

NAKANISHI POLISHING TOOLS

POLISHING TOOLS



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NAKANISHI INC. 2018

PR-K318E Ver.10 '18.11.03.㊞

Specifications and design are subject to change without notice.



Nature of Tochigi, Japan

Symbols used in NAKANISHI Tools Catalogue

	Shank Diameter Shows shank diameter of the tools. Nakanishi produces tools with several shank diameters. *Nakanishi micro grinders utilize a collet system, which insures maximum precision. Therefore, please use the collet that best corresponds to the tool shank diameter.
	Standard Package One package is the minimum shipping unit. This number shows the number of pieces in the standard package (bag, box and etc.). Please order the number of packages needed for the desired quantity.
	Maximum allowable speed Do not exceed the maximum allowable tool speed. For your safety, use the tools below the indicated allowable speed. Start at low speed and increase gradually to insure safety. The preceding is particularly important for the use of new tools and machines. *Maximum allowable speed assumes an overhang of less than 13mm. Decrease speed if the overhang is more than 13mm. Refer to "Precautions for using Nakanishi Tools" on the next page. *Check the tools and machinery for mechanical defects prior to each use.
	Grit This shows grain size of various grinding tools. Rough Cutting..... 46, 54, 60, 70, 80, 90 Medium Cutting..... 100, 120, 150, 180 Pre Finishing..... 220, 240, 280, 320, 400 Finishing..... 500, 600, 700, 800, 1000 Fine Finishing and Mirror Polishing..... 1200, 1500, 1800, 2000, 3000, 4000, 6000, 8000 ...

First code number on each page

Shank diameter of the tool

Code number (Order number)

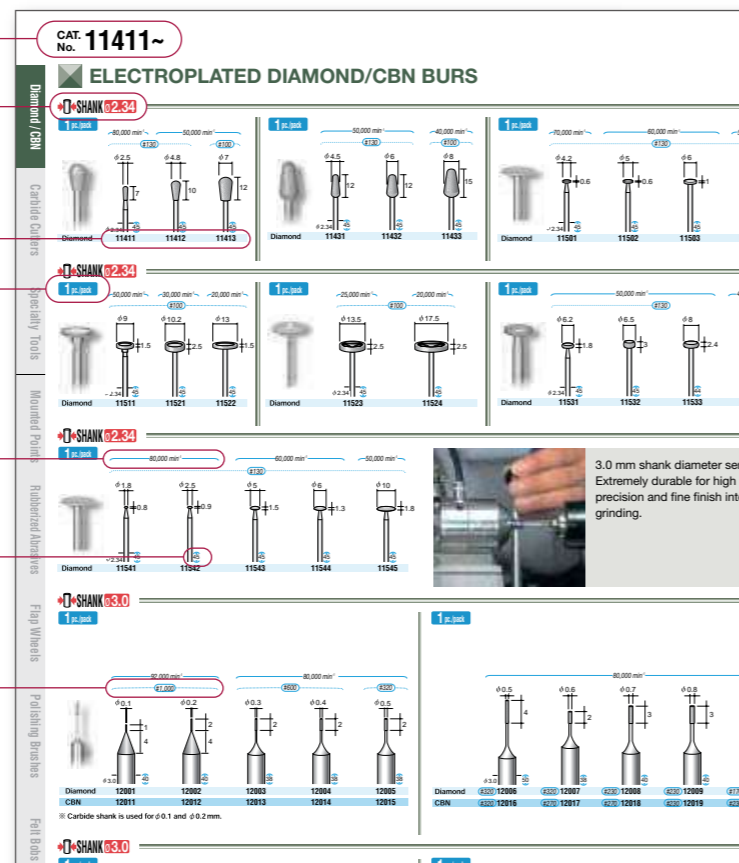
Standard package quantity

Maximum allowable speed

Total length of the tool (mm)

Grit

Note : Specifications may be changed without notice. Colors of the tools in this catalogue may not be the same as actual colors due to printing limitations.



Precautions for using Nakanishi Tools

For safe use of the tools

- Please read operation manuals before using any tools.
- Please keep all operation manuals on hand for reference whenever necessary.

Caution

Incorrect use of the tools, or ignoring 'CAUTIONS for safety' described in the operating manuals, could cause fatal or serious bodily injury.

CAUTIONS



Always use safety glasses, mask, face guard for your safety.



Fasten the chuck firmly.
Make sure the tool is fully installed in the chuck to avoid tool slippage.



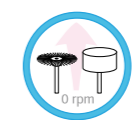
Do not touch the tools when in operation.
Make sure the work area is neat and there is sufficient light.



Do not use damaged or broken electric cords and air hoses.



Do not use the tool where flammable liquids or gases exist.



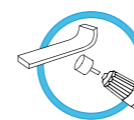
Start at low speed and increase gradually to insure safe work.
This is particularly important for the use of new tools, large cutting tools and elastic tools such as rubber grindstone, sander and brush tools.



Do not leave operating tools.
Confirm that the tool has stopped completely after switching off.



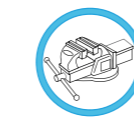
Keep the tools and products in a cool, dry place.



Select proper tools and products for your application.
Select tools carefully considering the performance of the tools, work procedure and type/shape of the material.



Check the tools carefully before use.
Confirm that the tools are free of chips, cracks, splits, scratches, irregular bondings, and out of round shanks, etc.



Fix the work material firmly in a vise and/or other clamping fixture.



Stop grinding or polishing immediately whenever unusual sounds, vibrations, or wear are found.
Restart the work only after the problem is found and corrected.



Do not wear loose clothing and/or accessories that may be caught in machinery.
Long hair should be secured prior to machine operation.



Only use attachments, parts, consumable articles and accessories produced by NAKANISHI.



Check all tools carefully before use.
Clean the inside of the chuck and tool shank, chips or fine metals inside the chuck could cause tool slippage and result in damage to machinery or bodily injury.



Do not apply high pressure to or pry with the tools.
This can break and/or bend the tools. Use the tools within their design limitation. Excessive pressure will decrease the efficiency of your work and cause excessive wear of the tools.



The tools should be used by taking care of the overhang and below maximum allowable speed.
The catalogue shows the maximum allowable speed at 13 mm overhang (distance between the face of the chuck and the top of the tool shank).

Decrease the speed as shown in the table below, if you are using a longer overhang than 13 mm.

Overhang	Maximum allowable speed (min ⁻¹)
Less than 13 mm	Shown in the catalogue (A)
Less than 20 mm	(A) x 0.5
Less than 25 mm	(A) x 0.3
Less than 50 mm	(A) x 0.1

ELECTROPLATED DIAMOND/CBN BURS

Types of Abrasive Grain

Diamond

Main Applications Suitable for grinding non-ferrous metals and non-metals ; rubber, plastic, FRP, FRM, stone material, carbide alloy, ceramics, pottery, glass, ferrite, zirconia, quartz, silicon, rare earth magnet, crystal and jewelry.

Main Work Materials Effective for hard and brittle materials such as non-ferrous metal materials.

- Carbide alloy, cermet, burned material such as alumina
- Stone material, ceramic, refractory material, tile, and concrete
- Ceramics, pottery and silicon
- Glass, crystal and jewelry
- Plastic, FRP, graphite and carbon fiber
- General Grinding
- Heat resistant injection metal and stellite
- Magnetic material, ferrite and rare earth materials

CBN

Main Applications *For grinding of hardened steels such as alloy steels and tool steels, alumite and copper

*For internal grinding of mold or jig grinder ; parts for precision machine, automobile, bearing and sewing machine.

Main Work Materials Effective for iron metal materials such as burned materials with iron and steel materials (harder than HRC60)

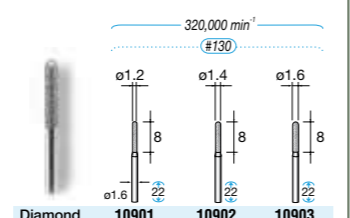
- Steel : carbon steel tools (SK), high speed steel (SKH), tool steel alloys (SKS, SKD), bearing steels (SUJ), structural alloy steels (SCM, SNCM, Scr and SACM), heat resistant steels (SUH) and stainless steels (SUS3 and SUS 4)
- Alloy : Ultra heat resistant cobalt alloys (haynes alloy, stellite, airresist, walex and inconel) Ultra heat resistant nickel alloys (inconel, hastelloy, Colmoy, and waspaloy)
- Cast iron : FC and FCD
- Stainless steel : SUS
- Injection metal
- Titanium alloys
- Magnetic materials: alnico, permalloy and sendust



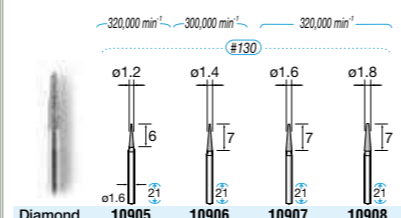
1.6 mm shank diameter series.
Short type for high-speed rotation.
Best for grinding very small parts.

SHANK $\phi 1.6$

5 pcs./pack

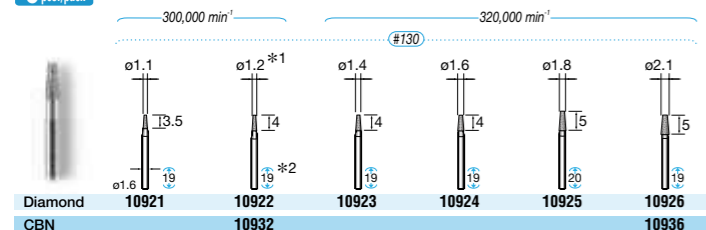


5 pcs./pack

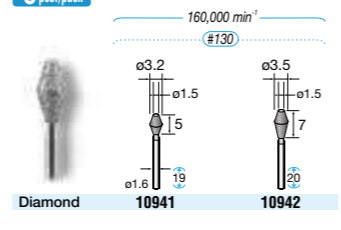


SHANK $\phi 1.6$

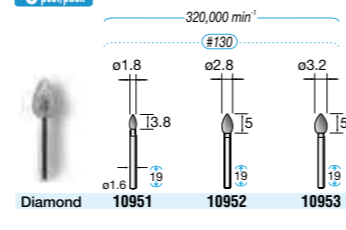
5 pcs./pack



5 pcs./pack

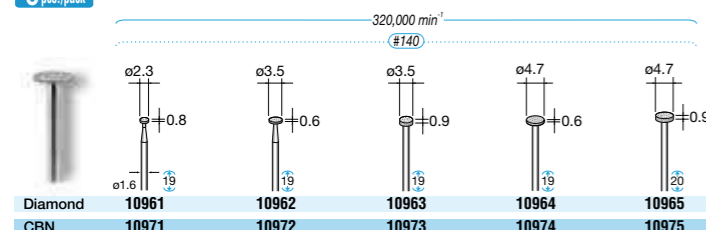


5 pcs./pack

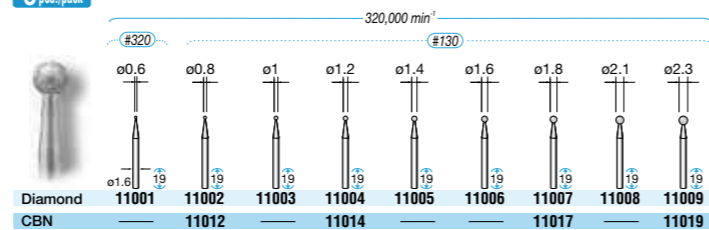


SHANK $\phi 1.6$

5 pcs./pack

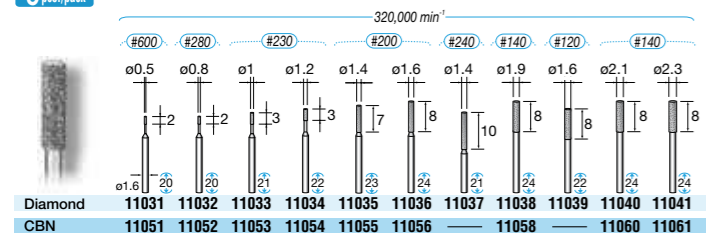


5 pcs./pack

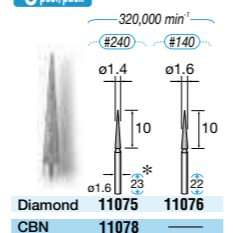


SHANK $\phi 1.6$

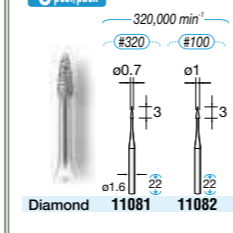
5 pcs./pack



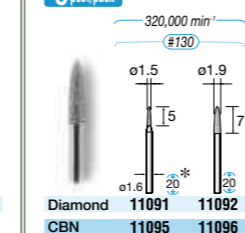
5 pcs./pack



5 pcs./pack



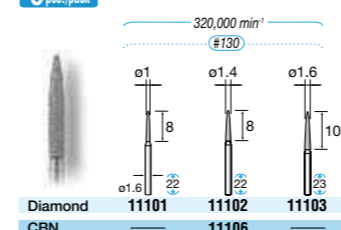
5 pcs./pack



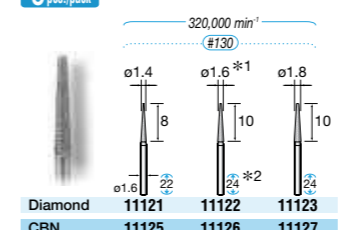
ELECTROPLATED DIAMOND/CBN BURS

SHANK $\phi 1.6$

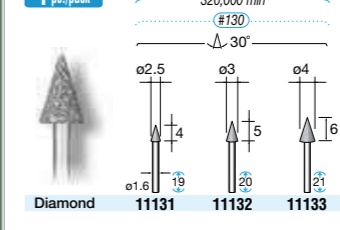
5 pcs./pack



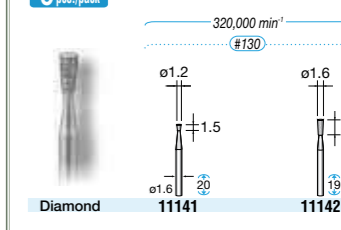
5 pcs./pack



1 pc./pack

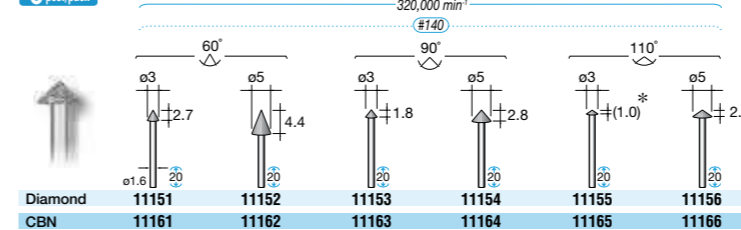


5 pcs./pack



SHANK $\phi 1.6$

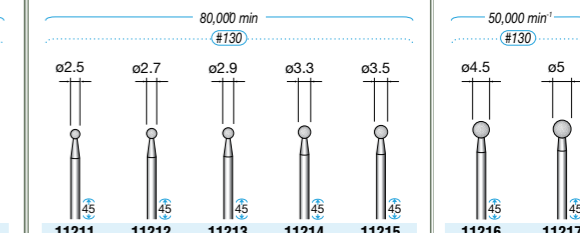
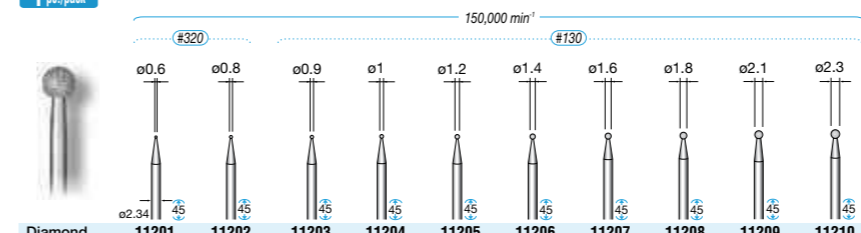
5 pcs./pack



2.34 mm shank diameter series.
Best for engraving, or precise burrs removal.

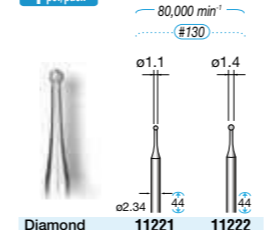
SHANK $\phi 2.34$

1 pc./pack

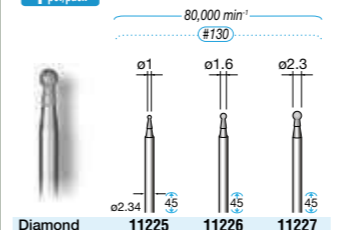


SHANK $\phi 2.34$

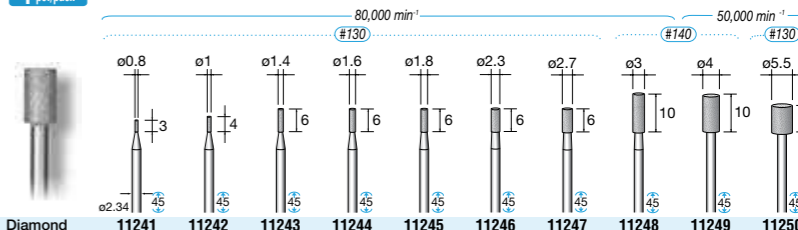
1 pc./pack



1 pc./pack

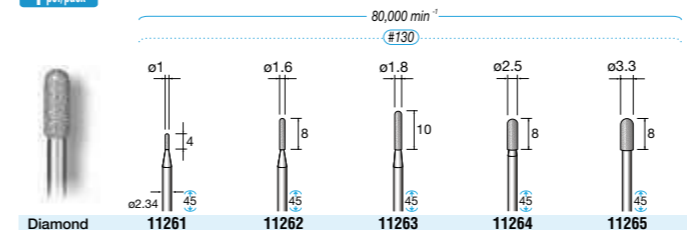


1 pc./pack

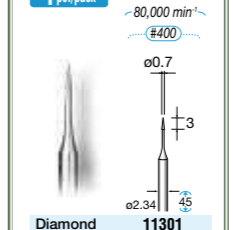


SHANK $\phi 2.34$

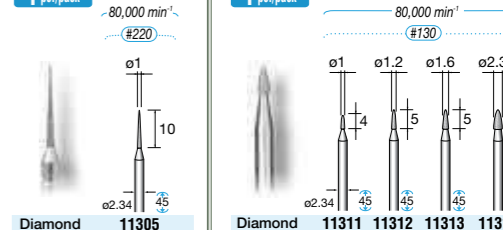
1 pc./pack



1 pc./pack

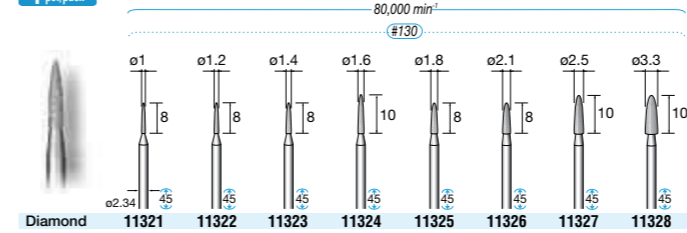


1 pc./pack

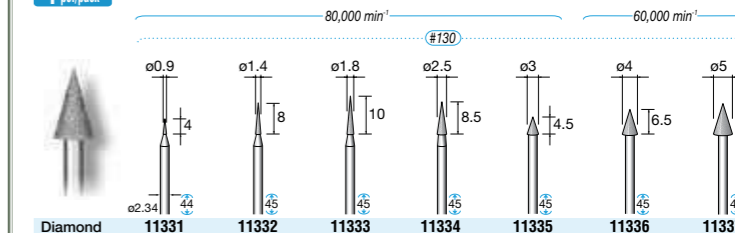


SHANK $\phi 2.34$

1 pc./pack



1 pc./pack



ELECTROPLATED DIAMOND/CBN BURS

SHANK $\phi 2.34$
1 pc./pack

50,000 min⁻¹ (#130)

Diamond $\phi 1.2$ 11341 $\phi 1.8$ 11342

Diamond $\phi 1.2$ 11351 $\phi 1.4$ 11352 $\phi 1.6$ 11353 $\phi 1.8$ 11354 $\phi 2.1$ 11355 $\phi 2.3$ 11356 $\phi 2.5$ 11357 $\phi 3.1$ 11358 $\phi 4$ 11359

SHANK $\phi 2.34$
1 pc./pack

50,000 min⁻¹ (#130)

Diamond $\phi 0.6$ 11360 $\phi 0.9$ 11361 $\phi 1.2$ 11362 $\phi 1.6$ 11363 $\phi 2.3$ 11364 $\phi 3.3$ 11365 $\phi 4$ 11366

SHANK $\phi 2.34$
1 pc./pack

50,000 min⁻¹ (#130)

Diamond $\phi 2.1$ 11391 $\phi 3.1$ 11393 $\phi 5$ 11394

SHANK $\phi 2.34$
1 pc./pack

50,000 min⁻¹ (#130) 30,000 min⁻¹

Diamond $\phi 1.2$ 11401 $\phi 1.8$ 11402 $\phi 2.7$ 11403 $\phi 4.7$ 11404 $\phi 6$ 11405 $\phi 9$ 11406

SHANK $\phi 2.34$
1 pc./pack

30,000 min⁻¹ (#130) (#100)

Diamond $\phi 4.8$ 11412 $\phi 7$ 11413

SHANK $\phi 2.34$
1 pc./pack

50,000 min⁻¹ (#130) 30,000 min⁻¹

Diamond $\phi 4.7$ 11425 $\phi 6$ 11426

SHANK $\phi 2.34$
1 pc./pack

50,000 min⁻¹ (#130) 40,000 min⁻¹ (#100)

Diamond $\phi 4.5$ 11431 $\phi 6$ 11432 $\phi 8$ 11433

SHANK $\phi 2.34$
1 pc./pack

20,000 min⁻¹ (#100)

Diamond $\phi 12.5$ 11441

SHANK $\phi 2.34$
1 pc./pack

70,000 min⁻¹ (#130) 60,000 min⁻¹ 50,000 min⁻¹

Diamond $\phi 4.2$ 11501 $\phi 5$ 11502 $\phi 6$ 11503 $\phi 7.5$ 11504

SHANK $\phi 2.34$
1 pc./pack

50,000 min⁻¹ (#100) 30,000 min⁻¹ 20,000 min⁻¹

Diamond $\phi 9$ 11511 $\phi 10.2$ 11521 $\phi 13$ 11522

SHANK $\phi 2.34$
1 pc./pack

30,000 min⁻¹ (#130) 40,000 min⁻¹

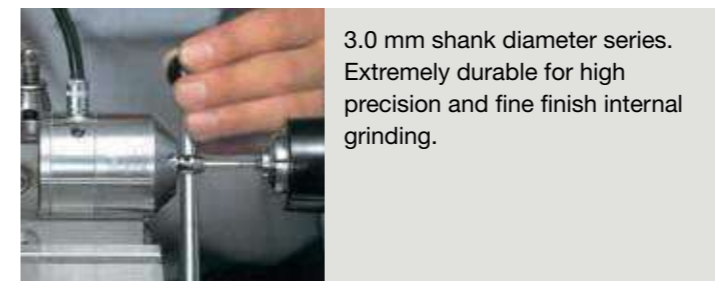
Diamond $\phi 6.3$ 11531 $\phi 6.5$ 11532 $\phi 8.3$ 11533 $\phi 10$ 11534

SHANK $\phi 2.34$
1 pc./pack

80,000 min⁻¹ (#130) 60,000 min⁻¹ 50,000 min⁻¹

Diamond $\phi 1.8$ 11541 $\phi 2.3$ 11542 $\phi 5$ 11543 $\phi 6.5$ 11544 $\phi 10$ 11545

ELECTROPLATED DIAMOND/CBN BURS



SHANK $\phi 3.0$
1 pc./pack

60,000 min⁻¹

Diamond #200 $\phi 0.5$ 11791 $\phi 0.6$ 11803 $\phi 0.7$ 11804 $\phi 0.8$ 11805 $\phi 0.9$ 11806 $\phi 1.0$ 11807 11808

Diamond #325 11803 11804 11805 11806 11807 11808

Diamond #600 11813 11814 11815 11816 11817 11818

CBN #200 11792

CBN #325 11823 11824 11825 11826 11827 11828

CBN #600 11833 11834 11835 11836 11837 11838

SHANK $\phi 3.0$
1 pc./pack

60,000 min⁻¹

Diamond #200 $\phi 0.5$ 11793 $\phi 0.6$ 11853 $\phi 0.7$ 11854 $\phi 0.8$ 11855 $\phi 0.9$ 11856 $\phi 1.0$ 11857 11858

Diamond #325 11853 11854 11855 11856 11857 11858

Diamond #600 11863 11864 11865 11866 11867 11868

CBN #200 11794

CBN #325 11873 11874 11875 11876 11877 11878

CBN #600 11883 11884 11885 11886 11887 11888

SHANK $\phi 3.0$
1 pc./pack

92,000 min⁻¹ (#1,000) 80,000 min⁻¹ (#600) (#320)

Diamond *12001 $\phi 0.1$ 12003 $\phi 0.2$ 12004 $\phi 0.3$ 12005 $\phi 0.4$ 12015

CBN *12011 *12012 12013 12014 12015

* Carbide shank is used for $\phi 0.1$ and $\phi 0.2$ mm.

