

Xinxiang New Zuan Diamond Tools Co., Ltd.



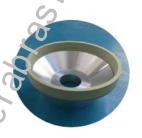
Provide Diamond & CBN Grinding Wheels

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Metal Bonded Grinding Wheels Resin Bonded Grinding Wheels Vitrified Bonded Grinding Wheels Electroplated Grinding Wheels

- Metal Bonded
   Wheels have High
   efficiency,good self sharpening ,high
   stock removal,
   stong hold and
   good abrasion
   resistance
- Resin bonded wheels have good self-;harpening ,sharp cutting ,high efficiency,low roughness of workpiece surface
- Vitrified boned wheels have sharp cutting ,high efficiency ,long life,less heat and jam generated in grinding, easy control of the precision and easy dressing
- Electroplated
   Wheels have high
   grain density, sharp
   grinding ,high
   efficiency ,good
   precision, without
   dressing

website: www.superabrasivetools.com email: info@superabrasivetools.com

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New Zuan Diamond Tools is a professional manufacturer and supplier of superhard tools. It is loca ted near Zhengzhou where is the birthland of abrasive in China. Our main products include grinding wheel series, dicing blade series, abrasive belt series, rotary dresser series, honing series, etc.

#### **Grinding wheel series:**

Diamond and CBN grinding wheels,

Metal bond, resin bond, electroplated bond, vitrified bond grinding wheels,

Centerless grinding wheels, cylindrical grinding wheels, internal grinding wheels, flat grinding wheels, and etc,

High precision, stable quality, good wear resistance, and also provide customized service.

#### Dicing blade series:

Diamond abrasive, Resin bond, metal bond, and electroplated bond, Hub type and hubless type High precision and stable quality

#### Abrasive belt series:

Diamond abrasive belt and CBN abrasive belt

Resin bond and electroplated bond

Resin bond diamond abrasive belt for HVOF with excellent performance is a featured product.

#### **Rotary dresser series:**

Diamond abrasive, high precision, stable quality, can be made according to customer's precision r equirements with different technologies.

#### **Honing series:**

Can produce diamond and CBN honing sticks to replace perfectly SUNNEN series honing sticks, al so produce honing mandrels to be perfectly matched with SUNNEN series honing machines. We have small horizontal and vertical honing machines.

#### Lapping wheels:

Diamond and CBN lapping disc, Resin bond vitrified bond and metal bond, Good wear resistance, good surface quality of the workpiece

All kinds of bond lapping discs can be customized according to the customer's needs. Our company can also sell the double-sided lapping machines.

#### Pellet series:

Diamond pellets

Resin bond and metal bond, Used for grinding and polishing all kinds of optical glass, Stable performance

Can also produce all kinds of grinding wheels and cut-off wheels for optical glass, and can provide the customized service according to customer's need.

#### Contact:

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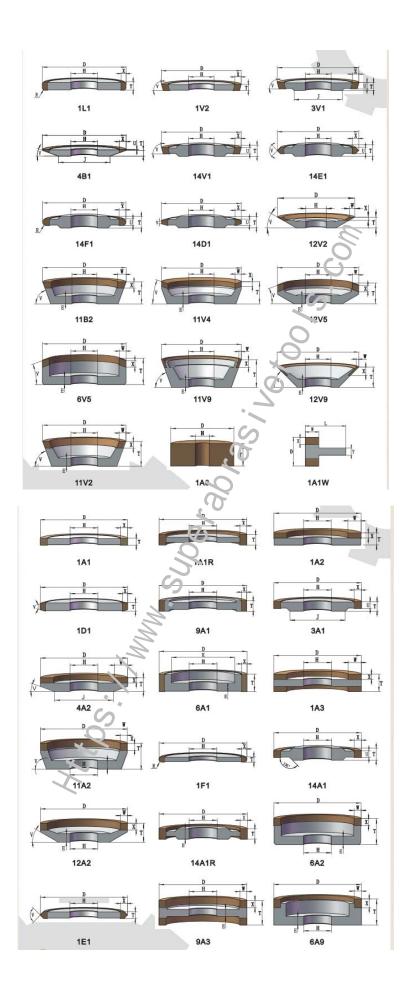
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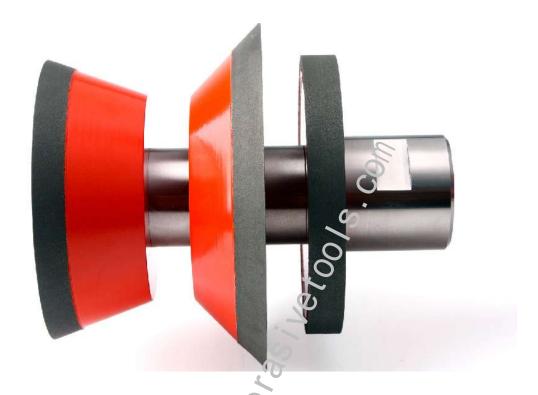
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## **Superabrasive Grinding Wheels for CNC Tools**

