

ABRASIVE

Super Abrasives - Introduction

The Super Abrasives, Diamond and Cubic Boron Nitride (CBN) process properties unmatched by the conventional abrasives such as Silicon Carbide and Aluminum Oxide. The hardness, abrasion resistance, compressive strength and thermal conductivity of Super Abrasives make them logical choices for many difficult grinding, slitting, lapping and honing applications. Super Abrasives can cut and grind the hardest materials known, making 'difficult-to-grind' application a routine operation.

Applications: The following are the various applications with Diamond and CBN

DIAMOND

MATERIALS

- Tungsten
- Tungsten Carbide & Steel Composite materials
- Hard alloys (Hard cast metal, Stellite)
- Ferro - Tic
- Ferrites, Ceramics, Magnetic materials
- Wear - Resistant coatings
- Oxide ceramic, Abrasive materials
- Porcelain ceramic materials
- Glass - Sheet glass, Optical glass
- Gem stones, Semi-Precious stones
- Plastic (Duroplast, Fiber reinforced)
- Graphite
- Grey Cast Iron, Cast Steel
- Semi-Conductors

TYPICAL OPERATIONS

- Off-hand grinding
- Tool and cutter grinding
- Form grinding
- Surface grinding
- Cylindrical grinding
- Internal grinding
- Polishing and Lapping
- Deep grinding - Creep feed
- Jip grinding
- Electrolytic grinding
- Honing
- Slitting and dicing

CBN

MATERIALS

- High speed steel
- Alloyed tool steel
- Super alloys (Nimonic, incoloy, etc.)
- Wear - Resistant coatings
- Cast Iron
- Case hardened steel
- Tool steels (Unhardened)

TYPICAL OPERATIONS

- Internal grinding - Gears, bushings, bearing
- Cylindrical grinding
- Slot grinding
- Creep - feed grinding
- Cam & Cam shaft grinding
- Jip grinding
- Gear grinding
- Hob resharpening
- Form grinding
- Honing - various application
- Slitting and dicing
- Flute grinding

Nikken Resibon Grit Size		U.S. Standard Mesh
Diamond	CBN	
D 251	CB 251	60/70
D 213	CB 213	70/80
D 181	CB 181	80/100
D 151	CB 151	120/140
D 126	CB 126	140/170
D 107	CB 107	170/200
D 91	CB D91	200/230
D 76	CB 76	230/270
D 64	CB 64	325/400
D 25	CB 25	
D 20B	CB 20B	



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ABRASIVE



A combination of a semi - friable pink abrasive and the best Nikken RESIBON bonds is wheel crafted with precision for precision applications, offering added value of end users

FEATURES	BENEFITS
<ul style="list-style-type: none"> • New advanced abrasive • Tighter dimensional, geometrical tolerance, better balance 	<ul style="list-style-type: none"> • Cooler and freer cutting, broad versatility • Minimal vibration, increase efficiency and accuracy of grinding process



This wheel is priced to give good value while going for cool, fast tool reconditioning the first choice for light grinding applications on all tool steels

FEATURES	BENEFITS
<ul style="list-style-type: none"> • Friable abrasive • Tighter dimensional, geometrical tolerance, better balance 	<ul style="list-style-type: none"> • Cool and burn - Free cutting • Lesser vibration in machine • High dimensional accuracy time after

SPECIFICATION

ABRASIVE	GRIT	GRADE	BOND
RA Pink	46 (Coarse)	U (Soft)	JVS
WA White	220 (Fine)	N (Hard)	JVS

CODE	SIZE / MODEL	CODE	SIZE / MODEL	CODE	SIZE / MODEL	CODE	SIZE / MODEL
AG04598	180 x 6 x 31.75 WA46J	AG04615	180 x 13 x 31.75 WA80K	AG04632	205 x 13 x 31.75 WA120J	AG04649	355 x 40 x 127 WA60J
AG04599	180 x 6 x 31.75 WA60J	AG04616	180 x 13 x 31.75 WA100K	AG04633	205 x 13 x 31.75 RA46K	AG04650	355 x 40 x 127 WA80J
AG04600	180 x 6 x 31.75 WA80J	AG04617	180 x 13 x 31.75 WA120K	AG04634	205 x 13 x 31.75 RA60K	AG04651	355 x 40 x 127 WA46K
AG04601	180 x 6 x 31.75 WA100J	AG04618	205 x 6 x 31.75 WA46J	AG04635	205 x 13 x 31.75 RA80K	AG04652	355 x 40 x 127 WA60K
AG04602	180 x 6 x 31.75 WA120J	AG04619	205 x 6 x 31.75 WA60J	AG04636	205 x 13 x 31.75 RA100K	AG04653	355 x 40 x 127 WA80K
AG04603	180 x 6 x 31.75 WA46K	AG04620	205 x 6 x 31.75 WA80J	AG04637	205 x 13 x 31.75 RA120K	AG04654	405 x 50 x 127 WA46J
AG04604	180 x 6 x 31.75 WA60K	AG04621	205 x 6 x 31.75 WA100J	AG04638	205 x 13 x 31.75 WA46J	AG04655	405 x 50 x 127 WA60J
AG04605	180 x 6 x 31.75 WA80K	AG04622	205 x 6 x 31.75 WA120J	AG04639	205 x 20 x 31.75 WA60J	AG04656	405 x 50 x 127 WA80J
AG04606	180 x 6 x 31.75 WA100K	AG04623	205 x 6 x 31.75 WA46K	AG04640	205 x 20 x 31.75 WA80J	AG04657	405 x 50 x 127 WA46K
AG04607	180 x 6 x 31.75 WA120K	AG04624	205 x 6 x 31.75 WA60K	AG04641	205 x 20 x 31.75 WA100J	AG04658	405 x 50 x 127 WA60K
AG04608	180 x 13 x 31.75 WA46J	AG04625	205 x 6 x 31.75 WA80K	AG04642	205 x 20 x 31.75 WA120J	AG04659	205 x 50 x 127 WA80K
AG04609	180 x 13 x 31.75 WA60J	AG04626	205 x 6 x 31.75 WA100K	AG04643	205 x 20 x 31.75 WA46K	AG04660	508 x 50 x 127 WA46J
AG04610	180 x 13 x 31.75 WA80J	AG04627	205 x 6 x 31.75 WA120K	AG04644	205 x 20 x 31.75 WA60K	AG04661	508 x 50 x 127 WA46J
AG04611	180 x 13 x 31.75 WA100J	AG04628	205 x 13 x 31.75 WA46J	AG04645	205 x 20 x 31.75 WA80K	AG04662	508 x 50 x 127 WA80J
AG04612	180 x 13 x 31.75 WA120J	AG04629	205 x 13 x 31.75 WA60J	AG04646	205 x 20 x 31.75 WA100K	AG04663	508 x 50 x 127 WA46K
AG04613	180 x 13 x 31.75 WA46K	AG04630	205 x 13 x 31.75 WA80J	AG04647	205 x 20 x 31.75 WA120K	AG04664	508 x 50 x 127 WA60K
AG04614	180 x 13 x 31.75 WA60K	AG04631	205 x 13 x 31.75 WA100J	AG04648	355 x 40 x 127 WA46J	AG04665	508 x 50 x 127 WA80K

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