SHANK $\phi 3.0$
1 pc./pack

80,000 min⁻¹

Diamond #320 12006 $\phi 0.5$ 12007 $\phi 0.6$ 12008 $\phi 0.7$ 12009 $\phi 0.8$ 12010 $\phi 0.9$ 12011

CBN #320 12016 #270 12017 #270 12018 #230 12019 #230 12020

SHANK $\phi 3.0$
1 pc./pack

80,000 min⁻¹

Diamond #100 12051 $\phi 1$ 12052 $\phi 1.2$ 12053 $\phi 1.5$ 12054 $\phi 1.7$ 12055 $\phi 2$ 12056 $\phi 2.2$ 12057 $\phi 2.5$ 12058

Diamond #140 12051 12052 12053 12054 12055 12056 12057 12058

Diamond #220 12091 12092 12093 12094 12095 12096 12097 12098

Diamond #320 12111 12112 12113 12114 12115 12116 12117 12118

Diamond #600 12131 12132 12133 12134 12135 12136 12137 12138

CBN #120 12155 12156 12157 12158

CBN #140 12151 12152 12153 12154

CBN #220 12171 12172 12173 12174 12175 12176 12177 12178

SHANK $\phi 3.0$
1 pc./pack

80,000 min⁻¹ 70,000 min⁻¹

Diamond #100 12059 $\phi 3.2$ 12060 $\phi 3.5$ 12061 $\phi 4$ 12062 $\phi 4.5$ 12063 $\phi 5$ 12064 $\phi 5.5$ 12065

Diamond #140 12039 12040 12041 12042 12043 12044 12045

Diamond #220 12099 12100 12101 12102 12103 12104 12105

Diamond #320 12119 12120 12121 12122 12123 12124 12125

Diamond #600 12139 12140 12141 12142 12143 12144 12145

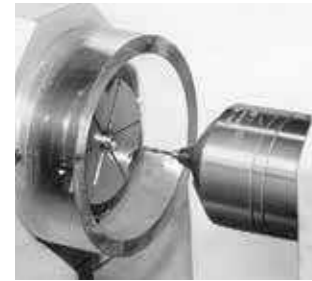
CBN #120 12159 12160 12161 12162 12163 12164 12165

CBN #220 12179 12180 12181 12182 12183 12184 12185

Diamond / CBN
Carbide Cutters
Specialty Tools
Mounted Points
Rubberized Abrasives
Flap Wheels
Polishing Brushes
Felt Bobs
Abrasive Compounds & Polishing Tools
NSK Exclusive Tools

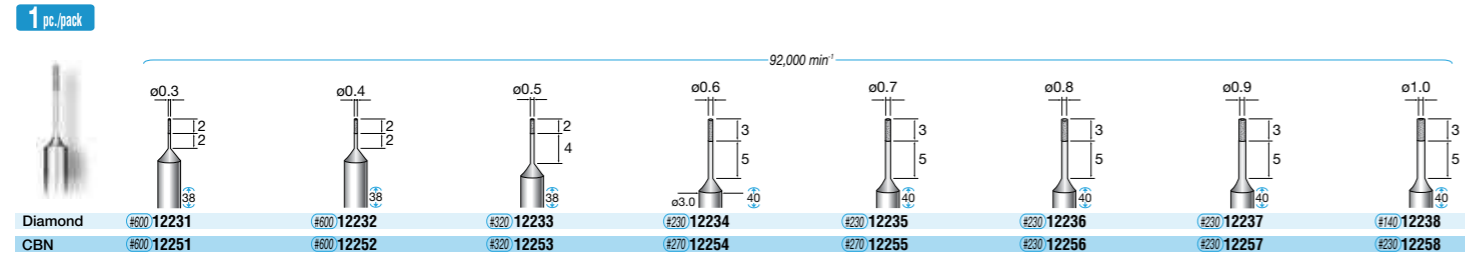
Diamond / CBN
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ELECTROPLATED DIAMOND/CBN BURS

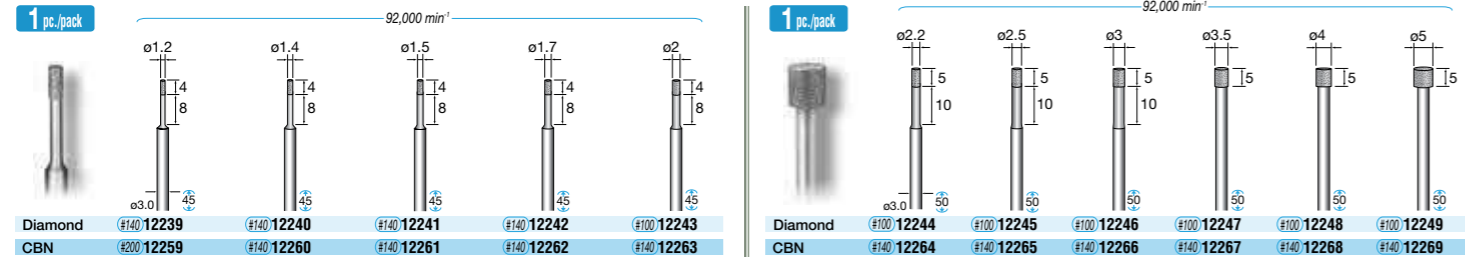


High rigidity and long clearance allow for high precision grinding of deep IDs. The up to 3 fold increase in rigidity versus stainless steel tools allows for much more precision and efficient grinding.

SHANK Ø3.0 Carbide

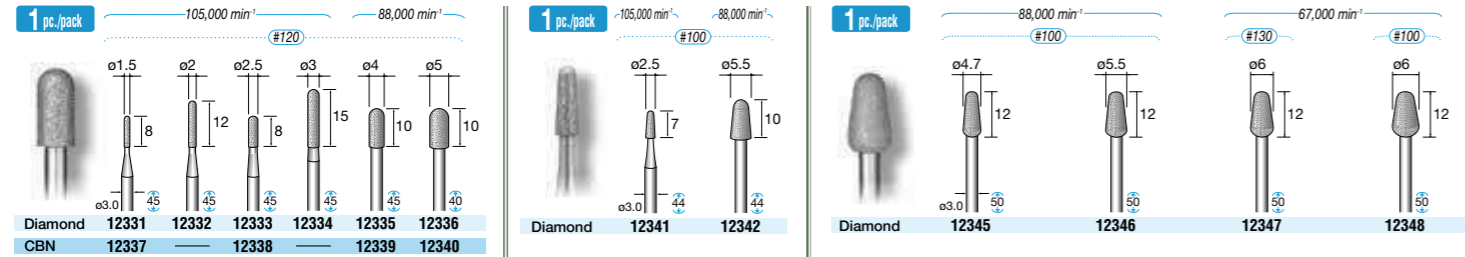


SHANK Ø3.0 Carbide

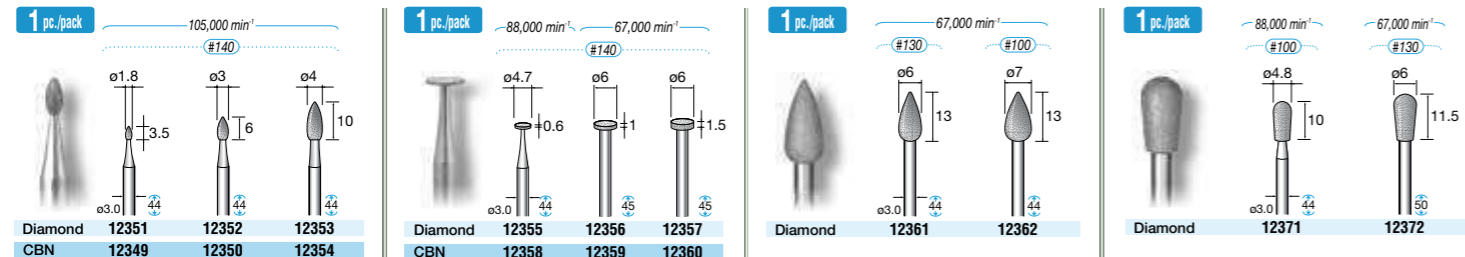


3.0 mm shank diameter series. Extremely durable for high precision burr removal and fine finishing.

SHANK Ø3.0

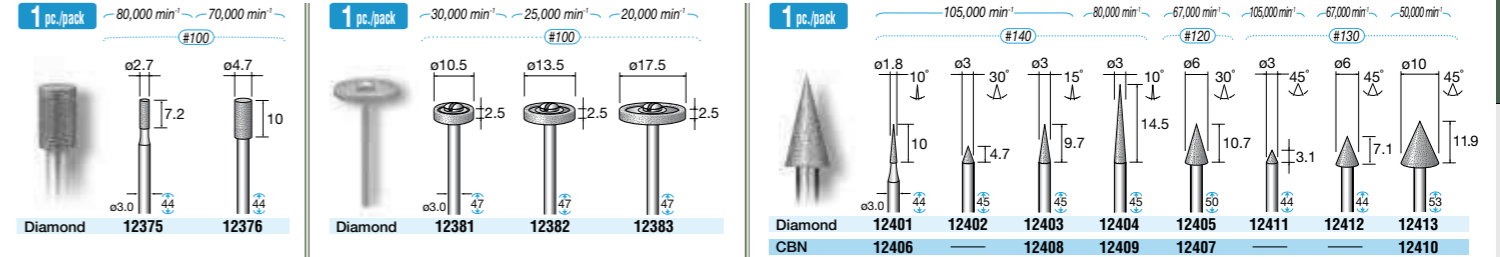


SHANK Ø3.0

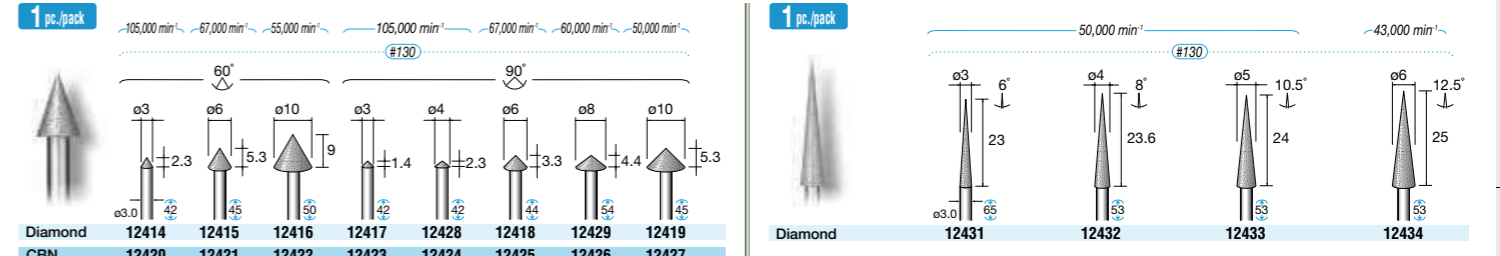


ELECTROPLATED DIAMOND/CBN BURS

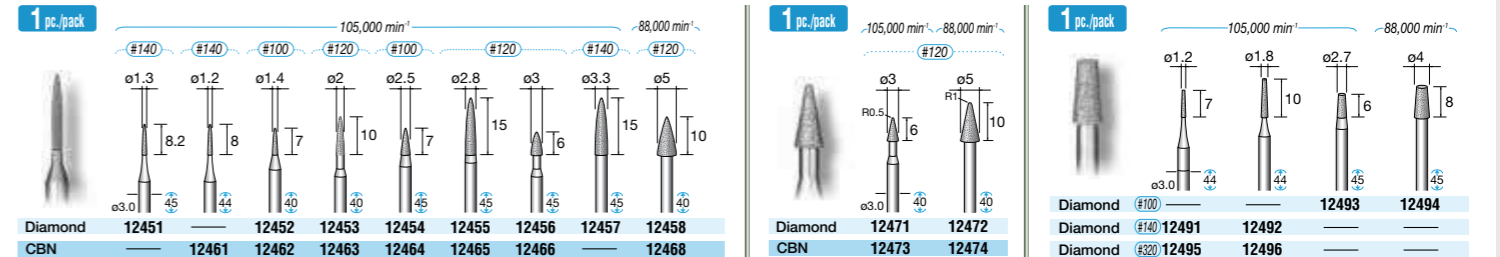
SHANK Ø3.0



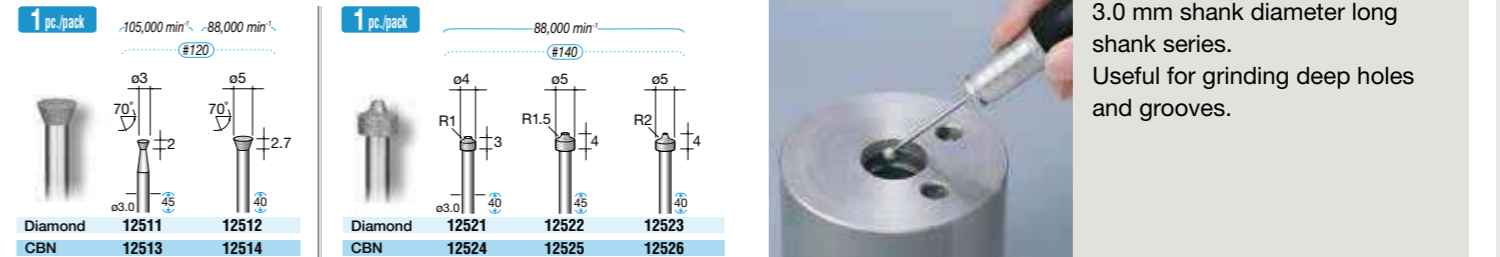
SHANK Ø3.0



SHANK Ø3.0

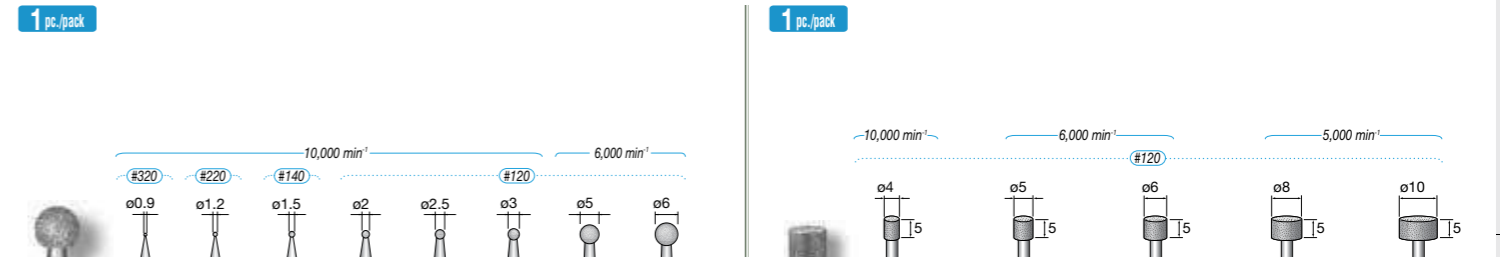


SHANK Ø3.0



3.0 mm shank diameter long shank series. Useful for grinding deep holes and grooves.

SHANK Ø3.0



ELECTROPLATED DIAMOND/CBN BURS

SHANK $\phi 3.0$
1 pc./pack

60,000 min⁻¹ 50,000 min⁻¹

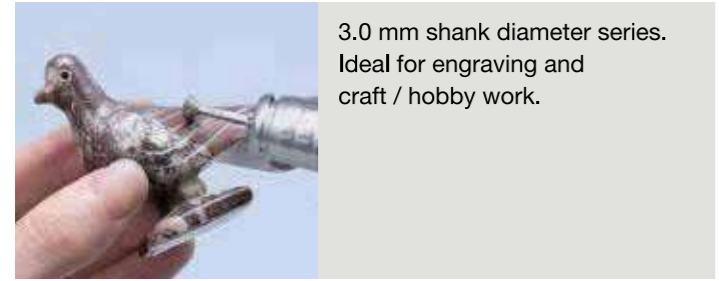
$\phi 1$ $\phi 2$ $\phi 3$ $\phi 4$

$\phi 0.8$ $\phi 1.6$ $\phi 2$ $\phi 3$

12 18 18 13

50 50 50 50

Diamond 12741 12742 12743 12744



3.0 mm shank diameter series.
Ideal for engraving and craft / hobby work.

SHANK $\phi 3.0$
1 pc./pack

50,000 min⁻¹

$\phi 5$ $\phi 6$ $\phi 8$ $\phi 10$

$\phi 3$ $\phi 3$ $\phi 3$ $\phi 3$

50 50 50 50

Diamond 12745 12746 12747 12748

SHANK $\phi 3.0$
3 pcs./pack

80,000 min⁻¹ 70,000 min⁻¹

$\phi 1$ $\phi 1.5$ $\phi 2$ $\phi 2.5$ $\phi 3$ $\phi 3.3$ $\phi 4$ $\phi 5$ $\phi 6$

8 8 8 8 10 10 10 10 10

45 45 45 45 45 45 45 45 45

Diamond 12801 12802 12803 12804 12805 12806 12807 12808 12809

SHANK $\phi 3.0$
3 pcs./pack

80,000 min⁻¹ 70,000 min⁻¹

$\phi 1$ $\phi 1.5$ $\phi 2$ $\phi 3$ $\phi 5$

45 45 45 45 45

Diamond 12811 12812 12813 12814 12815

SHANK $\phi 3.0$
3 pcs./pack

80,000 min⁻¹ 70,000 min⁻¹

$\phi 1.5$ $\phi 2$ $\phi 3$ $\phi 5$

8 8 10 10

45 45 45 45

Diamond 12816 12817 12818 12819

SHANK $\phi 3.0$
3 pcs./pack

70,000 min⁻¹

$\phi 2$ $\phi 2.8$ $\phi 3$ $\phi 4$ $\phi 6$

10 15 10 10 13

45 45 45 45 45

Diamond 12821 12822 12823 12824 12825

SHANK $\phi 3.0$
3 pcs./pack

80,000 min⁻¹ 70,000 min⁻¹

$\phi 1.5$ $\phi 2$ $\phi 3$ $\phi 6$

3 7 10 26

13 12 16 13

45 45 45 45

Diamond 12826 12827 12828 12829

SHANK $\phi 3.0$
3 pcs./pack

80,000 min⁻¹ 70,000 min⁻¹ 30,000 min⁻¹

$\phi 2$ $\phi 3$ $\phi 6$ $\phi 13$

10 10 1 1.1

45 45 45 45

Diamond 12831 12832 12833 12834 12835

SHANK $\phi 3.0$
3 pcs./pack

70,000 min⁻¹

$\phi 3$ $\phi 6$

6 10

45 45

Diamond 12836 12837

Assorted Set
18 pcs./pack

12841

Set (18 pieces)

12801	12813	12825
12803	12815	12827
12805	12817	12828
12807	12819	12832
12809	12821	12833
12811	12823	12836



6.0 mm shank diameter series.
Medium grit tools for highly efficient ID and jig grinding or burr removal.