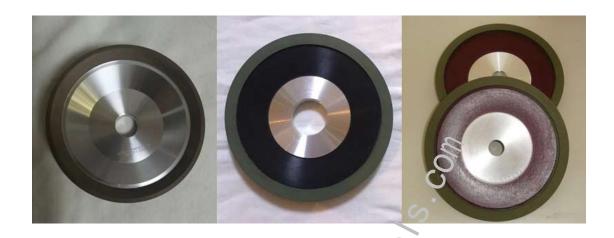


## Application:

Mainly used for tungsten carbide, high-speed steel(HSS), stainless drill, end mill and reamer.

Model	,3	Specification
		$D \times T \times H \times X$
1A1	3	40-200
		3-15
	T	2-30
		$D \times T \times H \times X$
1V1	D	40-200
	X	3-15
	Т	2-30
	D	$\times$ T $\times$ H $\times$ X $\times$ U
11V9	D	50-150
	X	2-10
	U	3-15
	D	$\times$ T $\times$ H $\times$ X $\times$ U
12V9	D	50-150
	X	2-10
	U	3-15

## **Superabrasive Grinding Wheels for Woodworking Tools**



## Application:

Mainly used for grinding the circular saw blades made of tungs ten carbide, high speed steel and PCD, top, face and side sharpening of CNC, processing woodwork drills and mills.

wiodels:		(0)			
Model		Specification			
		$5 \times T \times H \times W \times X$			
4A2	D	50-250			
	W	3-15			
	x Q	2-10			
	28	$D \times T \times H \times W \times X$			
12V9/12V2	D	50-250			
	w	3-15			
	X	2-10			
		$0 \times T \times H \times W(W1+W2) \times X$			
11AA9	D	75、100、125			
	W1+W2	(2.5+2.5) (3+2)			
	X	4-8			
	D×	$(T \times H \times X \times U \ (U1+U2) \ /U$			
14AA1/14A1	D	75-200			
	X	3-15			
	U	3-10			
	$D \times T \times H \times X \times U$				
4A9	D	75-200			
	X	3-15			
	U	3-10			

## **Peripheral Diamond Grinding Wheels for Indexable Inserts**



## Application:

Mainly used for tungsten carbide, ceramic, cermet, PCBN, PCD and etc

ivioueis.		
Model	Spec	cification
2A2T	D×T>	$\langle H \times W \times X$
	D	250
	₩ W	5-18
	Q x	6-10
11A2T	D×T>	$\times$ H $\times$ W $\times$ X
	D	300,350,400
	₹ w	3-18
	X	6-10
12A2T	D×T>	$\langle H \times W \times X$
	D	220,350,400
Co	W	3-18
Ç	Х	6-10
6A2M	$D\times T$	$\langle H \times W \times X$
	D	300,350
	W	5-30
	Х	6-10

## **Diamond Grinding Wheels for PCB Tools**



#### Features:

Good shape retention, perfect blade quality, good wear resistance and long life

## Application:

Mainly used for grinding welded or holistic milling cutter and drills for processing PCB

Model	Specification			
	$\bigcirc \times T \times H \times X$			
4BT1/3A1	D	75-250		
	X	3-10		
	U	1-5		
	C	$\times$ T $\times$ H $\times$ W(W1+W2) $\times$ X		
6AA2/6A2	D 75-150			
	W1+W2	(4+6), (5+5) /10		
	X 3-5			
	D×T×H×X×U 125-220			
12M1B				
	X 5-20			
	U 5-20			

## **Centerless Grinding Wheels**







## Features:

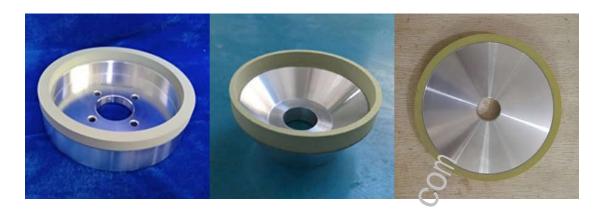
Efficient batch cylindrical grinding, high roundness and cylindricity of workpiece and good consistency of dimension, good surface finish after finish grinding, used for rough grinding, semi-finish grinding and finish grinding

## Application:

Mainly used for tungsten carbide, ceramic, magnetic :naterial, stainless steel bar, PCD and PCBN composites

