

A complete line of diamond wheels made with American, British technology and equipment for top, face & dual side grinding. Different bonds and design, dual or triple grit wheels to meet your exact requirements. A complete line of cup wheels for standard manual Tool & Cutter grinders. Available in both diamond & CBN bond for both wet or dry grinding. Polyamide wheels for fluting, gashing and grinding of drills, reamers and mills are also customers' choice.



Resin diamond wheels for woodworking & metalworking



Precision Electroplated Diamond Products



Precision plated diamond/CBN tools

With the importation of the complete line of technology and equipment from Trenker Abrasive Plant Technology, Germany, Saili is making a wide range of specialized electroplated diamond and CBN tools including bore finishing tools, core drills, glass reamers, diamond routers, plated screen, and diamond files.

Available for the materials:

Diamond tools:

For Carbide, Carbon, Semiconductor, Ceramic, Composites, Medical Devices, Fiberglass, Quartz, Marble, Lapidary, Graphite, Friction Material, etc.

CBN tools: For Alloy Steel, Hardened Tool Steel, Superalloys, Stainless, Cast Iron, etc.



Wheels for Paper Blades



Double or three-layer 6A2,6A9,12V2 and other types of wheels can be supplied:





CENTERLESS GRINDING WHEELS หินเจียรไร้ศูนย์



SURFACE GRINDING WHEELS หินเจียรราบ



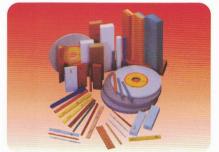
CYLINDER GRINDING WHEELS หินเจียรกลม



SNAGGING GRINDING WHEELS ห็นเจียรงานหล่อ



HOINING STONE หินเจียรขัดกระบอก



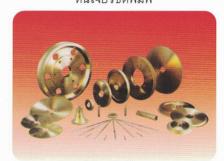
MOLD STONES หินเจียรขัดพิมพ์



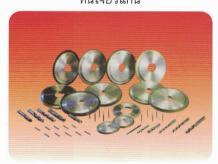
MOUTED POINTS หินเจียรแกน



GENERAL PURPOSE GRINDING WHEELS หินเจียรทั่วไป



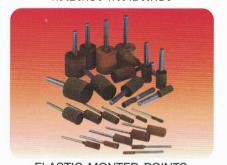
DIAMOND FILES MOUTED POINTS ตะไบเพชร หัวเจียรเพชร



DIAMOND & CBN WHEELS หินเจียรเพชร



DIAMOND DRESSOR เพชรแต่งหิน



ELASTIC MONTED POINTS หินเจียรแกนขัดเงา



MOUNTED FLAP WHEELS จานทรายและล้อทราย



CUTTING WHEELS ใบตัดไฟเบอร์



OFFSET WHEELS ใบเจียรไฟเบอร์

MAIN PRODUCTS

DIAMOND & CBN GRINDING WHEELS

DIAMOND DRESSING TOOLS

PCN & PCBN TURNING TOOLS

DIANOND TOOLS & FOR MASONRY

SAW BLADE, WHEELS, CORE DRILL & CBN TOOLS.

ELECTROPLATED DIAMOND & CBN TOOLS

FILES, MOUNTED POINTS, WHEEL & DENTAL INSTRUNEMT.

DIAMOND POLISHING TOOLS

COMPOUNDS, POWDERS, FOILS & HAND STONES.

เธาเลือกสรรค์อุปกรณ์ที่มาตราฐานเพื่อการผลิตงานเจียรแต่งด้านอุตสาหกรรม

ให้ได้รูปแบบที่ดีของตลาด

เธาภูมิใจที่เป็นส่วนหนึ่งในการสร้างสรรค์งานในประเทศ

ผู้ผลิตและจำหน่ายเครื่องมือ อุปกรณ์เคลือบชุบเพชร

บริษัท ฮารอท คาร์ไบด์แอนด์ไดมอนด์ จำกัด

1056/6 ถนนรามคำแหง แขวงหัวหมาก เขตบางกะปี กรุงเทพฯ 10240 โทร. (662) 376-3451-3 โทรสาร: (662) 376-3454



HARROT CARBIDE & DIAMOND CO., LTD.

1056/6 Ramkhamhaeng Rd., Huamark, Bangkapi, Bangkok 10240 Tel. (662) 376-3451-3 Fax: (662) 376-3454