SHANK $\phi 6.0$
1 pc./pack

80,000 min⁻¹

$\phi 3$ $\phi 4$ $\phi 5$ $\phi 6$

6 10 10 10

50 50 50 50

Diamond #100 13011 13012 13013 L=55 13014 13034

CBN #140 13101 13102 13103 L=50 13104 13124

SHANK $\phi 6.0$
1 pc./pack

80,000 min⁻¹ 75,000 min⁻¹

$\phi 6.5$ $\phi 7$ $\phi 8$ $\phi 9$ $\phi 10$ $\phi 11$ $\phi 12$

7 7 8 9 10 10 10

50 50 50 50 50 50 50

Length	L=80	L=50	L=87	L=50	L=88	L=55	L=89	L=60	L=90	L=80	L=80
Diamond #100	13035	13015	13036	13016	13037	13017	13038	13018	13039	13040	13019
CBN #140	13125	13105	13126	13106	13127	13107	13128	13108	13129	13130	13109

ELECTROPLATED DIAMOND/CBN BURS

SHANK $\phi 6.0$
1 pc./pack

50,000 min⁻¹ 35,000 min⁻¹

$\phi 13$ $\phi 13$ $\phi 14$ $\phi 15$

10 10 10 10

50 50 50 50

Length	L=60	L=80	L=60	L=80	L=80
Diamond #100	13020	13041	13042	13021	13022
CBN #140	13110	13131	13132	13111	13112

SHANK $\phi 6.0$
1 pc./pack

80,000 min⁻¹ 60,000 min⁻¹ 45,000 min⁻¹

$\phi 4$ $\phi 6$ $\phi 8$ $\phi 10$ $\phi 13$

54 56 58 60 55

50 50 50 50 50

Diamond	13201	13202	13203	13204	13205
CBN	13206	13207	13208	13209	13210

SHANK $\phi 6.0$
1 pc./pack

50,000 min⁻¹ 45,000 min⁻¹

$\phi 6$ $\phi 10$ $\phi 13$

15 16 15

60 65 60

Diamond	13241	13242	13243
CBN	13246	13247	13248

SHANK $\phi 6.0$
1 pc./pack

50,000 min⁻¹ 45,000 min⁻¹

$\phi 6$ $\phi 10$ $\phi 13$

15 15 20

60 65 60

Diamond	13261	13262	13263
CBN	13266	13267	13268

SHANK $\phi 6.0$
1 pc./pack

35,000 min⁻¹ 45,000 min⁻¹ 30,000 min⁻¹

$\phi 13$ $\phi 6$ $\phi 10$

25 14 30

65 59 54

Diamond	13301	13311	13312
CBN	13302		

SHANK $\phi 6.0$
1 pc./pack

50,000 min⁻¹ 35,000 min⁻¹

$\phi 10$ $\phi 15$ $\phi 16$

45 45 60

47 50 55

Diamond	13321	13322	13332
CBN			13336

SHANK $\phi 6.0$
1 pc./pack

50,000 min⁻¹ 45,000 min⁻¹ 35,000 min⁻¹ 30,000 min⁻¹

$\phi 10$ $\phi 13$ $\phi 16$ $\phi 20$

90 90 90 90

5.3 7 9 10

65 50 50 50

Diamond	13340	13341	13342	13343
CBN	13344	13345	13346	

SHANK $\phi 6.0$
1 pc./pack

45,000 min⁻¹ 35,000 min⁻¹ 45,000 min⁻¹ 35,000 min⁻¹

$\phi 13$ $\phi 16$ $\phi 13$ $\phi 16$

60 60 90 90

6 8 4 6

45 50 45 45

Diamond	13351	13352	13353	13354
CBN	13355	13356	13357	13358

SHANK $\phi 6.0$
1 pc./pack

45,000 min⁻¹ 35,000 min⁻¹

$\phi 13$ $\phi 16$

7 8

45 45

Diamond	13371	13372
CBN	13375	13376

SHANK $\phi 6.0$
1 pc./pack

45,000 min⁻¹ 35,000 min⁻¹

$\phi 13$ $\phi 16$

2 3

45 45

Diamond	13381	13382
CBN	13385	13386

SHANK $\phi 6.0$
1 pc./pack

45,000 min⁻¹ 35,000 min⁻¹

$\phi 13$ $\phi 16$

8 10

50 50

Diamond	13391	13392
CBN	13395	13396

SHANK $\phi 2.34$
1 pc./pack

Twist type : 15,000 min⁻¹

$\phi 0.8$ $\phi 0.9$ $\phi 1.0$ $\phi 1.1$ $\phi 1.2$ $\phi 1.3$ $\phi 1.4$ $\phi 1.5$

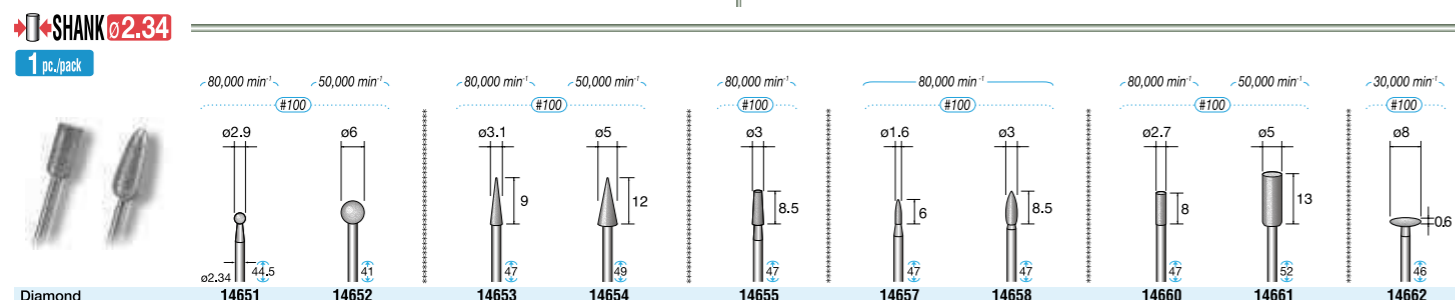
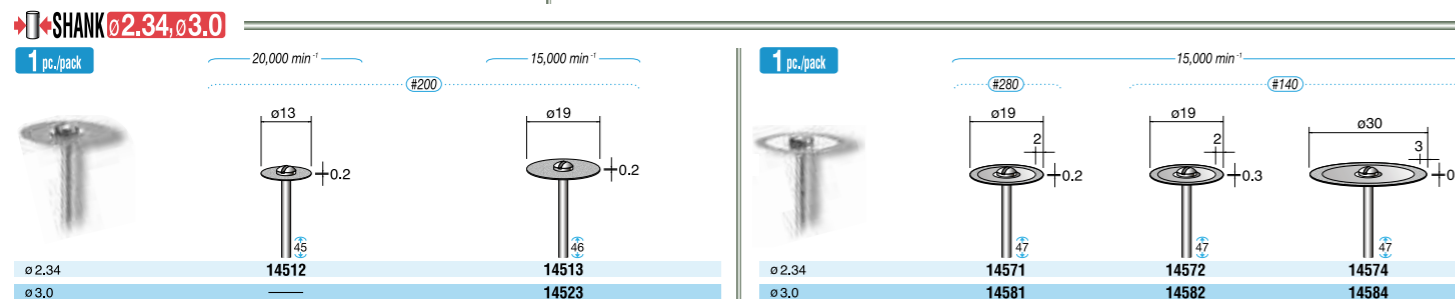
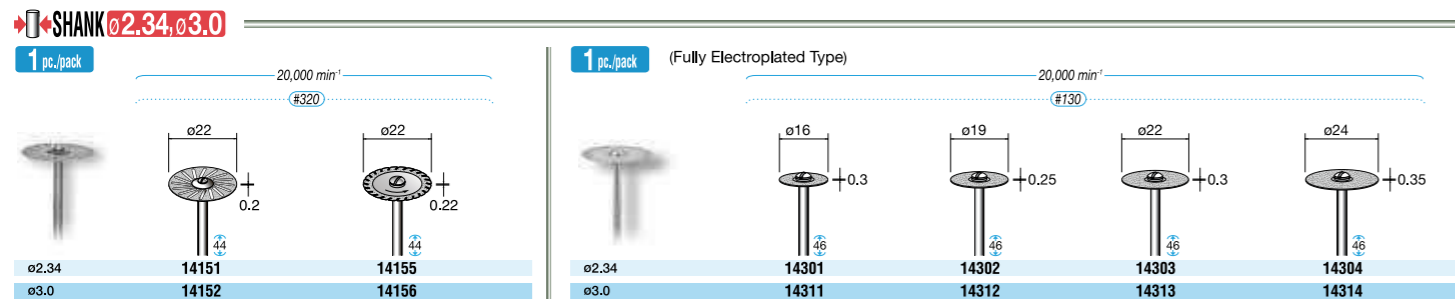
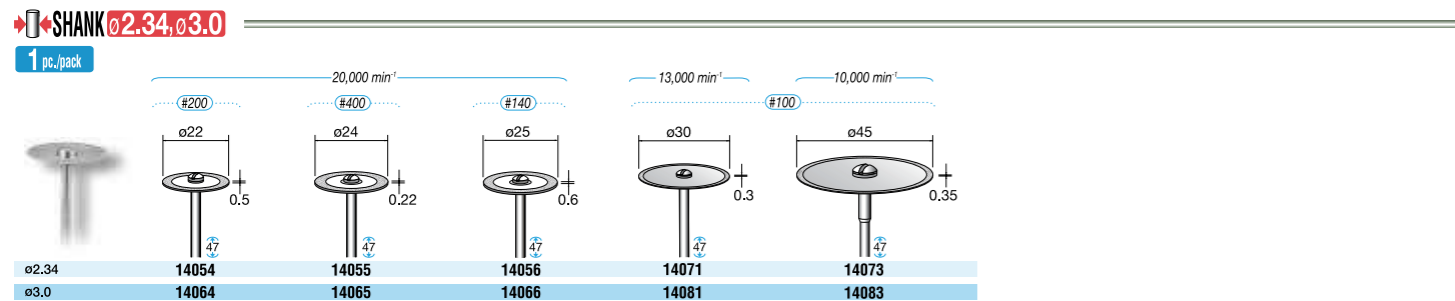
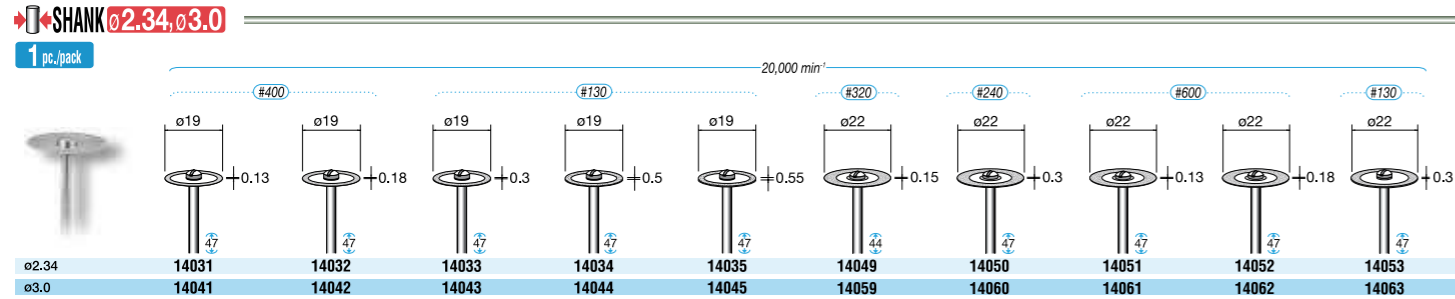
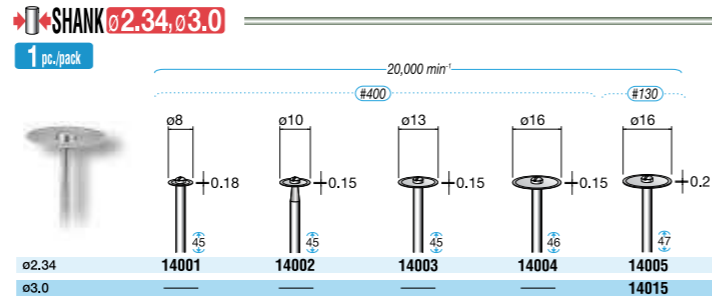
8 8 8 8 10 10 10 10

0mm	Lmm	
0.8	8	13851
0.9	8	13852
1.0	8	13853
1.1	8	13854
1.2	10	13855
1.3	10	13856
1.4	10	13857
1.5	10	13858

ELECTROPLATED DIAMOND/CBN BURS



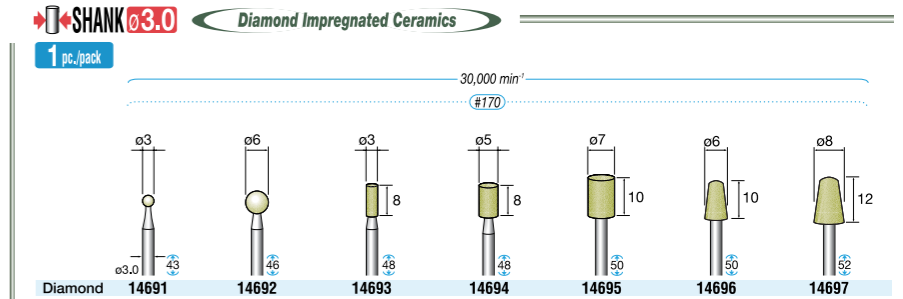
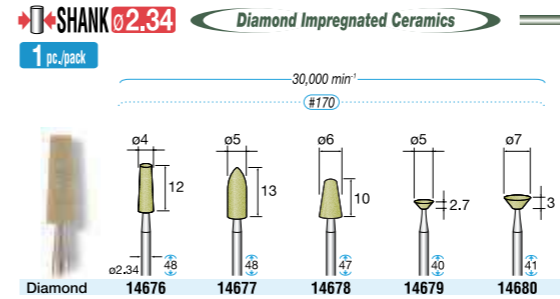
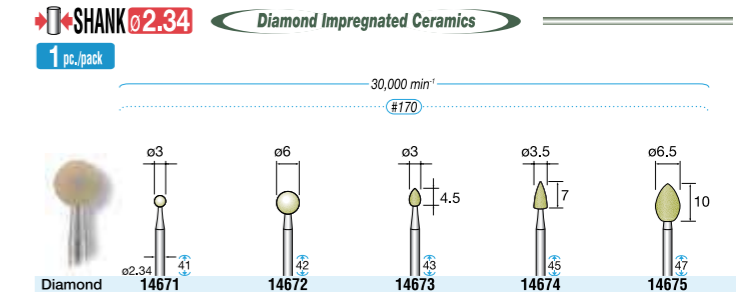
2.34 / 3.0 mm shank diameters. Diamond grinding discs, ideal for ceramics, FRP, glass, ferrites, various stones, and super hard alloys.



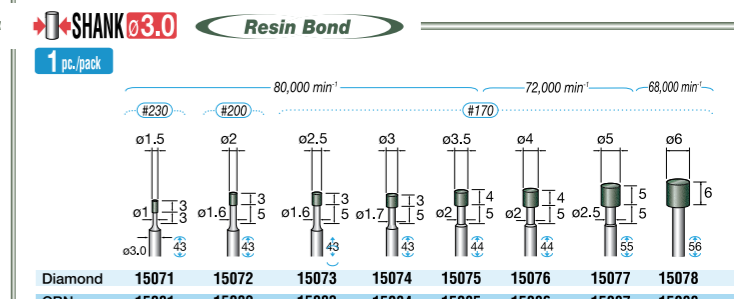
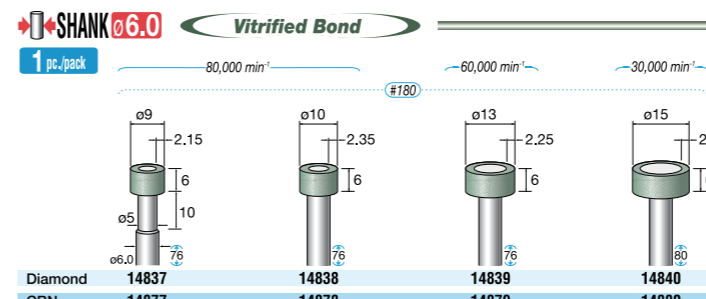
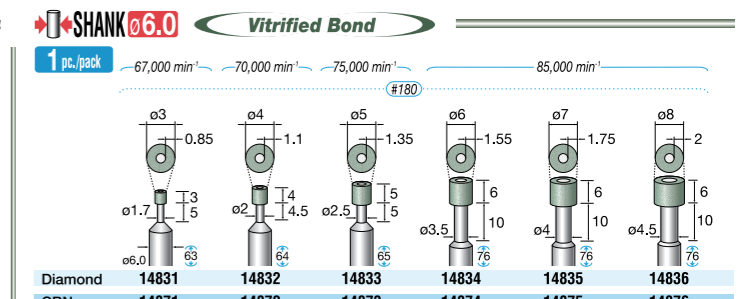
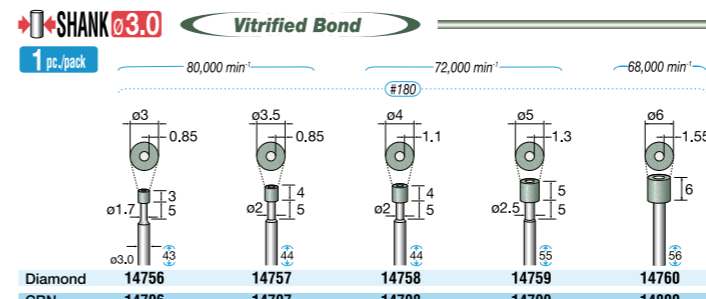
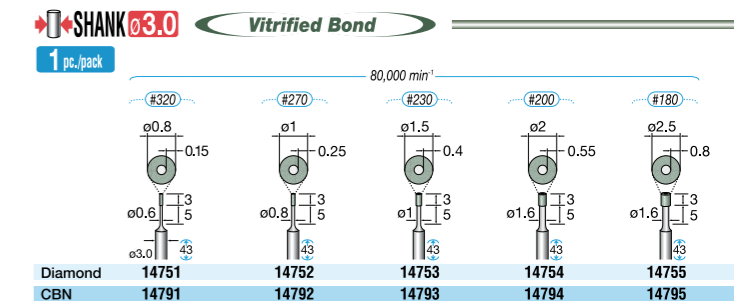
VITRIFIED / RESIN BONDED DIAMOND / CBN AND DIAMOND IMPREGNATED CERAMIC BARS



2.34 / 3.0 mm shank diameters. Diamond impregnated ceramics have the same basic cutting properties of standard abrasives but are very durable.



Vitrified, Diamond & CBN grindstones. Highly durable bonding and high abrasive concentration make these tools ideal for mass production applications.



Resin bonded, Diamond & CBN grindstones. Good for general grinding, these grindstones will exhibit better performance than standard abrasives.

Diamond / CBN
Carbide Cutters
Specialty Tools
Mounted Points
Rubberized Abrasives
Flap Wheels
Polishing Brushes
Felt Bobs
Abrasive Compounds & Polishing Tools
NSK Exclusive Tools

VITRIFIED / RESIN BONDED DIAMOND / CBN AND DIAMOND IMPREGNATED CERAMIC BARS

SHANK $\phi 6.0$ Resin Bond
1 pc./pack

Diamond	15101	15102	15103	15104	15105
CBN	15111	15112	15113	15114	15115

SHANK $\phi 2.34$
12 pcs./pack Assorted Set

15301	
Set (12 pieces) (Each code No. one piece-pack)	
11204	11313
11208	11321
11213	11333
11242	11356
11247	11366
11250	11502

SHANK $\phi 3.0$
12 pcs./pack Assorted Set

15305	
Set (12 pieces) (Each code No. one piece-pack)	
12317	12403
12320	12405
12336	12412
12341	12415
12355	12451
12401	12492

SHANK $\phi 3.0$
10 pcs./pack Assorted Set

15311			
Set (10 pieces) (Each code No. one piece-pack)			
ϕ mm	CAT. NO.	ϕ mm	CAT. NO.
0.8	12009	3	12058
1	12051	3.5	12060
1.5	12053	4	12061
2	12055	5	12063
2.5	12057	6	12065

15312			
Set (10 pieces) (Each code No. one piece-pack)			
ϕ mm	CAT. NO.	ϕ mm	CAT. NO.
0.8	12019	3	12158
1	12151	3.5	12160
1.5	12153	4	12161
2	12155	5	12163
2.5	12157	6	12165

SHANK $\phi 3.0$
8 pcs./pack Assorted Set

15321			
Set (8 pieces) (Each code No. one piece-pack)			
ϕ mm	CAT. NO.	ϕ mm	CAT. NO.
1	14752	3	14756
1.5	14753	4	14758
2	14754	5	14759
2.5	14755	6	14760

15322			
Set (8 pieces) (Each code No. one piece-pack)			
ϕ mm	CAT. NO.	ϕ mm	CAT. NO.
1	14792	3	14796
1.5	14793	4	14798
2	14794	5	14799
2.5	14795	6	14800

SHANK $\phi 3.0$
8 pcs./pack Assorted Set

15331			
Set (8 pieces) (Each code No. one piece-pack)			
ϕ mm	CAT. NO.	ϕ mm	CAT. NO.
1.5	15071	3.5	15075
2	15072	4	15076
2.5	15073	5	15077
3	15074	6	15078

15332			
Set (8 pieces) (Each code No. one piece-pack)			
ϕ mm	CAT. NO.	ϕ mm	CAT. NO.
1.5	15081	3.5	15085
2	15082	4	15086
2.5	15083	5	15087
3	15084	6	15088

CARBIDE CUTTERS

Tool / Cut types and features (*' Shows available shank sizes for each cut type)

<p>Single Cut (1)</p> <p>Single cut produces superior surface finishes. * $\phi 1.6, \phi 2.34, \phi 3.0, \phi 6.0$</p>	<p>Single Cut Coarse (2)</p> <p>Single Cut Coarse has similar cutting characteristics to Single cut, but is better for gummy materials due to deep helix design. Ideal for rubbers, resins, and plasters. * $\phi 2.34, \phi 3.0$</p>	<p>Chip Breaker (3)</p> <p>Chip Breaker is the single cut with a chip breaker. The chip breaker clears chips easily making aggressive cutting very efficient. Surface finish is rougher than single cut. * $\phi 1.6, \phi 2.34$</p>	<p>Alumina Cut (4)</p> <p>Alumina Cut has very sharp edge with a deep helix. The deep helix design prevents tool loading. Ideal for aluminum, magnesium alloys, plastics and hard rubbers. * $\phi 6.0$</p>
<p>Double Cut (5)</p> <p>Smooth Cut with small tooth design minimizes chatter. This tool also helps enhance safety as it produces very small chips. * $\phi 2.34, \phi 3.0, \phi 6.0$</p>	<p>Double Cut Coarse (6)</p> <p>Deep helix design prevents tool loading. Ideal for grinding hard rubbers, resins and plaster. * $\phi 2.34$</p>	<p>Diamond Cut Fine (7)</p> <p>Diamond Cut Fine (7) has similar characteristics as Double Cut (5). Specially designed for very hard materials. Produces fine surface finish. * $\phi 2.34, \phi 3.0$</p>	<p>Diamond Cut Coarse (8)</p> <p>Specially designed for very hard materials. Produces fine surface finish. * $\phi 3.0, \phi 6.0$</p>

Titanium coating insures long tool life and minimizes tool loading.