Model	Specification		
	D  imes T  imes H  imes X		
	D	125-600	
1A1		50-350	
	Ħ	75,127,203	
	X	5,10	
		$D \times T \times H \times X$	
	D	125-600	
6A1	Т	50-350	
	Н	75,127,203	
	X	5,10	
		$D \times T \times H \times X$	
9A1	D	125-600	
	Т	50-350	
	Н	75,127,203	
	X	5,10	

## **Diamond Grinding Wheels for PCD/PCBN Tools**



## Features:

Long service life, stable quality
High efficiency, coarse grinding sharp
Good surface finish after grinding
Diamond abrasive
Resin and vitrified bond

## Application:

PCD,PCBN tools

Application	Model	Specification			
		D (7)	Т	Н	Х
Cylindrical		150	20	32	5
grinding/		200	25	31.75	
Plane	1A1	250	25	32	
grinding	9A1	300	40	127	5,10
		350	20,40	127	
		400	50,60	203	
		600	50	305	
Centerless		350	125	127	
grinding	1A1	400	150	203	5,10
	9A1	500	150	203	
	*	510	205	305	20
Face grinding	6A2,6A2T	100,150,200,250	40	20.32.40	10,20

## Superabrasive lapping wheels



## **Resin Bond Superabrasive lapping wheels**

## Application:

Parts of air conditioning compressor: cylinder block (grey cast iron or no full reast iron), sleeve (alloy cast iron), Slide (high speed steel)

Hydraulic parts: vane of vane pump(high speed steel)

Tungsten carbide cutting tools: cutters(YG tungsten carbide)

Magnetic material: magnetic soft ferrite material

Sapphire, glass, crystal, zircon

#### Models:

Model	Specification		
	$D \times T \times H \times W \times X$		
6A2M	D	250-1200	
	W	10-350	
	X Ø	3-10	
	$D \times T \times H \times W \times X$		
6A2H	D 2	250-1200	
	W	10-350	
		3-10	

## Vitrified Bond Superabrasive lapping wheels

## Application:

Sealing components: silicon carbide, alumina ceramics, zirconia ceramics, cermets, etc

Tools: carbide, PCD, PCBN, high speed steel

Ceramic valves

All kinds of powder metallurgy and YG series carbide products

Model	Specification		
	$D \times T \times H \times W \times X$		
1A2T	D	534-1200	
	W	10-350	
	Х	3-10	
	$D \times T \times H \times W \times X$		
6A2B	D	534-1200	
	W	10-350	
	Х	3-10	

## **Superabrasive Grinding Wheels Series for Auto Processing Industry**



# Vitrified Bond CBN Grinding Wheels with Camshaft, Crankshaft and Gear Shaft Application:

Mainly used for high efficiency high speed grinding of the camshaft of CAM

Mainly used for high efficiency high speed grinding of crankpin, rain journal, flange neck, thrust face and end face

# **Electroplated Grinding Wheel for Crankshaft Application:**

Used for rough grinding the camshaft of motor

## Applied material for the above 2 kinds of grinding wheels

Cast iron: Chilled cast iron, nodular cast iron, grey cast iron, alloy cast iron, etc.

Steel: 20Cr,GCr15,CF53,45# steel, 55# steel, 80B high carbon steel

## **Specifications**

## **Specifications of Grinding Wheel for Crankshaft**

Model	12	Specification		
		$D \times T \times H \times X$		
	D	400-950		
1A1	S x	5-10		
	2 т	10-50		
	$D \times T \times H \times X \times U$			
•	D	400-950		
3A1	X	5-10		
	U	10-50		
		D  imes T  imes H  imes X  imes U		
	D	400-950		
14LL1	Х	5-10		
	U	10-50		

## **Specifications of Grinding Wheel for Camshaft**

Model	Specification			
	$D \times T \times H \times X$			
	D	100-750		
1A1	Х	3-10		
	Т	10-70		
		$D \times T \times H \times X \times U$		
	D	100-750		
14A1	Х	3-10		
	U	10-70		
		$D\times T\times H\times X\times (U1+U2)$		
	D	100-400		
9A1B	Х	3-10		
	U1,U2	10-30		
		$D \times T \times H \times X \times U$		
	D	100-750		
3A1	X	3-10		
	Т	10-70		
		$D \times T \times H \times X$		
	D (V)	50-150		
3Q1	х 2	10-15		
	U S	5-20		
	$D \!  imes \! T \!  imes \! H \!  imes \! X$			
	D	350-750		
9A1	**	3-10		
	J	20-70		

## **CBN Grinding Wheels for Valve**



# Electroplated bond and vitrified bond **Application:**

Mainly used for form grinding auto engine(arc, slope, cylindrical and other parts of intake& exhaust)

Workpiece material: 20Cr, 20CrMo,middle carbon alloyed steel, high temperature steel, 40Cr, 40Cr9Si2Mo, etc.