SHANK $\phi 3.0$
1 pc./pack Double Cut

SHANK $\phi 3.0$
1 pc./pack Double Cut

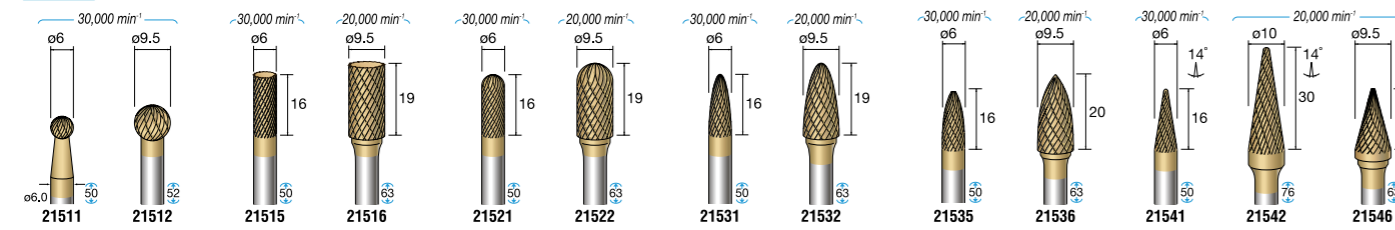
1 pc./pack Single Cut

SHANK $\phi 3.0$
1 pc./pack Single Cut

CARBIDE CUTTERS

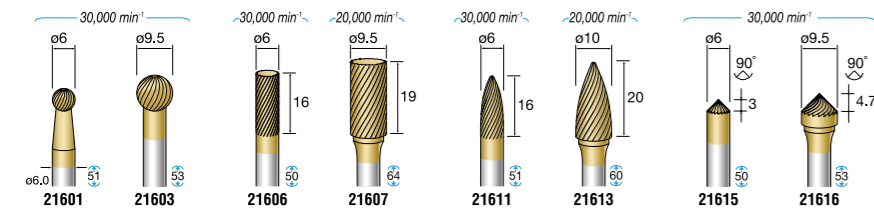
SHANK $\phi 6.0$

1 pc./pack **Double Cut**



SHANK $\phi 6.0$

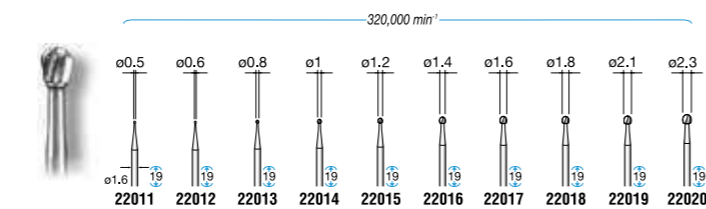
1 pc./pack **Single Cut**



1.6 mm shank diameter series.
Short type for high speed rotation.
Best for grinding very small parts.

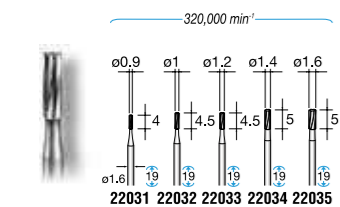
SHANK $\phi 1.6$

5 pcs./pack **Single Cut** Round Type

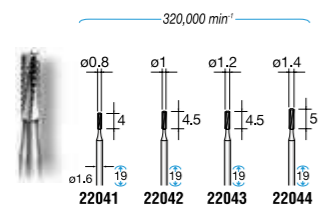


SHANK $\phi 1.6$

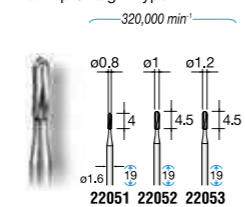
5 pcs./pack **Single Cut** Straight Type



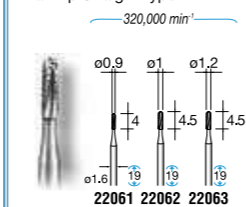
5 pcs./pack **Chip Breaker** Straight Type



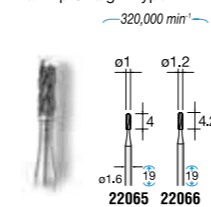
5 pcs./pack **Single Cut** Ball Tip Straight Type



5 pcs./pack **Chip Breaker** Ball Tip Straight Type

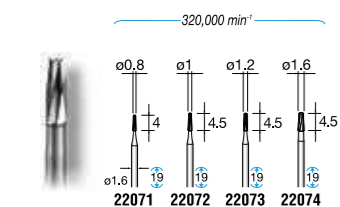


5 pcs./pack **Double Cut** Ball Tip Straight Type

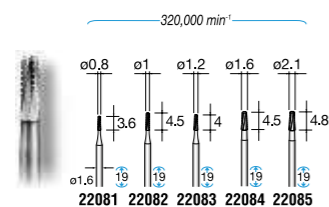


SHANK $\phi 1.6$

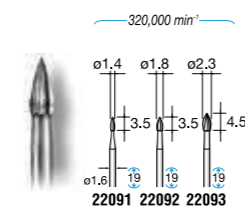
5 pcs./pack **Single Cut** Tapered Type



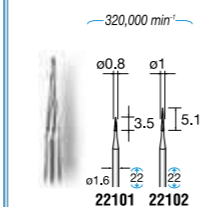
5 pcs./pack **Chip Breaker** Tapered Type



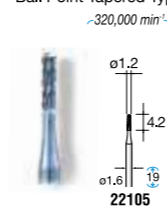
5 pcs./pack **Single Cut**



5 pcs./pack **Single Cut**

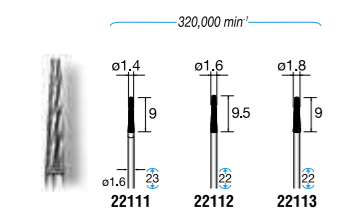


5 pcs./pack **Double Cut** Ball Point Tapered Type

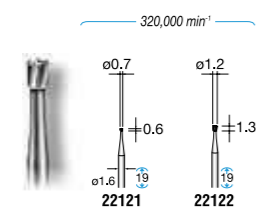


SHANK $\phi 1.6$

5 pcs./pack **Single Cut**



5 pcs./pack **Single Cut**



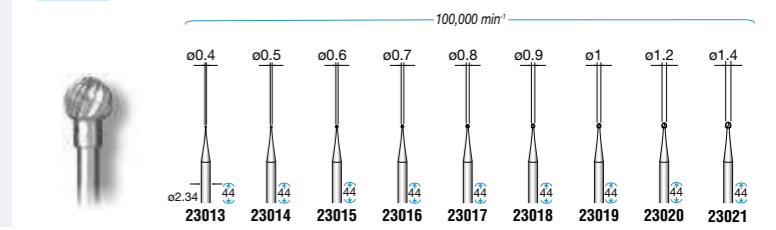
CARBIDE CUTTERS



2.34 mm shank diameter series.
Ideal for engraving, and high precision burr removal.

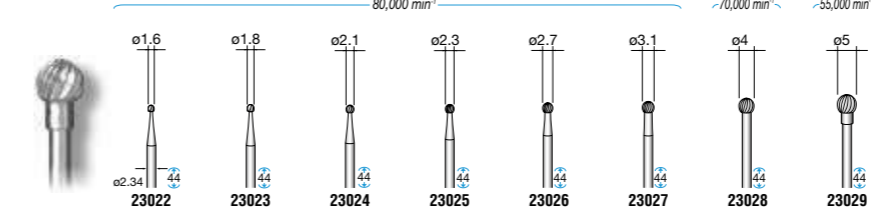
SHANK $\phi 2.34$

1 pc./pack **Single Cut**

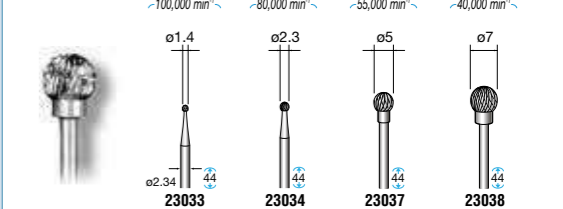


SHANK $\phi 2.34$

1 pc./pack **Single Cut**

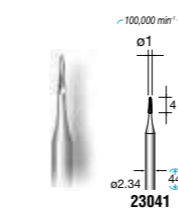


1 pc./pack **Double Cut**

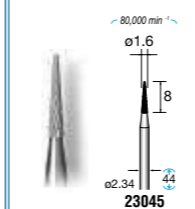


SHANK $\phi 2.34$

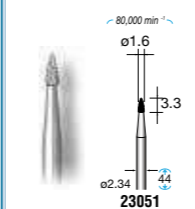
1 pc./pack **Single Cut**



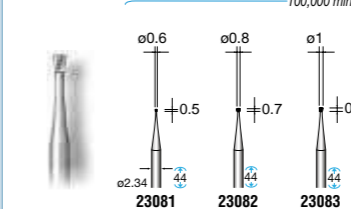
1 pc./pack **Diamond Cut**



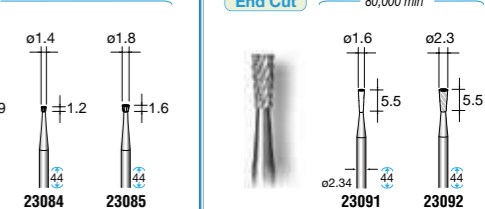
1 pc./pack **Diamond Cut**



1 pc./pack **Single Cut** End Cut

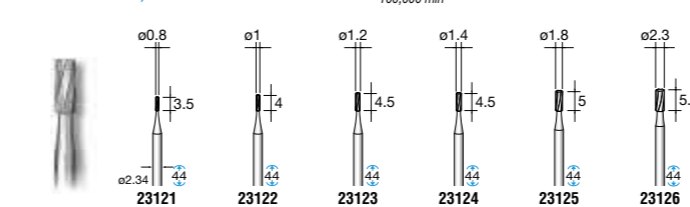


1 pc./pack **Diamond Cut** End Cut

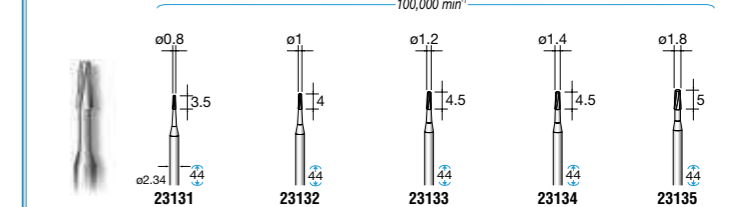


SHANK $\phi 2.34$

1 pc./pack **Single Cut** Straight Type

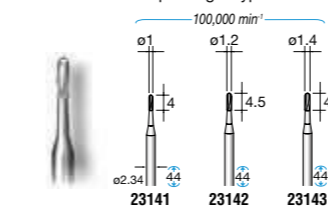


1 pc./pack **Single Cut** Tapered Type

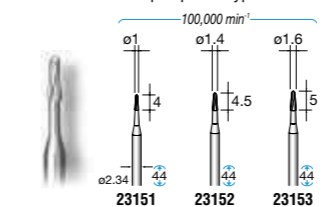


SHANK $\phi 2.34$

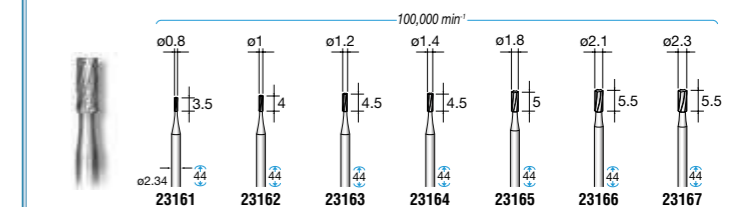
1 pc./pack **Single Cut** Ball Tip Straight Type



1 pc./pack **Single Cut** Ball Tip Tapered Type

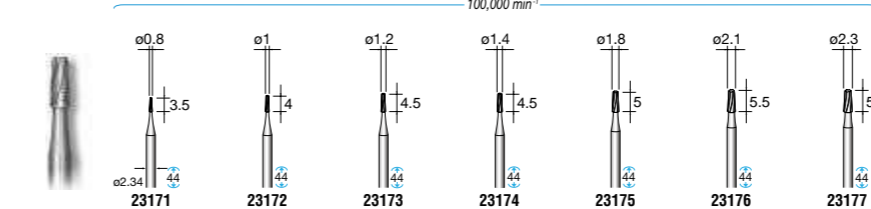


1 pc./pack **Chip Breaker** Straight Type

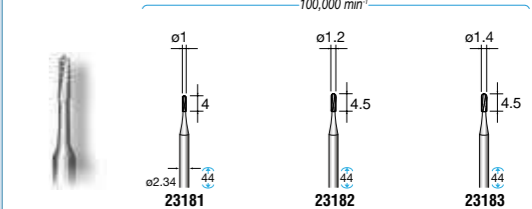


SHANK $\phi 2.34$

1 pc./pack **Chip Cut** Tapered Type



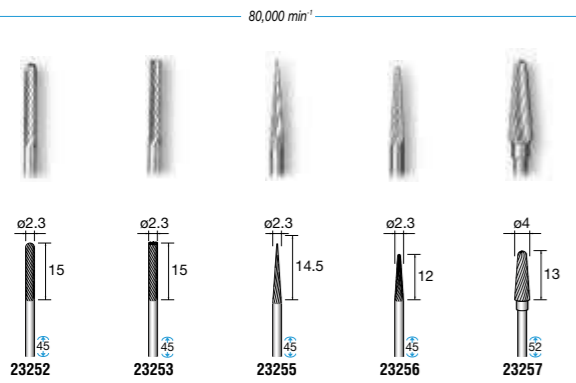
1 pc./pack **Chip Cut** Ball Tip Straight Type



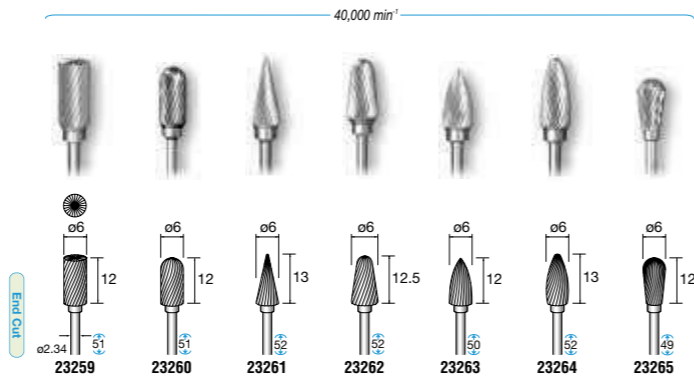
CARBIDE CUTTERS

SHANK $\phi 2.34$

1 pc./pack Single Cut

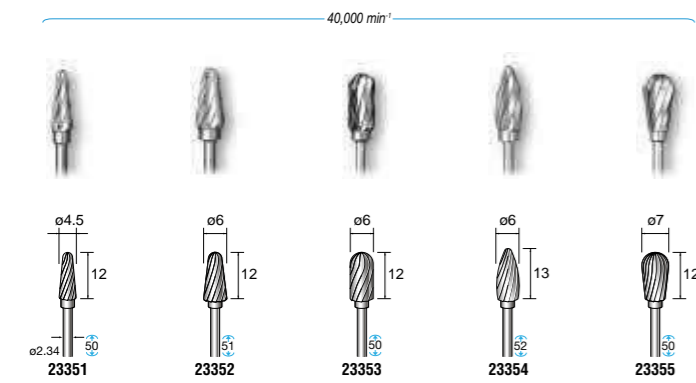


1 pc./pack Single Cut

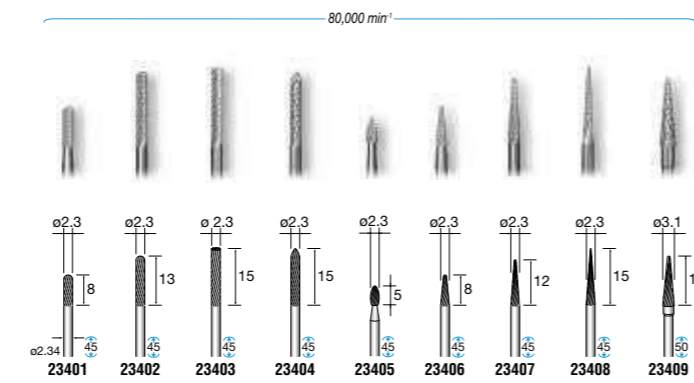


SHANK $\phi 2.34$

1 pc./pack Single Cut

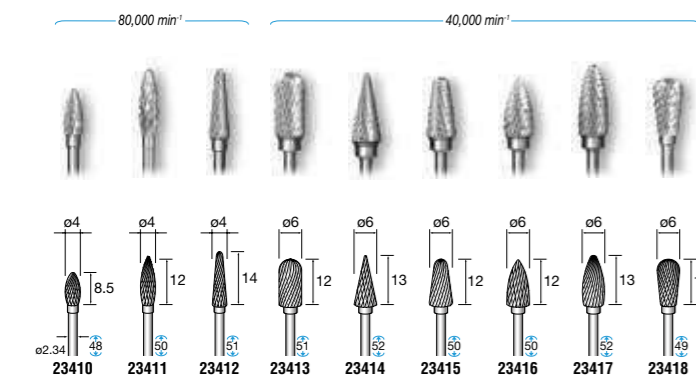


1 pc./pack Double Cut

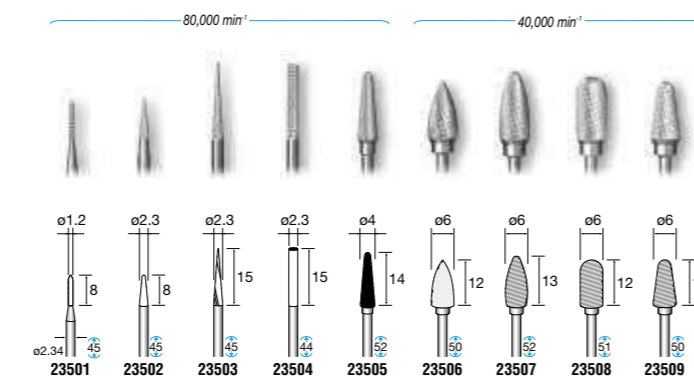


SHANK $\phi 2.34$

1 pc./pack Double Cut

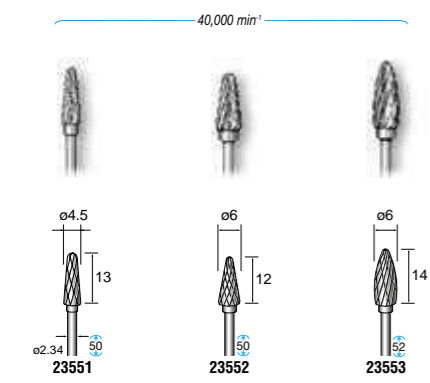


1 pc./pack Diamond Cut <Fine>

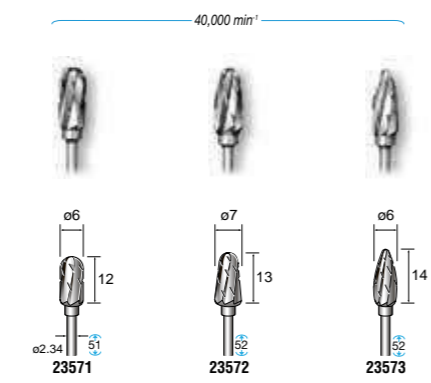


SHANK $\phi 2.34$

1 pc./pack Double Cut <Rough>



1 pc./pack Double Cut <Super Rough>



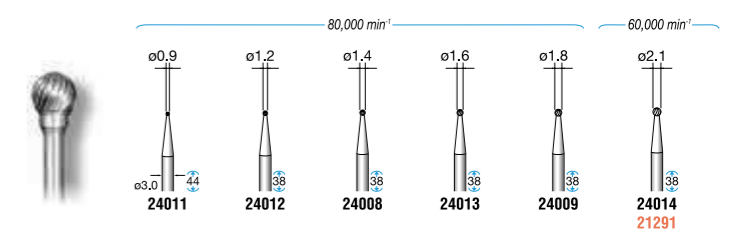
CARBIDE CUTTERS - Orange code numbers indicate Titanium-Coated Type.



3.0 mm shank diameter series. High quality carbide cutters offer superior durability and produce fine surface finishes.

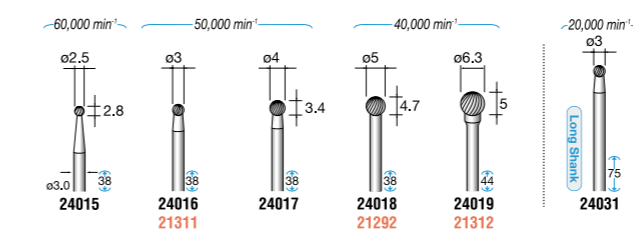
SHANK $\phi 3.0$

1 pc./pack Single Cut

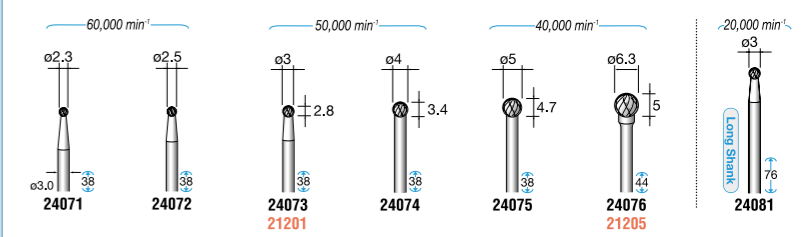


SHANK $\phi 3.0$

1 pc./pack Single Cut

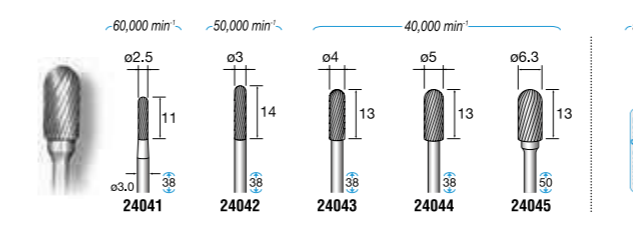


1 pc./pack Double Cut

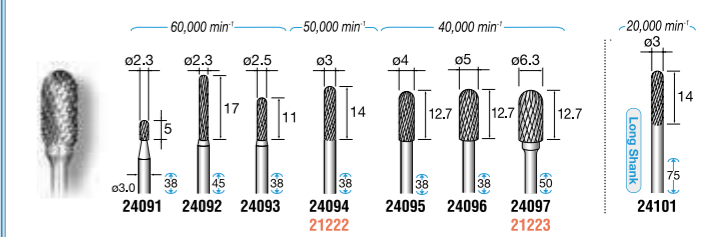


SHANK $\phi 3.0$

1 pc./pack Single Cut

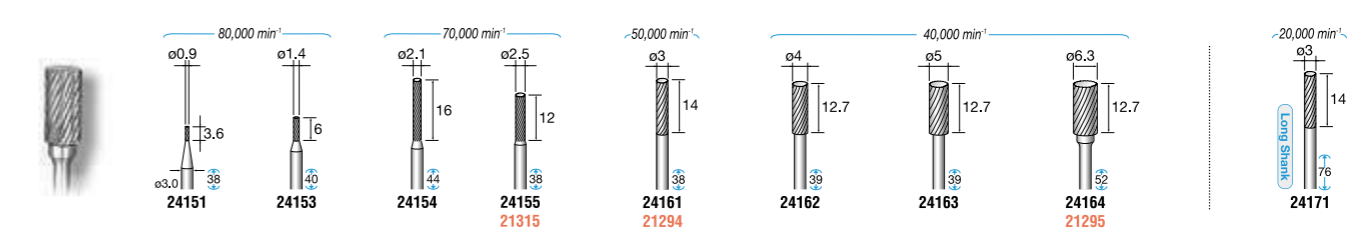


1 pc./pack Double Cut



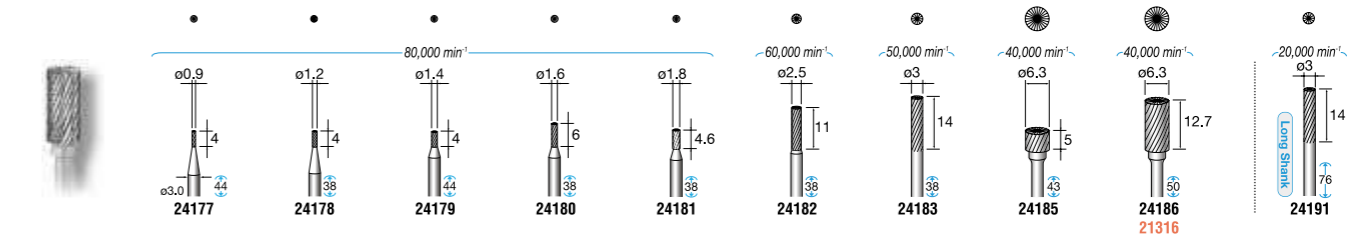
SHANK $\phi 3.0$

1 pc./pack Single Cut



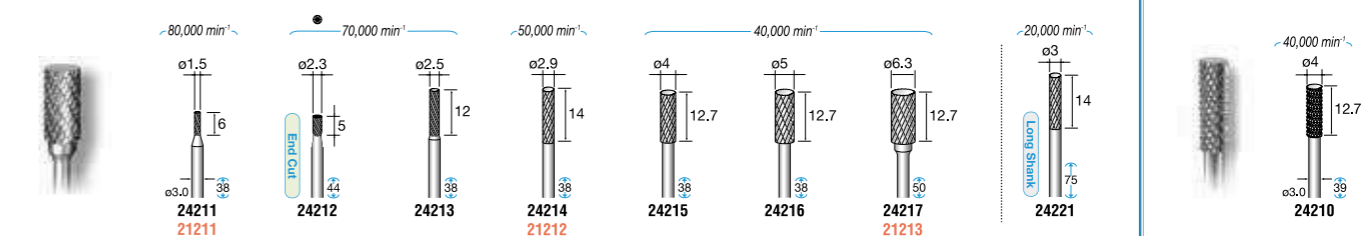
SHANK $\phi 3.0$

1 pc./pack Single Cut End Cut



SHANK $\phi 3.0$

1 pc./pack Double Cut



1 pc./pack Diamond Cut

CARBIDE CUTTERS

Orange code numbers indicate Titanium-Coated Type.

SHANK $\phi 3.0$

1 pc./pack Double Cut End Cut

80,000 min⁻¹ 60,000 min⁻¹ 50,000 min⁻¹ 40,000 min⁻¹ 40,000 min⁻¹ 20,000 min⁻¹

24231 24232 24233 24234 24235 24241

21215 21216

1 pc./pack Single Cut

50,000 min⁻¹ 40,000 min⁻¹ 20,000 min⁻¹

24261 24262 24263 24271

SHANK $\phi 3.0$

1 pc./pack Single Cut

50,000 min⁻¹ 40,000 min⁻¹ 20,000 min⁻¹

24281 24282 24283 24284 24291

1 pc./pack Single Cut

50,000 min⁻¹ 40,000 min⁻¹ 20,000 min⁻¹

24301 24302 24303 24304 24305 24311

SHANK $\phi 3.0$

1 pc./pack Double Cut

50,000 min⁻¹ 40,000 min⁻¹ 20,000 min⁻¹

24321 24322 24323 24331

1 pc./pack Double Cut

50,000 min⁻¹ 40,000 min⁻¹ 20,000 min⁻¹

24342 24343 24344 24351

SHANK $\phi 3.0$

1 pc./pack Double Cut

60,000 min⁻¹ 50,000 min⁻¹ 40,000 min⁻¹ 20,000 min⁻¹

24361 24362 24363 24364 24365 24366 24371

1 pc./pack Single Cut

50,000 min⁻¹ 40,000 min⁻¹ 20,000 min⁻¹

24402 24403 24411

SHANK $\phi 3.0$

1 pc./pack Single Cut

40,000 min⁻¹ 40,000 min⁻¹

24425 24435

1 pc./pack Single Cut

50,000 min⁻¹ 40,000 min⁻¹ 20,000 min⁻¹

24451 24452 24453 24454 24461

SHANK $\phi 3.0$

1 pc./pack Single Cut

60,000 min⁻¹ 50,000 min⁻¹ 40,000 min⁻¹ 50,000 min⁻¹ 40,000 min⁻¹

24471 24472 24473 24474 24475 24476 24477

1 pc./pack Single Cut

40,000 min⁻¹ 50,000 min⁻¹

24485 24486 24487 24488 24489 24490 24491 24492 24493 24494

CARBIDE CUTTERS

Orange code numbers indicate Titanium-Coated Type.

SHANK $\phi 3.0$

1 pc./pack Single Cut **1 pc./pack Double Cut** **1 pc./pack Diamond Cut**

50,000 min⁻¹ 60,000 min⁻¹ 50,000 min⁻¹ 40,000 min⁻¹ 20,000 min⁻¹ 40,000 min⁻¹

24496 24497 24501 24502 24503 24504 24506 24525

SHANK $\phi 3.0$

1 pc./pack Double Cut **1 pc./pack Diamond Cut** **1 pc./pack Double Cut**

40,000 min⁻¹ 60,000 min⁻¹ 50,000 min⁻¹ 40,000 min⁻¹ 20,000 min⁻¹

24515 24551 24531 24532 24533 24534 24535 24541

SHANK $\phi 3.0$

1 pc./pack Double Cut **1 pc./pack Double Cut** **1 pc./pack Double Cut**

60,000 min⁻¹ 50,000 min⁻¹ 40,000 min⁻¹ 40,000 min⁻¹ 50,000 min⁻¹

24561 24562 24563 24564 24565 24572 24581 24582

SHANK $\phi 3.0$

1 pc./pack Alloy Cut **End Cut**

60,000 min⁻¹

24611 24612 24621 24622 24623 24631 24632 24635 24636 24641 24642 24645

SHANK $\phi 3.0$

1 pc./pack Alloy Cut **12 pc./pack Assorted Set**

60,000 min⁻¹

24646 24651 24652 24653 24654 24661 24662 24663

24601
Set (12 pieces)
(Each code No. one piece-pack)

24611	24646
24612	24651
24622	24653
24623	24654
24631	24661
24632	24663

*Wood box will be replaced with the plastic case when the stock of wood box is sold out.

SHANK $\phi 6.0$

1 pc./pack Alloy Cut

30,000 min⁻¹ 20,000 min⁻¹ 30,000 min⁻¹ 25,000 min⁻¹ 20,000 min⁻¹

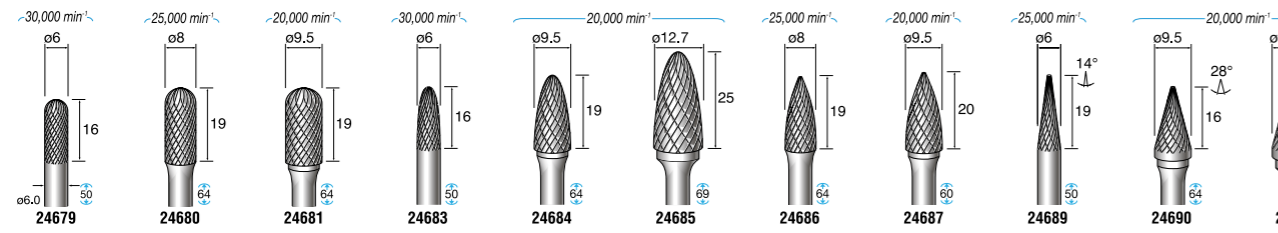
24670 24671 24672 24673 24674 24675 24676 24677 24678

CARBIDE CUTTERS

Orange code numbers indicate Titanium-Coated Type.

SHANK $\phi 6.0$

1 pc./pack Alloy Cut

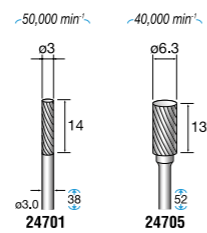


Left Handed
Left handed carbide cutters. For left handed grinders and a wide variety of automated machines.

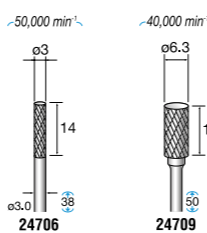
SHANK $\phi 3.0$

Left Handed

1 pc./pack Single Cut



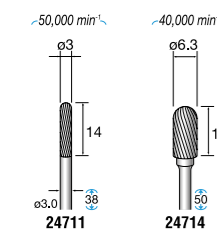
1 pc./pack Double Cut



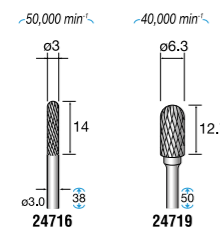
SHANK $\phi 3.0$

Left Handed

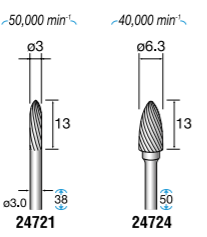
1 pc./pack Single Cut



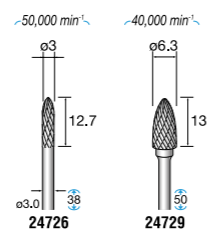
1 pc./pack Double Cut



1 pc./pack Single Cut



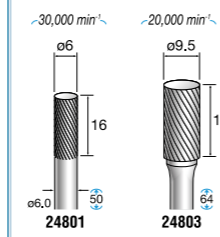
1 pc./pack Double Cut



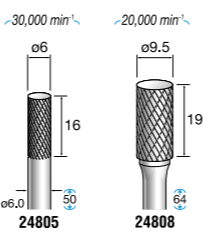
SHANK $\phi 6.0$

Left Handed

1 pc./pack Single Cut



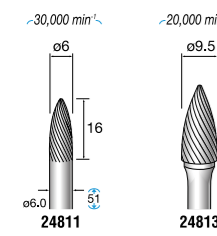
1 pc./pack Double Cut



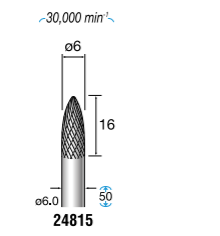
SHANK $\phi 6.0$

Left Handed

1 pc./pack Single Cut



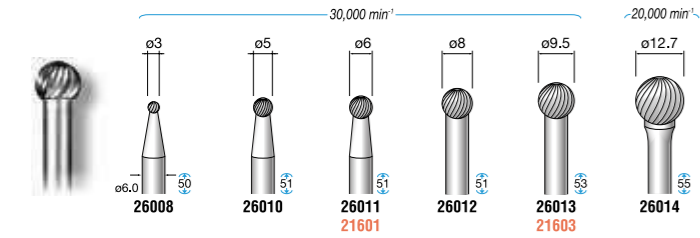
1 pc./pack Double Cut



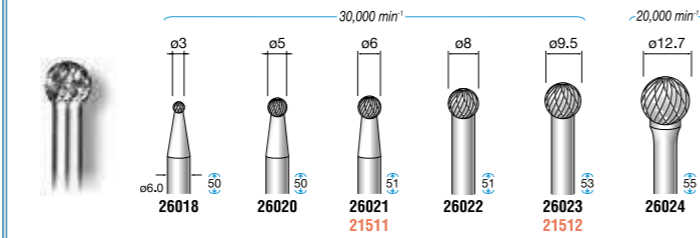
6.0 mm shank diameter series. Ideal for grinding, polishing and general finishing of large work areas.

SHANK $\phi 6.0$

1 pc./pack Single Cut

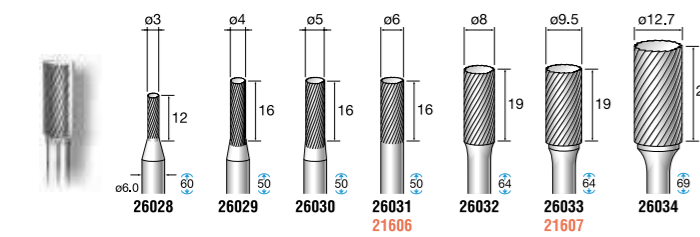


1 pc./pack Double Cut

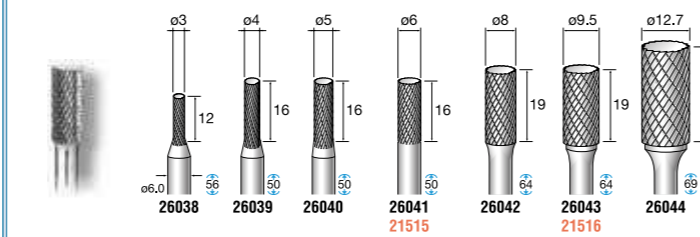


SHANK $\phi 6.0$

1 pc./pack Single Cut



1 pc./pack Double Cut



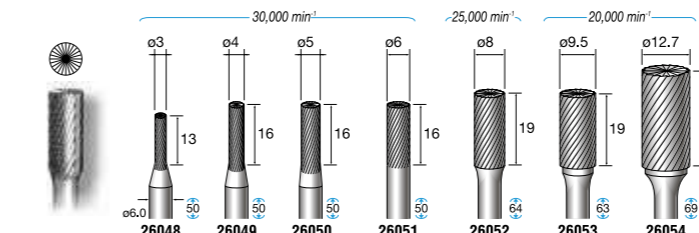
CARBIDE CUTTERS

Orange code numbers indicate Titanium-Coated Type.

SHANK $\phi 6.0$

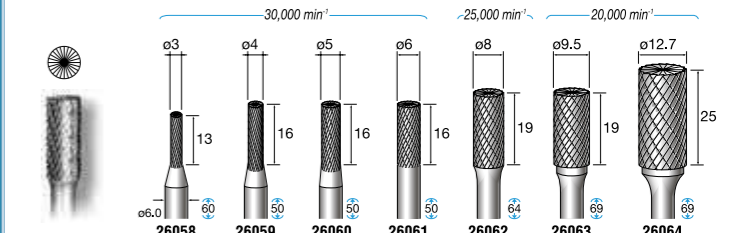
1 pc./pack Single Cut

End Cut



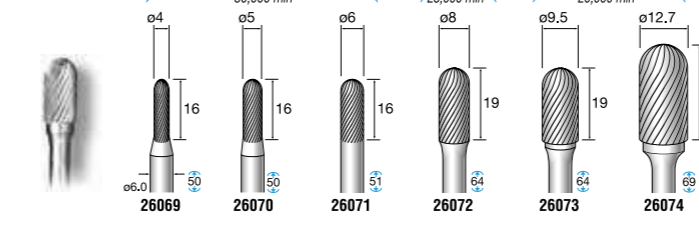
1 pc./pack Double Cut

End Cut

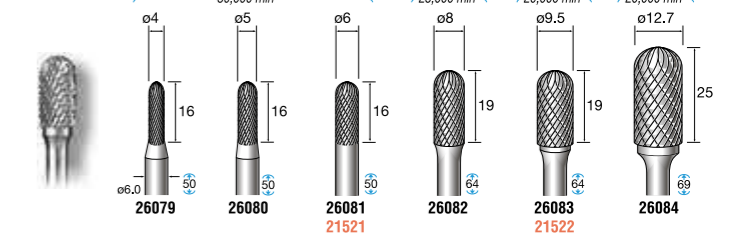


SHANK $\phi 6.0$

1 pc./pack Single Cut

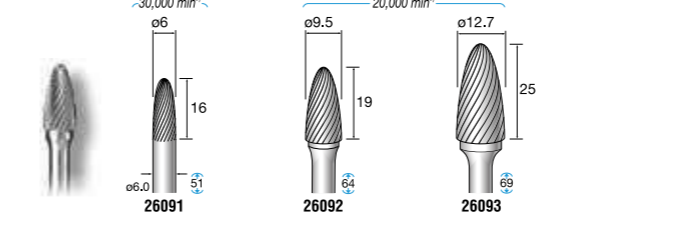


1 pc./pack Double Cut

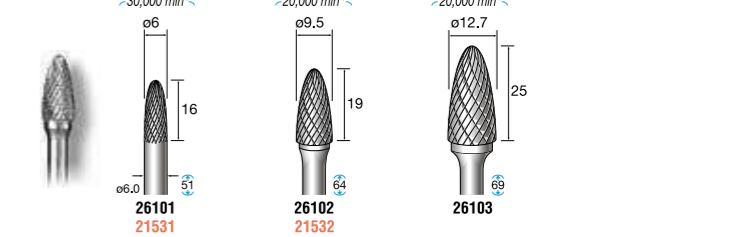


SHANK $\phi 6.0$

1 pc./pack Single Cut

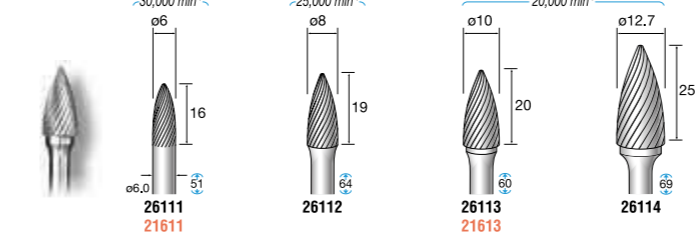


1 pc./pack Double Cut

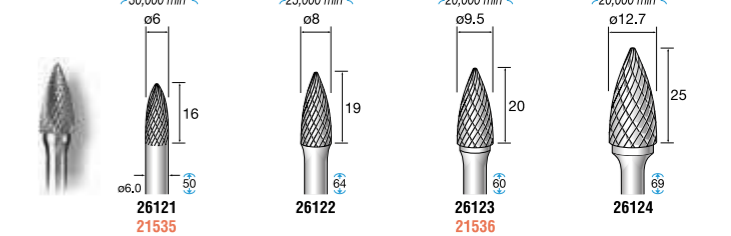


SHANK $\phi 6.0$

1 pc./pack Single Cut

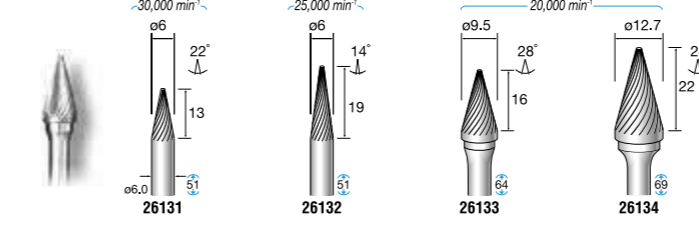


1 pc./pack Double Cut

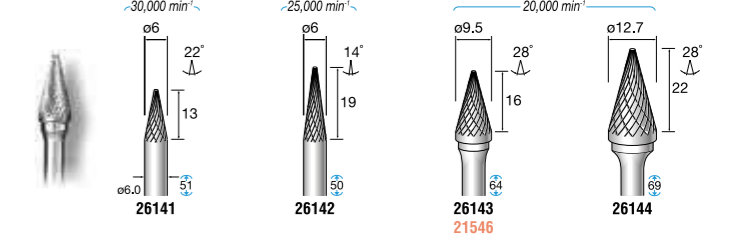


SHANK $\phi 6.0$

1 pc./pack Single Cut

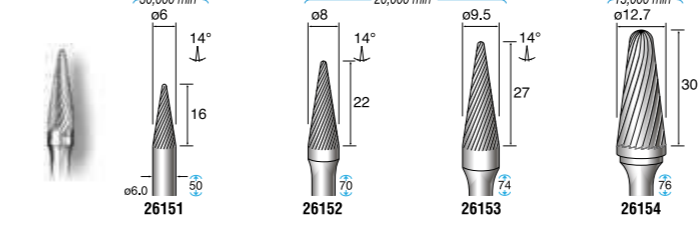


1 pc./pack Double Cut

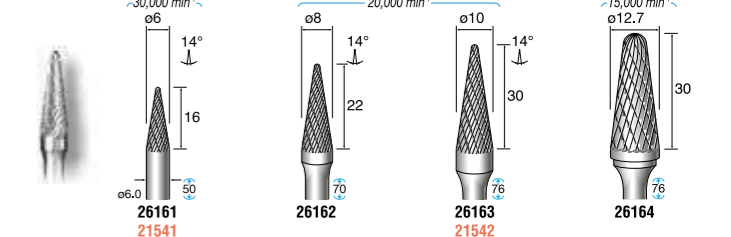


SHANK $\phi 6.0$

1 pc./pack Single Cut

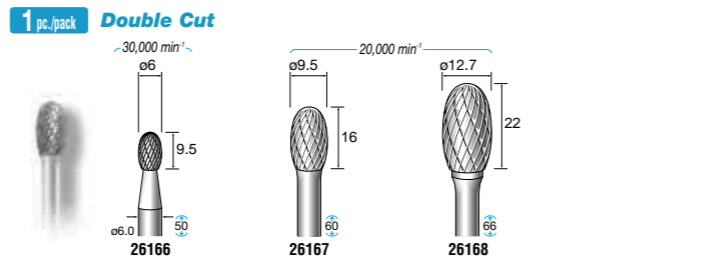
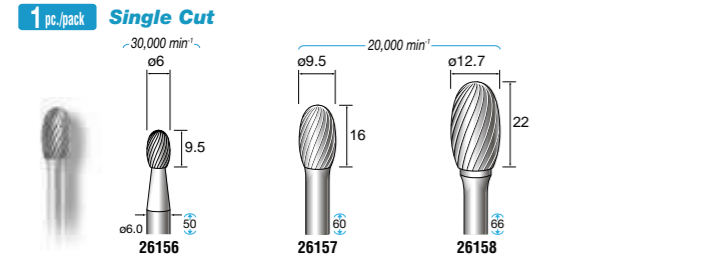


1 pc./pack Double Cut

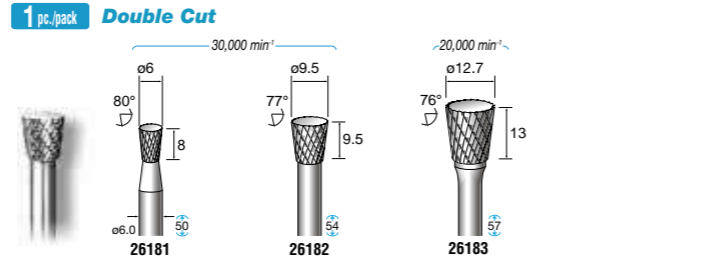
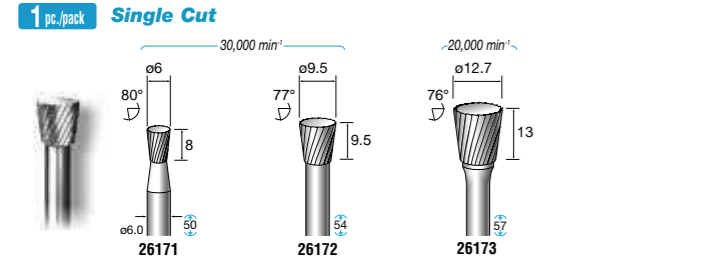


CARBIDE CUTTERS • Orange code numbers indicate Titanium-Coated Type.