## **Superabrasive Internal Grinding Wheels**



## Application:

Hydraulic tappet of auto motor, pump stator of auto, roller, cylinder, flange cover of air condition compressor

## **Optical Glass Grinding Series:**

**Flat Diamond Milling Grinding Wheels:** used for rough grinding and finish grinding of optical glass such as lens, prism and etc.



## **Sphere Diamond Milling Grinding Wheels:**

used for spherical milling grinding and chamfering such as optical lens, optical glass, etc.



Side Grinding Wheels, Forming Grinding Wheel Mold:

For optical glass



such as lens, prisms forming, chamfering and side grinding

Click  $\underline{\text{here}}$ , check the detailed parameter information of optical glass processing

## **Diamond Grinding Wheel for gem**



0		10 - 1- 1	_:		- 4 -
Suitable f	or po	iisning	zircon,	crystal.	, etc

	1A1-350 ×440 ×127 ×10		
Specifications	1A2 -400×20×27×141×5		
	1A2 -400×21×27×145×6		

## **Back Grinding Wheels for Silicon Wafer Sapphire**



## Application:

Used for sapphire substrate epitaxial wafer, Sic substrate epitaxial wafer, Si substrate wafer, zirconia ceramic, etc

Workpiece materials: artificial sapphire, Sic, monocrystalline silicon, etc

#### **Specifications:**

Bond type: vitrified bond, resin bond, metal bond

Outer diameter:  $\phi$ 175、 $\phi$ 195、 $\phi$ 209、 $\phi$ 255、 $\phi$ 305、 $\phi$ 355

Diamond grain size: 200#、400#、800#、1200#、1500#、3000#、6000#、8000#、15000#、30000#

## **Superabrasive Grinding Wheels for Roller**



## Application:

Used for tungsten carbide thermal spray roll, chromium oxide thermal spray roll, high speed steel roll, stainless steel roll, etc.

#### Specification:

Specification.				
		1A1-300×30×127×5		
Specification	1A1- 600×45×305×10			
	1A1-750×40×305× 10			
		1A1-750×75×305×10		
		1A1-850×50×305×10		

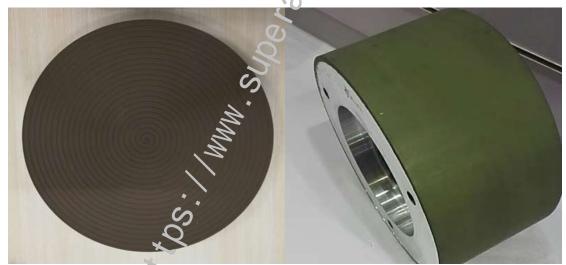
## **Diamond Grinding Wheels for Sanding Belt**



Used for cutting and grinding of abrasive belts such as zircor in used alumina, brown fused alumina, green silicon carbide, black silicon carbide and other abrasive belt products.

	1A1 -150×1.5×32×5
Specification	6A2 -75×25×25×3×5
	6A2H-75×35×20×2×6

## **Diamond Grinding Wheel for Magnetic Materials**



The flat grinding wheel is used for the flat grinding of magnetic materials, and the centerless grinding wheel is used for cylindrical grinding of magnetic materials such as neodymium iron boron.

## **Specifications:**

Flat grinding	1A1 -350×40×127×10		
	1A2T-450×70×370×40×10		
Centerless grinding	9A1-300×100×120×10		
	9A1-350×125×127×10		
	9A1-500×150×305×10		
	9A1-600×200×305×10		

## **Diamond Grinding Wheels for Photoelectric Ceramic**

Mainly used for forming grinding, rough grinding, fine grinding and polishing of zirconia, alumina and other optoelectronic ceramics (such as ceramic ferrule, ferrule sleeve, etc.).

## **Specifications:**



Bond	Grinding type	Specification	D	Т	Н	W	Х
Vitrified bond	Sphere Grinding Wheels	S 1A8	8.5	12	6	1.25	12
			18.6	12	15. 8	1.35	12
	Centerless Grinding Wheel	3A1	128	60	30	6	50
Resin bond	Face Grinding Wheel	6A2T	350	75	70	45	5
						50	
						80	
						100	
						45	5
						50	
						80	
						100	
		6A2T	200	60	138	10	8
		6A2	150	30	M1	4	5
					2		8
	Centerless Grinding Wheel	9A1	200	70	75	10	70
		1A1	350	125	127	12	125
	Slide Grinding Wheel	1A1	103	0.5	40	6	0.5