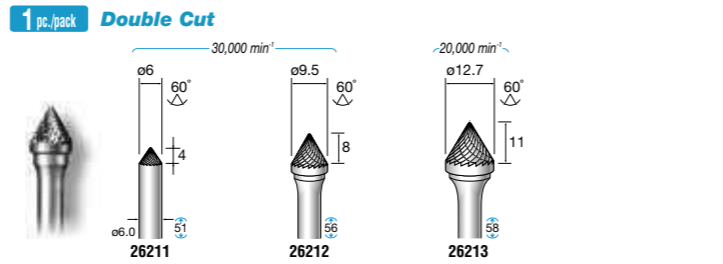
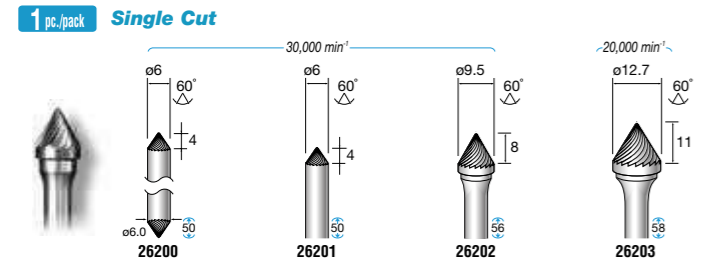
SHANK $\phi 6.0$



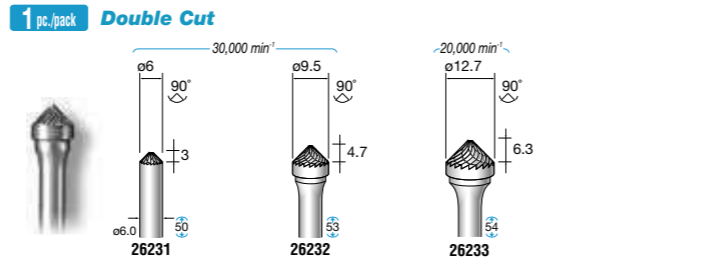
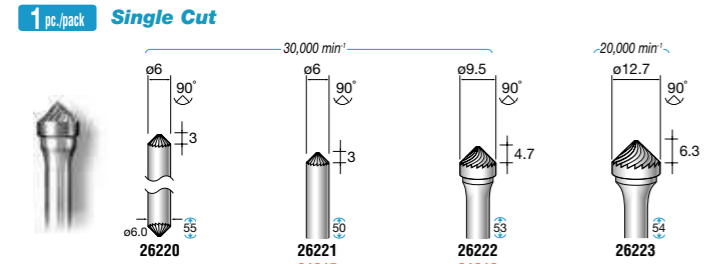
SHANK $\phi 6.0$



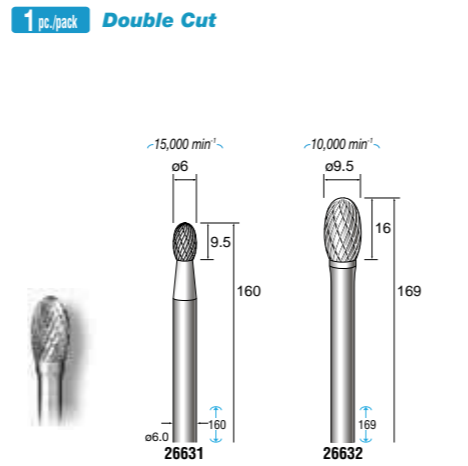
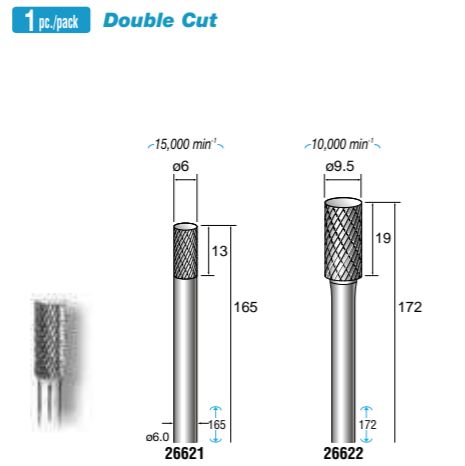
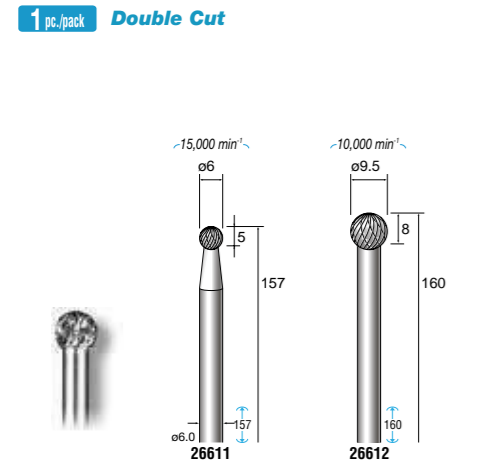
SHANK $\phi 6.0$



SHANK $\phi 6.0$

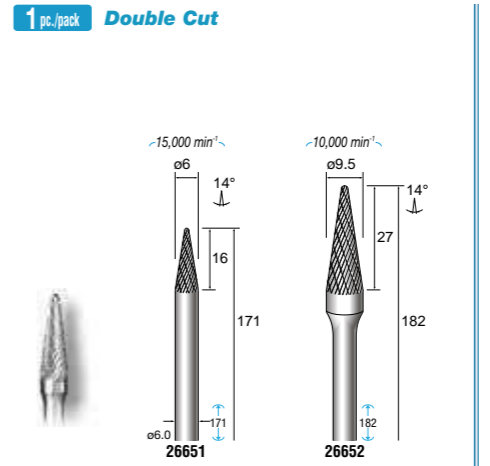
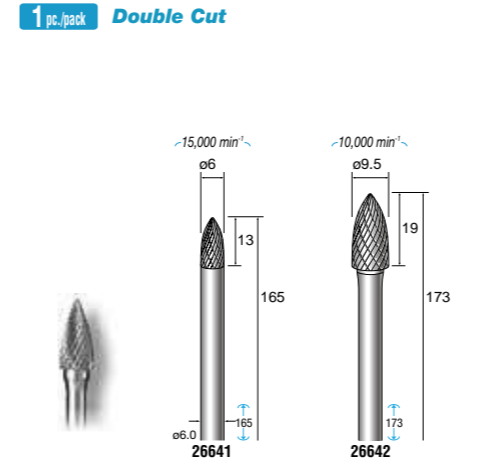


SHANK $\phi 6.0$

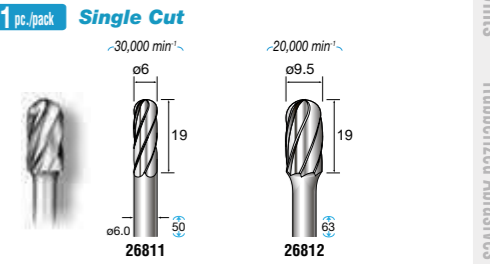
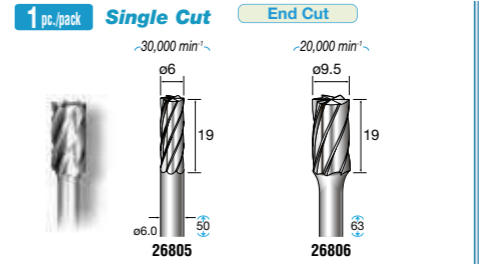
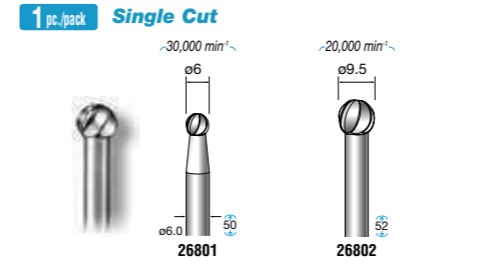


CARBIDE CUTTERS

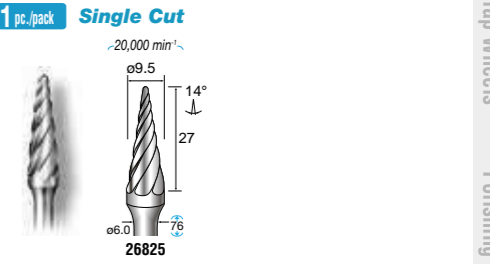
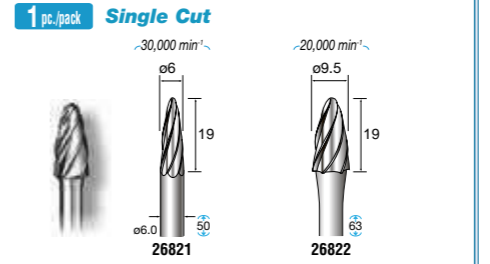
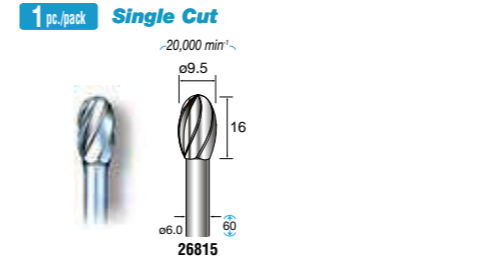
SHANK $\phi 6.0$



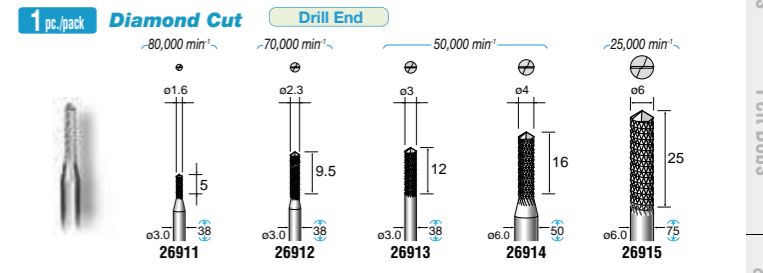
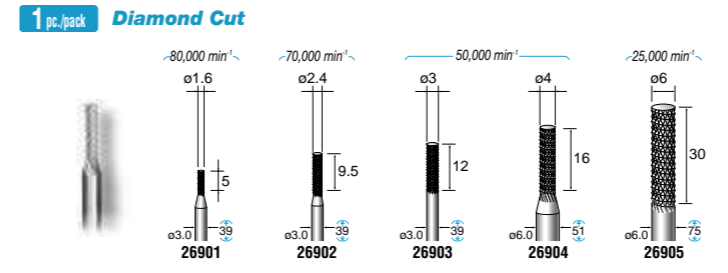
SHANK $\phi 6.0$



SHANK $\phi 6.0$



SHANK $\phi 3.0, \phi 6.0$



SHANK $\phi 1.0, \phi 1.5, \phi 2.0, \phi 2.5$



D= $\phi 1.0$ Length=30		D= $\phi 1.5$ Length=30		D= $\phi 2.0$ Length=38		D= $\phi 2.5$ Length=43	
d ϕ mm	\bar{L} mm	d ϕ mm	\bar{L} mm	d ϕ mm	\bar{L} mm	d ϕ mm	\bar{L} mm
0.5	4.0	0.8	6.3	1.5	11.2	2.0	12.0
0.6	4.5	0.9	7.1	1.6	12.0	2.1	12.0
0.7	5.6	1.0	9.0	1.7	12.0	2.2	12.0
		1.1	9.0	1.8	12.0	2.3	12.0
		1.2	10.0	1.9	12.0	2.4	12.0
		1.3	10.0				
		1.4	11.2				

Diamond / CBN Carbide Cutters Specialty Tools Mounted Points Rubberized Abrasives Flap Wheels Polishing Brushes Felt Bobs Abrasive Compounds & Polishing Tools NSK Exclusive Tools

Diamond / CBN Carbide Cutters Specialty Tools Mounted Points Rubberized Abrasives Flap Wheels Polishing Brushes Felt Bobs Abrasive Compounds & Polishing Tools NSK Exclusive Tools

CARBIDE CUTTERS

SHANK $\phi 3.0$
12 pcs./pack **Single Cut Assorted Set**



28111 Titanium Coating	
Set (12 pieces) (Each code No. one piece-pack)	
21201	21245
21205	21261
21212	21262
21213	21265
21241	21272
21242	21275

SHANK $\phi 6.0$
8 pcs./pack **Double Cut Assorted Set**



28115 Titanium Coating	
Set (8 pieces) (Each code No. one piece-pack)	
21511	21535
21512	21536
21515	21541
21516	21546

SHANK $\phi 2.34$
12 pcs./pack **Single Cut Assorted Set**



28121	
Set (12 pieces) (Each code No. one piece-pack)	
23014	23132
23017	23133
23019	23161
23022	23162
23024	23163
23131	23166

12 pcs./pack **Double Cut Assorted Set**



28125	
Set (12 pieces) (Each code No. one piece-pack)	
23403	23415
23405	23416
23407	23504
23410	23507
23412	23553
23413	23573

SHANK $\phi 3.0$
12 pcs./pack **Single Cut Assorted Set**



28141	
Set (12 pieces) (Each code No. one piece-pack)	
24016	24301
24019	24303
24041	24305
24044	24402
24161	24452
24164	24454

12 pcs./pack **Double Cut Assorted Set**



28145	
Set (12 pieces) (Each code No. one piece-pack)	
24073	24362
24076	24364
24093	24366
24096	24504
24214	24532
24217	24534

SHANK $\phi 6.0$
8 pcs./pack **Single Cut Assorted Set**



28171	
Set (8 pieces) (Each code No. one piece-pack)	
26011	26111
26031	26131
26071	26151
26091	26171

8 pcs./pack **Single Cut Assorted Set**



28175	
Set (8 pieces) (Each code No. one piece-pack)	
26013	26113
26033	26133
26073	26153
26092	26172

SHANK $\phi 6.0$
8 pcs./pack **Double Cut Assorted Set**



28181	
Set (8 pieces) (Each code No. one piece-pack)	
26021	26121
26041	26141
26081	26161
26101	26181

8 pcs./pack **Double Cut Assorted Set**



28185	
Set (8 pieces) (Each code No. one piece-pack)	
26023	26123
26043	26143
26083	26163
26102	26182

SHANK $\phi 3.0$
12 pcs./pack **Alloy Cut Assorted Set**



24601	
Set (12 pieces) (Each code No. one piece-pack)	
24611	24646
24612	24651
24622	24653
24623	24654
24631	24661
24632	24663

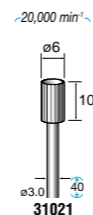
* Wood box will be replaced with the plastic case when the stock of wood box is sold out.

SPECIALTY TOOLS

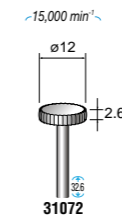
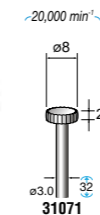


High Speed Steel(H.S.S.)Cutters.
For cutting of general steels,
light metals, non-metals, plastics,
resins, etc.

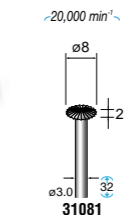
SHANK $\phi 3.0$
1 pc./pack



1 pc./pack

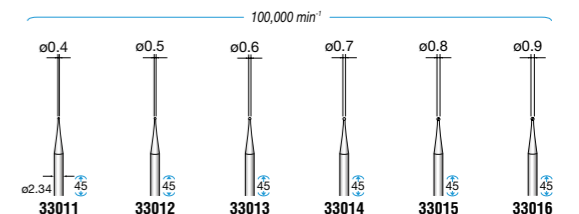


1 pc./pack

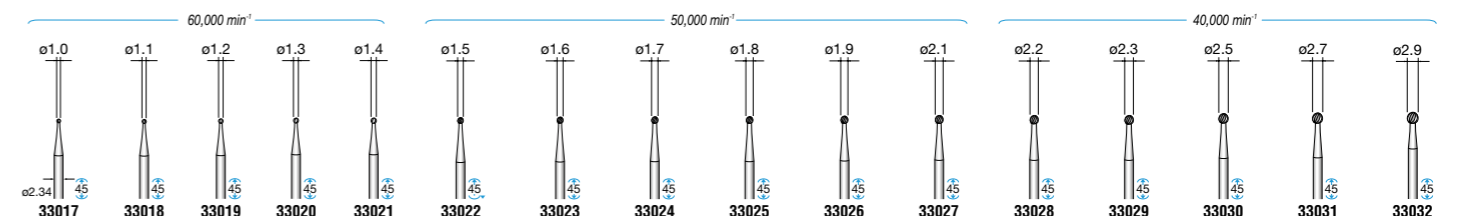


Tungsten Vanadium Steel Cutters.
For fine finishing of soft materials,
resins, bronze, acrylics, etc.

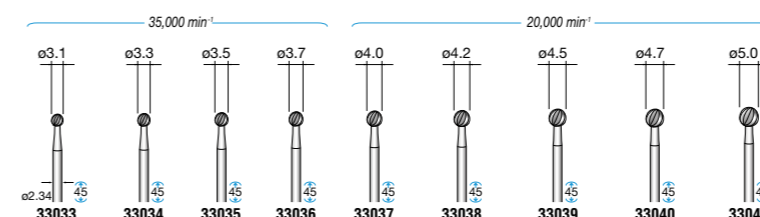
SHANK $\phi 2.34$
12 pcs./pack



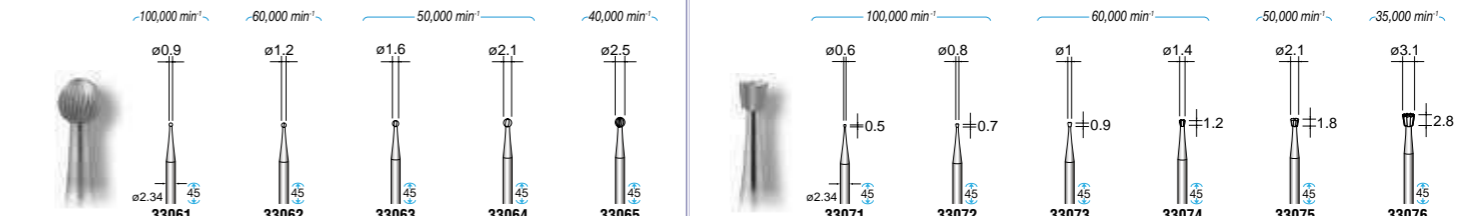
SHANK $\phi 2.34$
12 pcs./pack



SHANK $\phi 2.34$
12 pcs./pack



SHANK $\phi 2.34$
12 pcs./pack

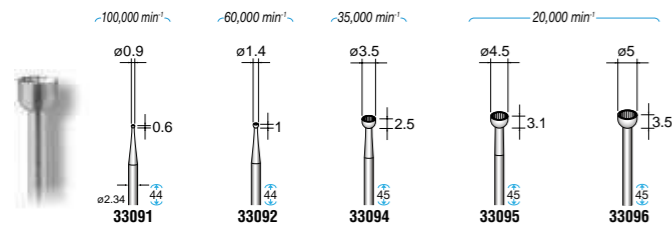


Diamond / CBN
Carbide Cutters
Specialty Tools
Mounted Points
Rubberized Abrasives
Flap Wheels
Polishing Brushes
Felt Bobs
Abrasive Compounds & Polishing Tools
NSK Exclusive Tools

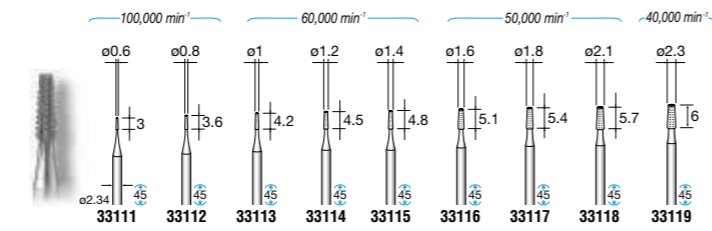
SPECIALTY TOOLS

SHANK $\phi 2.34$

12 pcs./pack



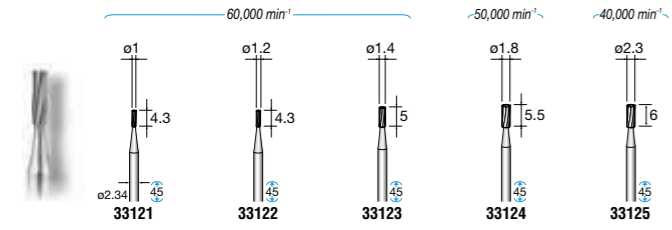
12 pcs./pack Tapered Type



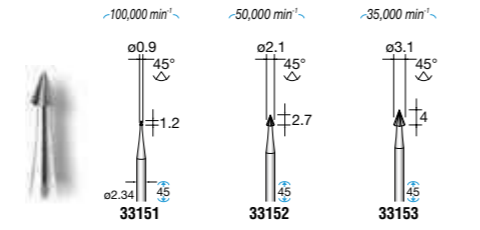
SHANK $\phi 2.34$

12 pcs./pack

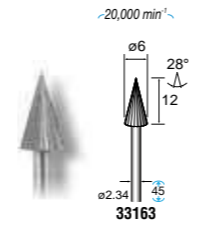
Straight Type



12 pcs./pack

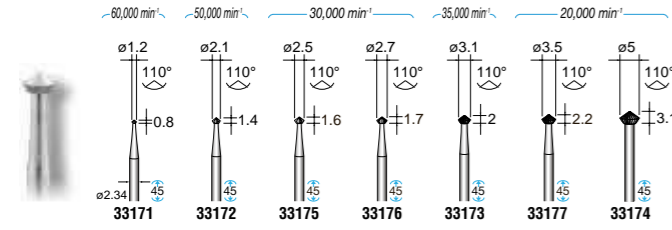


6 pcs./pack

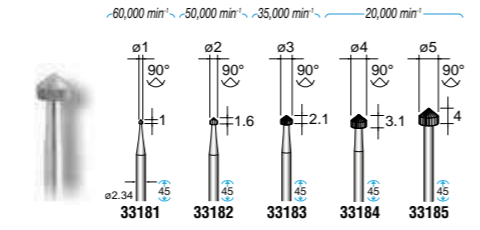


SHANK $\phi 2.34$

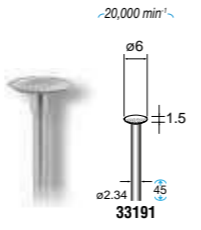
12 pcs./pack



12 pcs./pack

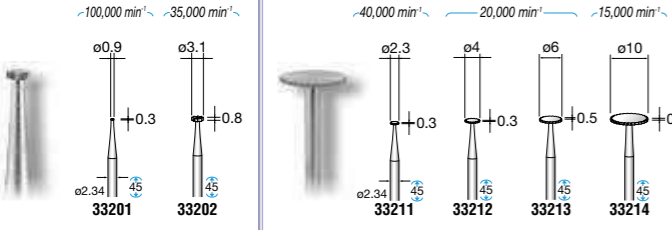


1 pc./pack

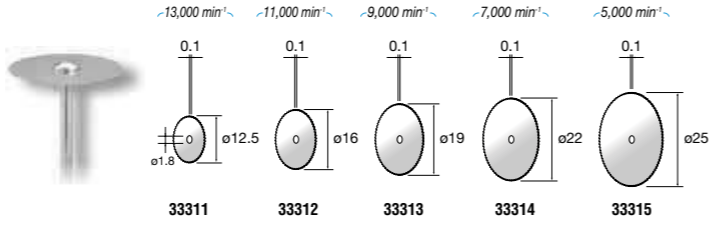


SHANK $\phi 2.34$

12 pcs./pack



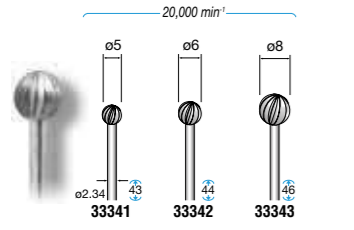
10 pcs./pack Saw Blade



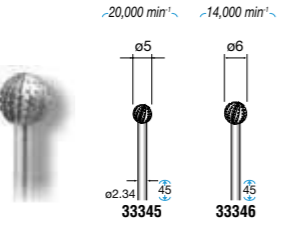
*Use with corresponding mandrels P.29(37011, 37012, 37015, 37051). *Mandrel is purchased separately.

SHANK $\phi 2.34$

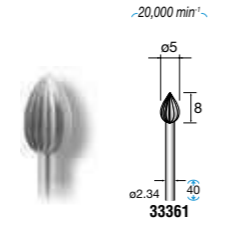
6 pcs./pack



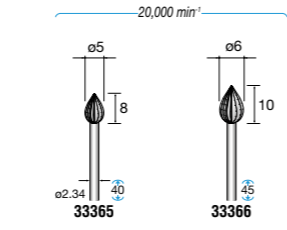
6 pcs./pack



6 pcs./pack

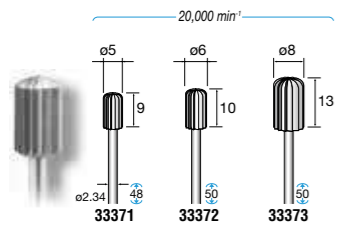


6 pcs./pack

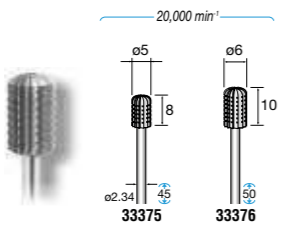


SHANK $\phi 2.34$

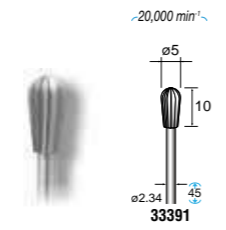
6 pcs./pack



6 pcs./pack

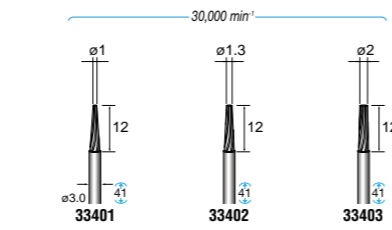


6 pcs./pack



SHANK $\phi 3.0$

6 pcs./pack



*Cutting for plastic and acryl.

SPECIALTY TOOLS

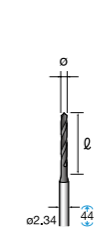


Tempered Steel Drills for plastics and woods. High Speed Steel Drills for steels and stainless steels, Carbide Drills for PCB, FRP.

SHANK $\phi 2.34$

12 pcs./pack

Tempered Steel Drill (Total Length : 44 mm) : 15,000 min⁻¹



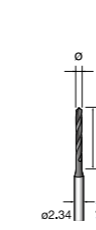
ϕ mm	L mm		ϕ mm	L mm		ϕ mm	L mm	
0.5	8	36011	1.2	10	36018	2.3	12	36029
0.6	8	36012	1.3	10	36019			
0.7	8	36013	1.4	10	36020			
0.8	8	36014	1.5	10	36021			
0.9	10	36015	1.6	10	36022			
1.0	10	36016	1.8	12	36024			
1.1	10	36017	2.1	12	36027			

• $\phi 0.5$ ~ 2.3 mm each 1 pc. Full Size Set (No. 36011 ~ 36029 ; 15 pcs. - pack) ; Special case provided 36030

SHANK $\phi 2.34$

10 pcs./pack

High Speed Steel (H.S.) Drill (Total Length : 44 mm) : 20,000 min⁻¹



ϕ mm	L mm		ϕ mm	L mm		ϕ mm	L mm	
0.5	9	36051	1.2	11	36058	1.9	12	36065
0.6	9	36052	1.3	11	36059	2.0	12	36066
0.7	9	36053	1.4	11	36060	2.1	12	36067
0.8	11	36054	1.5	12	36061	2.2	12	36068
0.9	11	36055	1.6	12	36062	2.3	12	36069
1.0	11	36056	1.7	12	36063			
1.1	11	36057	1.8	12	36064			

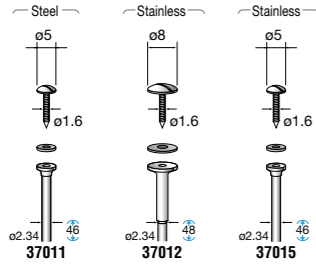
• $\phi 0.5$ ~ 2.3 mm each 1 pc. Full Size Set (No. 36051 ~ 36069 ; 19 pcs. - pack) ; Special case provided 36070

Diamond / CBN
Carbide Cutters
Specialty Tools
Mounted Points
Rubberized Abrasives
Flap Wheels
Polishing Brushes
Felt Bobs
Abrasive Compounds & Polishing Tools
NSK Exclusive Tools

Diamond / CBN
Carbide Cutters
Specialty Tools
Mounted Points
Rubberized Abrasives
Flap Wheels
Polishing Brushes
Felt Bobs
Abrasive Compounds & Polishing Tools
NSK Exclusive Tools

SPECIALTY TOOLS

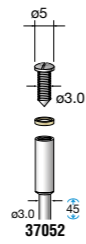
SHANK $\phi 2.34$
10 pcs./pack Mandrels



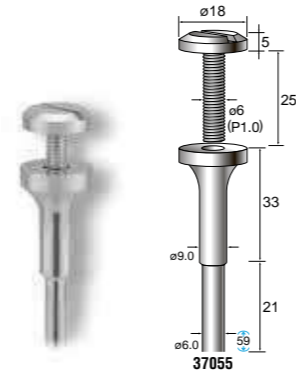
SHANK $\phi 3.0$
10 pcs./pack Mandrels



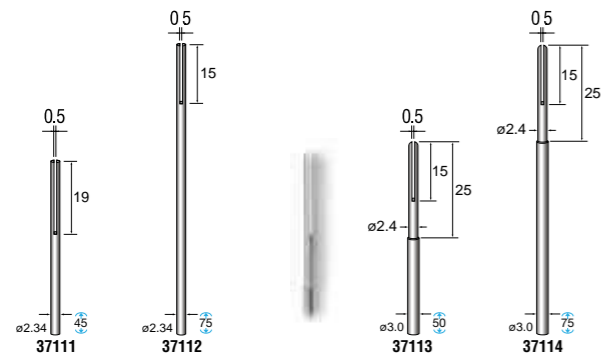
3 pcs./pack Mandrels



SHANK $\phi 6.0$
1 pc./pack Mandrels



SHANK $\phi 2.34, \phi 3.0$
10 pcs./pack



MOUNTED POINTS

Types of Abrasive Grain

"Abrasive Grain" is a general term of very hard abrasive particles for polishing and grinding. Abrasive Grain is harder than work materials and functions to grind work materials. Abrasive Grain is classified generally into three types.

Alumina type

Primary ingredient is alumina (aluminium oxide : Al_2O_3).

- A** : For rough grinding of iron and steel materials, low carbon steels, forged products, castings and raw steel materials.
- WA** : For general grinding of alloy steels, tool steels and carbon steels.
- PA** : For general grinding of heat treated alloy steels, tool steels, and stainless steels.

Silicon Carbide type

Primary ingredient is silicon carbide (SiC).

- C** : For general grinding of cast iron, chilled cast iron, copper, bronze, brass, aluminum and non ferrous metals.
- GC** : For general grinding of super hard alloys, ceramics, stone, jewelry, glass, pottery, wood and synthetic resins.

Mixed Abrasive Grain type

Mixed use of abrasive grain of the same type

- PA • W** : For precision grinding of high speed steel, alloy steels, tool steels and special alloys.
- A • WA** : For rough grinding of iron and steel materials, low carbon steels, forged products, castings, steel materials and stainless steels.

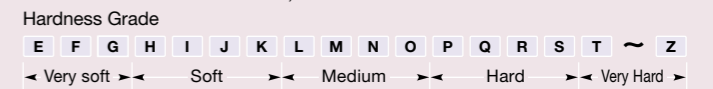
Bonding Material

Material used to bond and hold abrasive grains. Primary bonding materials are shown below.

- V (vitrified)** : Mainstream of magnetic bonding material, grinding stone
- B (resinoid)** : Bonding material is mainly made of thermosetting
- R (rubber)** : Hard rubber
- E (shellac)** : Thermoplastic resin (natural resin)

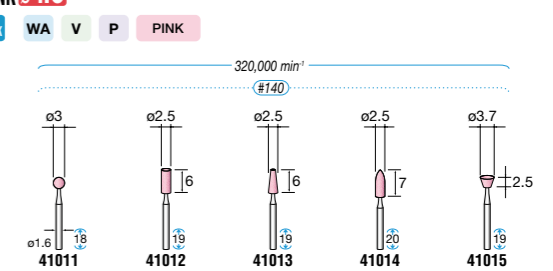
Hardness Grade

This shows bonding strength of abrasive grain, bonding materials and wear resistance of grinding stone. The Hardness Grade is measured by various instruments. The hardness is classified from A to Z, A is the softest while Z is the hardest.

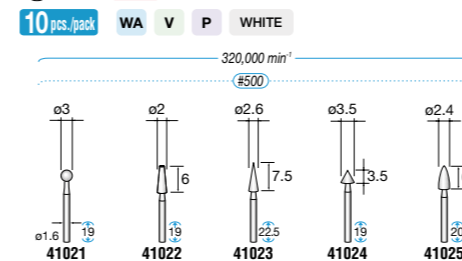


1.6 mm shank diameter series.
Short Shank Type grindstones for high-speed rotation. Ideal for very small parts.

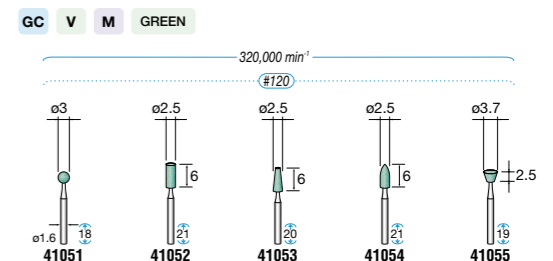
SHANK $\phi 1.6$
10 pcs./pack



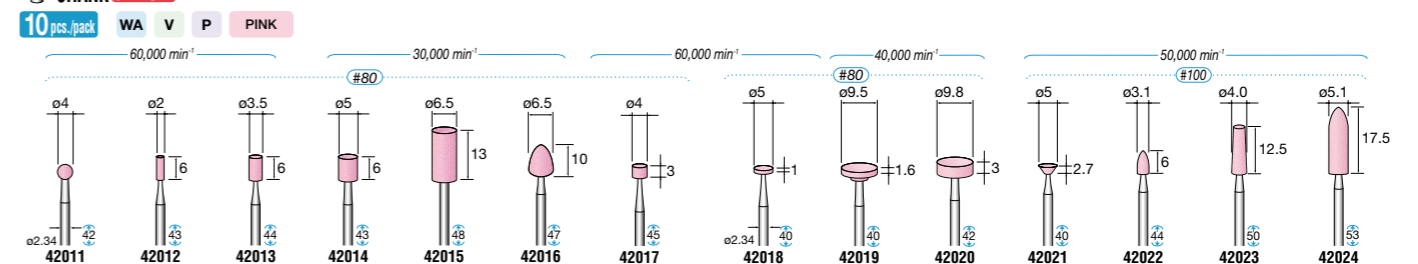
SHANK $\phi 1.6$
10 pcs./pack



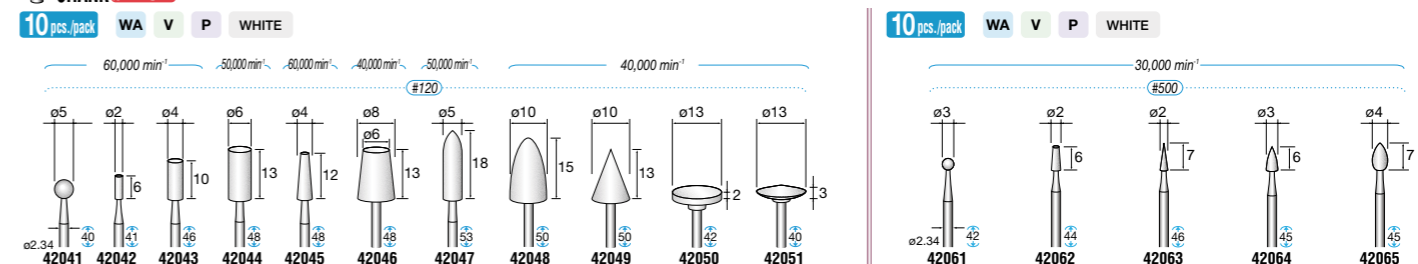
10 pcs./pack



SHANK $\phi 2.34$
10 pcs./pack

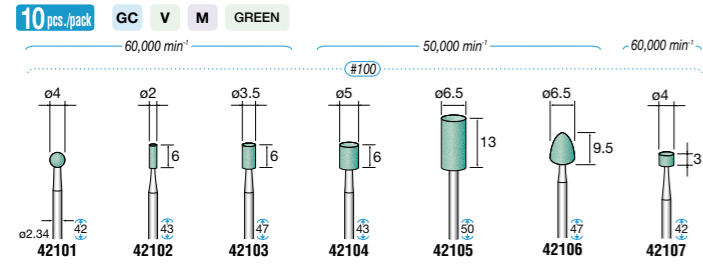


SHANK $\phi 2.34$
10 pcs./pack



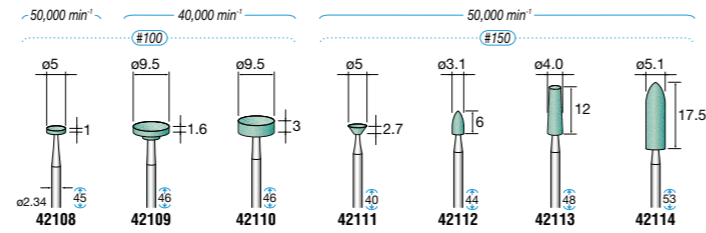
MOUNTED POINTS

SHANK $\phi 2.34$

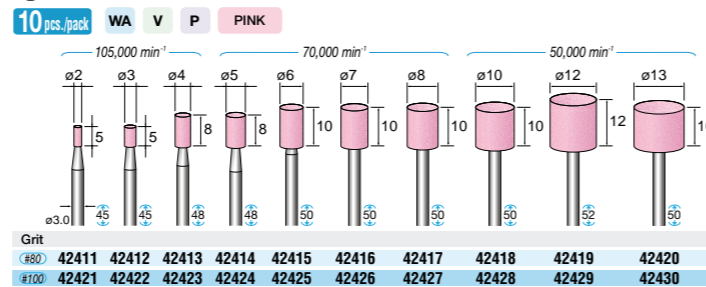


3.0 mm shank diameter series. Perfect for high surface finishing, precision work.

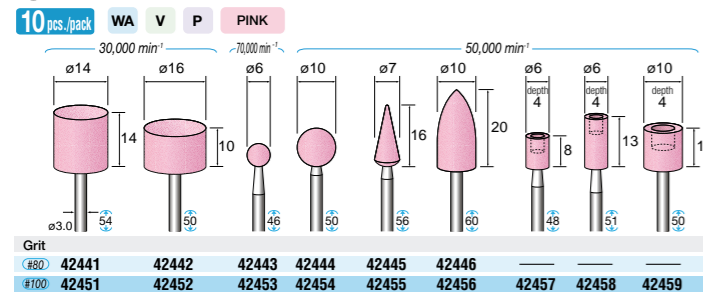
SHANK $\phi 3.0$



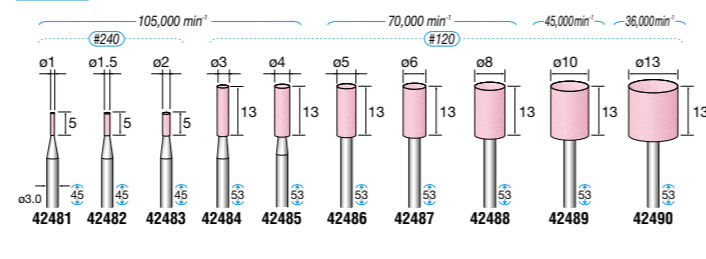
SHANK $\phi 3.0$



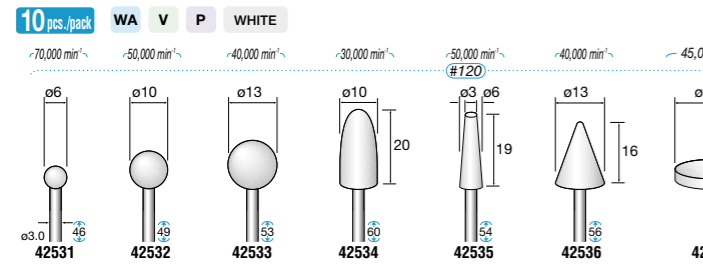
SHANK $\phi 3.0$



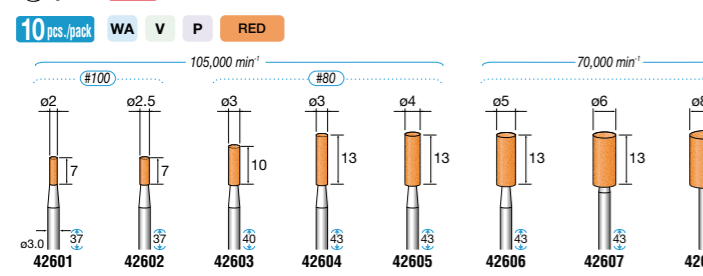
SHANK $\phi 3.0$



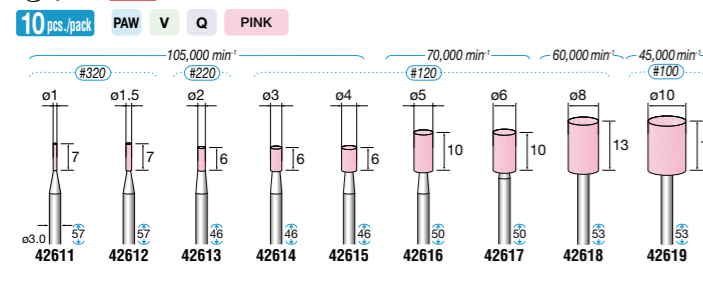
SHANK $\phi 3.0$



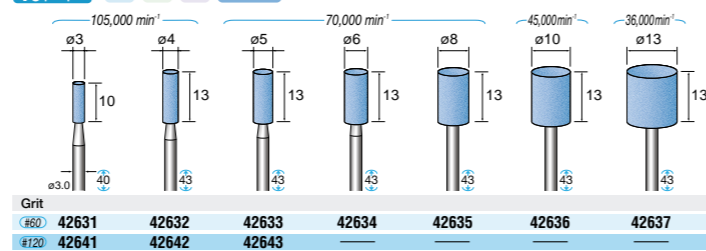
SHANK $\phi 3.0$



SHANK $\phi 3.0$

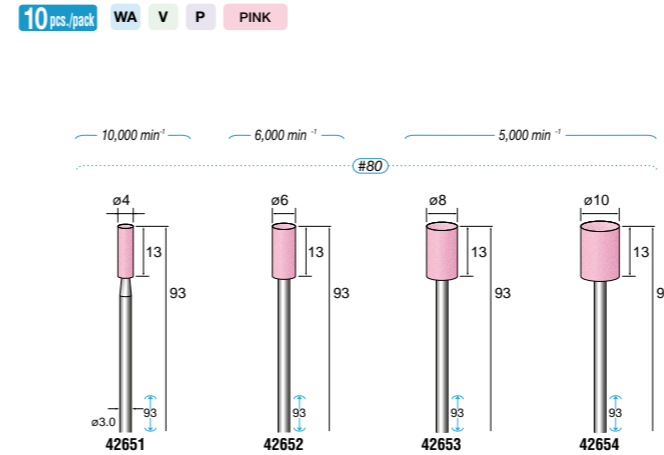


SHANK $\phi 3.0$

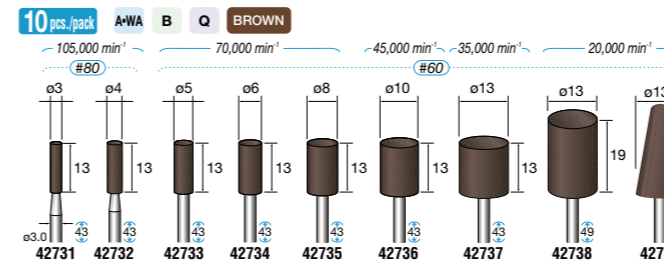


MOUNTED POINTS

SHANK $\phi 3.0$

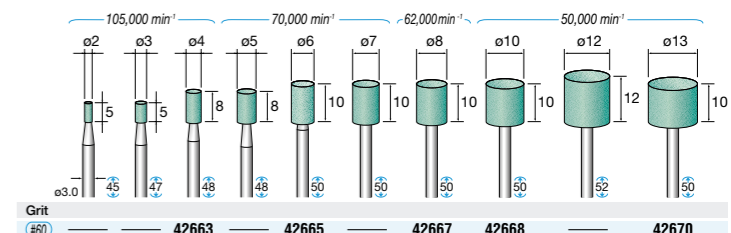


SHANK $\phi 3.0$

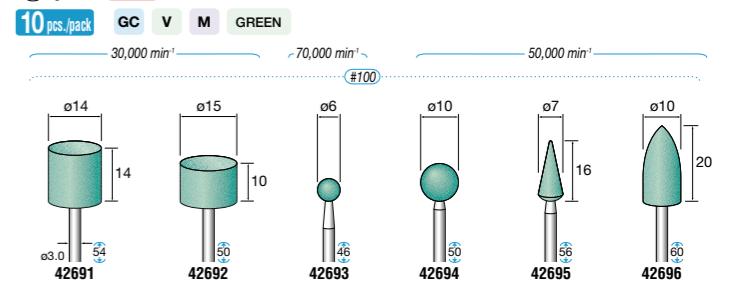


6.0 mm shank diameter series. High quality finishing grindstones.

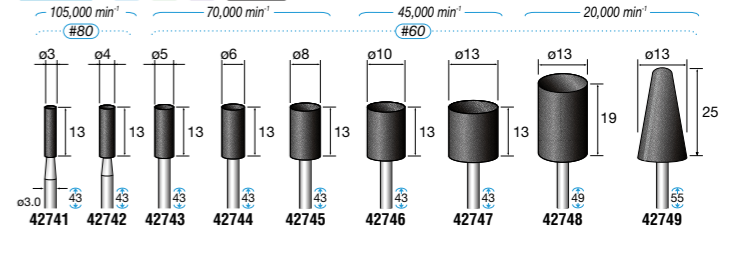
SHANK $\phi 3.0$



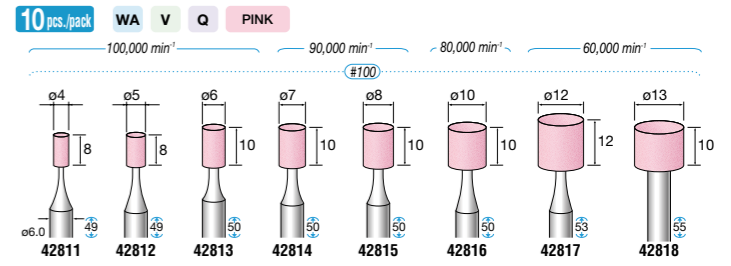
SHANK $\phi 3.0$



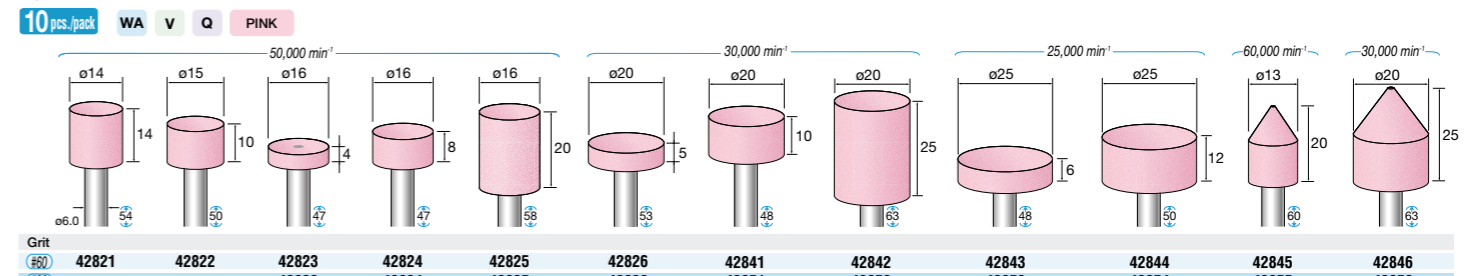
SHANK $\phi 3.0$



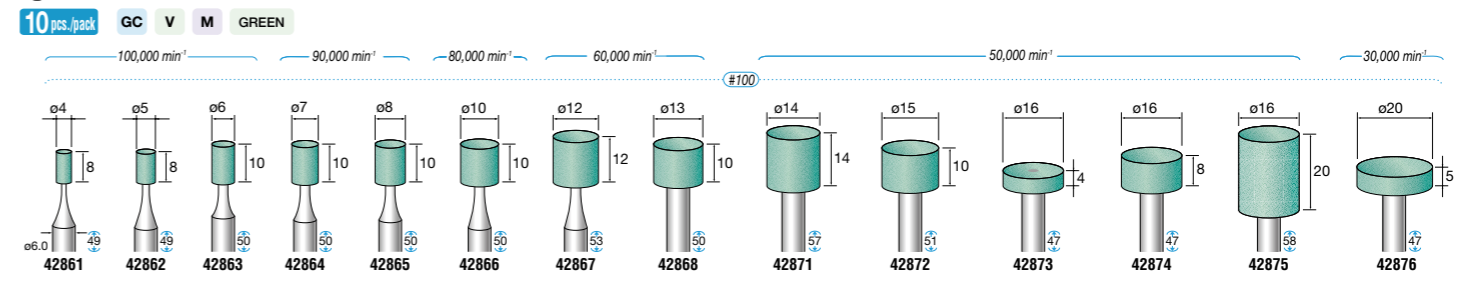
SHANK $\phi 6.0$



SHANK $\phi 6.0$



SHANK $\phi 6.0$



MOUNTED POINTS

SHANK $\phi 6.0$
10 pcs./pack GC V M GREEN

30,000 min⁻¹ 25,000 min⁻¹ 60,000 min⁻¹ 30,000 min⁻¹

SHANK $\phi 6.0$
10 pcs./pack A-WA B Q BROWN

102,000 min⁻¹ 90,000 min⁻¹ 81,000 min⁻¹ 69,000 min⁻¹ 55,000 min⁻¹ 40,000 min⁻¹ 30,000 min⁻¹ 25,000 min⁻¹

Grinding disk for metal grinding, slitting and cutting. Can easily be attached to mandrels (P.29)
*Mandrel is purchased separately.

SHANK $\phi 6.0$
10 pcs./pack A B Q BLACK

102,000 min⁻¹ 90,000 min⁻¹ 81,000 min⁻¹ 69,000 min⁻¹ 55,000 min⁻¹ 40,000 min⁻¹ 30,000 min⁻¹ 25,000 min⁻¹

SHANK $\phi 3.0$
10 pcs./pack WA

15,000 min⁻¹ 13,000 min⁻¹ 8,000 min⁻¹

SHANK $\phi 2.34$
18 pcs./pack Assorted Set

43401

Set (18 pieces) (Each code No. one piece-pack)	
WA	GC
#80 42011	#100 42101
#80 42012	#100 42102
#80 42013	#100 42103
#80 42014	#100 42104
#80 42016	#100 42106
#80 42018	#100 42108
#120 42047	#100 42109
#120 42048	#100 42110
#120 42050	
#120 42051	

SHANK $\phi 3.0$
18 pcs./pack Assorted Set

43405

Set (18 pieces) (Each code No. one piece-pack)		
WA	PA	GC
#100 42421	#100 42428	#120 42484
#100 42422	#100 42430	#120 42485
#100 42423	#100 42454	#120 42486
#100 42424	#100 42455	#120 42487
#100 42425	#100 42456	#120 42488
#100 42427		#120 42489

SHANK $\phi 3.0$
15 pcs./pack Assorted Set

43410

Set (15 pieces) (Each code No. one piece-pack)			
PAW		PA	
#320 42612	#120 42616	#60 42631	
#220 42613	#120 42617	#60 42632	
#120 42614	#120 42618	#60 42633	
#120 42615	#100 42619	#60 42634	
		#60 42635	
		#60 42636	
		#60 42637	

SHANK $\phi 3.0$
12 pcs./pack Assorted Set

43415

Set (12 pieces) (Each code No. one piece-pack)			
GC			
#100 42681	#100 42688		
#100 42682	#100 42690		
#100 42683	#100 42692		
#100 42684	#100 42694		
#100 42685	#100 42695		
#100 42687	#100 42696		

RUBBERIZED ABRASIVES

SHANK $\phi 1.6$
10 pcs./pack WA Silicon Polisher

1.6 mm shank diameter series. Short type for high-speed rotation. Ideal for grinding very small parts.

SHANK $\phi 2.34$
10 pcs./pack WA GC Green Polisher

2.34 mm shank diameter series. Perfect for precision finishing and deburring.

SHANK $\phi 2.34$
10 pcs./pack WA High Shine Polisher

30,000 min⁻¹ 20,000 min⁻¹ 15,000 min⁻¹ 8,000 min⁻¹ 30,000 min⁻¹ 20,000 min⁻¹ 18,000 min⁻¹

Grit	Color	#120 (GC) Green	#120 (WA) Green	#320 (WA) Green
46111	46115	46121	46125	46131
46135	46151	46155		
46112	46116	46122	46126	46132
46136	46152	46156		
46113	46117	46123	46127	46133
46137	46153	46157		

SHANK $\phi 2.34$
10 pcs./pack WA Silicon Polisher

20,000 min⁻¹ 15,000 min⁻¹ 15,000 min⁻¹ 30,000 min⁻¹

Grit	Color	#180 Gray	#220 Brown	#500 Dark Brown	#1000 Green	#2000 Blue
46311	46315	46322	46326	46331	46342	46346
46313	46316	46323	46327	46334	46343	46347
46314	46317	46324	46328	46335	46344	46348
46318	46321	46329	46332	46338	46345	46349

* 46344, 46345, 46348, 46349 is diameter $\phi 12$.
* 46344, 46345, 46348, 46349 is Total Length 42mm.
* 46311, 46314 is Total Length 50mm.

SHANK $\phi 3.0$
10 pcs./pack WA Power Polisher

3.0 mm shank diameter series. Produces a smoother, better surface finish due to greater pliability versus standard grindstones.

SHANK $\phi 1.6$
10 pcs./pack WA Silicon Polisher

30,000 min⁻¹

Grit	Color	#180 Red	#400 Dark Green	#800 Olive	#1000 Green	#1500 Beige
46601	46611	46621	46631	46641	46651	46661
46602	46612	46622	46632	46642	46652	46662
46603	46613	46623	46633	46643	46653	46663
46604	46614	46624	46634	46644	46654	46664
46605	46615	46625	46635	46645	46655	46665
46606	46616	46626	46636	46646	46656	46666

* 46616 is Total Length 15mm. * 46616 is Total Length 45mm.

SHANK $\phi 3.0$
10 pcs./pack WA Power Polisher

30,000 min⁻¹ 20,000 min⁻¹

Grit	Color	#80 Red	#120 Dark Green	#180 Olive	#220 Green	#320 Brown	#400 Beige
46601	46611	46621	46631	46641	46651	46661	46671
46602	46612	46622	46632	46642	46652	46662	46672
46603	46613	46623	46633	46643	46653	46663	46673
46604	46614	46624	46634	46644	46654	46664	46674
46605	46615	46625	46635	46645	46655	46665	46675
46606	46616	46626	46636	46646	46656	46666	46676

RUBBERIZED ABRASIVES

SHANK $\phi 3.0$
10 pcs./pack WA GC Green Polisher

Abrasive Power ★★★★★☆
Grinding Power ★★★★★☆
Rubber Hardness Medium

Grit	Color	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
#150 (GC)	Green	46721	46731	46741	46751	46761	46771
#220 (WA)	Green	46722	46732	46742	46752	46762	46772
#320 (WA)	Green	46724	46734	46744	46754	46764	46774
#400 (WA)	Green	46723	46733	46743	46753	46763	46773

10 pcs./pack WA High Shine Polisher

Abrasive Power ★★★★★☆
Grinding Power ★★★★★☆
Rubber Hardness Hard

Grit	Color	Part No.	Part No.	Part No.	Part No.
#120	Blue	46802	46812	46822	46832
#220	Green	46805	46815	46825	46835
#320	Violet	46803	46813	46823	46833
#500	Brown	46804	46814	46824	46834

SHANK $\phi 3.0$
10 pcs./pack WA Green Polisher

Abrasive Power ★★★★★☆
Grinding Power ★★★★★☆
Rubber Hardness Medium

Grit	Color	Part No.	Part No.
#120	Green	46861	46871
#180	Green	46862	46872
#320	Green	46863	46873
#400	Green	46864	46874

10 pcs./pack WA Long Reach Power Polisher

Abrasive Power ★★★★★☆
Grinding Power ★★★★★☆
Rubber Hardness Medium

Grit	Color	Part No.	Part No.	Part No.	Part No.
#80	Red	46901	46911	46921	46931
#120	Dark Green	46902	46912	46922	46932
#180	Olive	46903	46913	46923	46933
#220	Green	46904	46914	46924	46934
#320	Brown	46905	46915	46925	46935

SHANK $\phi 3.0$
10 pcs./pack WA Special Rubber Grindstone For High-Speed Rotation (For 60,000min⁻¹)

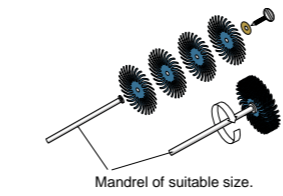
Special rubber grindstones for high speed rotation. Useful for grinding and polishing with IMPULSE & ESPERT 500 (Both Nakanishi Micro-grinder Series) because of long durability at high speeds of 60,000min⁻¹.

- Micro Air Grinder "IMPULSE".....Max. Speed: 60,000min⁻¹
- Brushless Micro-Grinder "ESPERT 500"Max. Speed: 50,000min⁻¹

Abrasive Power ★★★★★☆
Grinding Power ★★★★★☆
Rubber Hardness Medium

Grit	Color	Part No.	Part No.	Part No.	Part No.
#80	Brown	46951	46956	46961	46966
#120	Black	46952	46957	46962	46967
#220	Red	46953	46958	46963	46968
#320	Violet	46954	46959	46964	46969

RUBBERIZED ABRASIVES



Spiral abrasive rubber disk for finishing. Useful for efficient finishing because of the spiral shape. These tools can be used with mandrels (37011,37051, 37052,47042,47043,47044). Please use a mandrel of suitable size.

10 pcs./pack

Grit	Color	Part No.	Grit	Color	Part No.	Grit	Color	Part No.
#120	White	47001	#80	Yellow	47011	#36	Brown	47021
#220	Brown	47002	#220	Brown	47012	#50	Green	47022
#400	Blue	47003	#400	Blue	47013	#80	Yellow	47023
#800	Pink	47004	#800	Pink	47014	#120	White	47024
#3000	Beige	47005	#3000	Beige	47015			
#8000	Green	47006	#8000	Green	47016			

Assorted Set

Set (12 pieces) (47001-47006)	47009	Set (8 pieces) (47021-47024)	47029
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5 pcs./pack

Grit	Color	Part No.
#80	Yellow	47031
#120	White	47032
#220	Brown	47033
#400	Blue	47034
#800	Pink	47035
#3000	Beige	47036
#8000	Green	47037

Assorted Set 47039 (7 pieces) (47031-47037)



6.0 mm shank diameter series. Easy to use rubber grindstone's feature low noise levels and because of increased pliability produce very fine surface finishes.

SHANK $\phi 2.34, \phi 3.0, \phi 6.0$

10 pcs./pack, 3 pcs./pack, 1 pc./pack

Assorted Set

Set (12 pieces) (47001-47006)	47009	Set (8 pieces) (47021-47024)	47029
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SHANK $\phi 6.0$
10 pcs./pack WA Power Polisher

Abrasive Power ★★★★★☆
Grinding Power ★★★★★☆
Rubber Hardness Medium

Grit	Color	Part No.	Part No.	Part No.	Part No.
#80	Red	47501	47511	47521	47531
#120	Dark Green	47502	47512	47522	47532
#220	Green	47503	47513	47523	47533
#320	Brown	47504	47514	47524	47534

RUBBERIZED ABRASIVES

SHANK #6.0
10 pcs./pack WA **Green Polisher**

Abrasive Power ★★★★★☆
Grinding Power ★★★★★
Rubber Hardness Medium

Grit	Color	47551	47561	47571	47581
#120	Green	47551	47561	47571	47581
#220	Green	47552	47562	* 47572	47582
#320	Green	47553	47563	47573	47583
#400	Green	47554	47564	* 47574	47584

*47572,47574 is Total Length 60mm.

SHANK #6.0
10 pcs./pack WA **High Shine Polisher**

Abrasive Power ★★★★★
Grinding Power ★★★★★
Rubber Hardness Hard

Grit	Color	47601	47611	47621	47631
#80	Red	47601	47611	47621	47631
#120	Blue	47602	47612	47622	47632
#220	Green	47603	47613	47623	47633
#320	Violet	47604	47614	47624	47634
#500	Brown	47605	47615	47625	47635

SHANK #2.34
3 pcs./pack

Abrasive Power ★★★★★
Grinding Power ★★★★★
Rubber Hardness Soft

Grit	Color	47751	47752	47753	47754
#120	Black	47751	47752	47753	47754

SHANK #6.0
10 pcs./pack WA **Silicon Wheel Rubber Grindstone**

Abrasive Power ★★★★★☆
Grinding Power ★★★★★☆
Rubber Hardness Soft

Grit	Color	47804	47805	47806	47807
#120	Black	47804	47805	47806	47807
#180	Gray	47802	47803	47804	47805
#240	Brown	47802	47803	47804	47805
#500	Dark Brown	47808	47809	47810	47811
#800	Green	47803	47807	47811	47815

*Use after attaching to mandrel P.29 (No.37011~37051).
*Mandrel needs to be purchased separately.

SHANK #6.0
10 pcs./pack WA **Green Wheel Rubber Grindstone**

Abrasive Power ★★★★★☆
Grinding Power ★★★★★☆
Rubber Hardness Medium

Grit	Color	47841	47851	47861	47871
#120	Green	47841	47851	47861	47871
#220	Green	47842	47852	47862	47872
#320	Green	47843	47853	47863	47873

*Use after attaching to mandrel P.29 (No. 37011~37051).
*Mandrel needs to be purchased separately.

SHANK #2.34
12 pcs./pack **Abrasive Rubber Point Assortment Set**

47901
Set (12 pieces) (Each code No. one piece-pack)

Green Polisher #220	High Shine Polisher #320	Silicon Polisher #500
46112	46212	46312
46122	46216	46316
46152	46232	46342
46156	46236	46346

SHANK #3.0
12 pcs./pack **Abrasive Rubber Point Assortment Set**

47905
Set (12 pieces) (Each code No. one piece-pack)

Power Polisher #180	Green Polisher #150	High Shine Polisher #320
46623	46741	46803
46633	46751	46813
46643	46761	46823
46653	46771	46833

FLAP WHEELS

Nylon fabric fiber flap wheels.
Perfect for light polishing.

SHANK #2.34
10 pcs./pack

Grit	Color	48701	48711
#180	Brown	48701	48711

SHANK #3.0

5 pcs./pack 5 pcs./pack 10 pcs./pack 10 pcs./pack

Grit	Color	48681	48691	48704	48714
#120	Red Brown	48681	48691	48704	48714
#180	Brown	48682	48692	48705	48715
#320	Red Brown	48683	48693	48706	48716
#400	Green	48684	48694	48708	48718
#600	Gray	48685	48695	48707	48717

SHANK #3.0

3 pcs./pack 10 pcs./pack

Grit	Color	48724	48731	48736
#120	Red Brown	48724	48731	48736
#180	Brown	48725	48732	48737
#320	Red Brown	48726	48733	48738
#400	Green	48728	48734	48739
#600	Gray	48727	48735	48740

*Use after attaching to mandrel P.29.
*Mandrel needs to be purchased separately.

SHANK #6.0
3 pcs./pack

Grit	Color	48744	48754
#120	Red Brown	48744	48754
#180	Brown	48745	48755
#320	Red Brown	48747	48757

Soft, sander made of non-woven polyester fabric. High quality, strong fibers prevent loading and are ideal for light polishing.

SHANK #3.0
3 pcs./pack ⚠ Need to be used dry. (Do not use water or grinding solution)

Grit	48783	48793	48803	48813
#120	48783	48793	48803	48813
#240	48785	48795	48805	48815
#400	48786	48796	48806	48816
#600	48787	48797	48807	48817

SHANK #6.0
3 pcs./pack ⚠ Need to be used dry. (Do not use water or grinding solution)

Grit	48823	48833	48843
#120	48823	48833	48843
#240	48825	48835	48845
#400	48826	48836	48846
#600	48827	48837	48847

Diamond / CBN
Carbide Cutters
Specialty Tools
Mounted Points
Rubberized Abrasives
Flap Wheels
Polishing Brushes
Felt Bobs
Abrasive Compounds & Polishing Tools
NSK Exclusive Tools

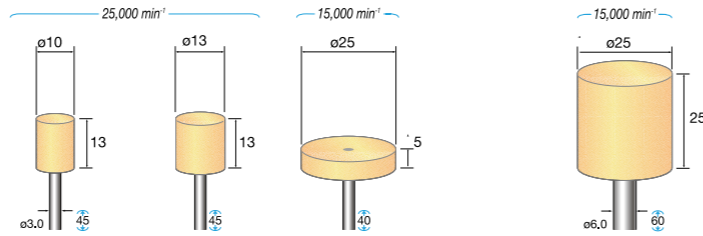
Diamond / CBN
Carbide Cutters
Specialty Tools
Mounted Points
Rubberized Abrasives
Flap Wheels
Polishing Brushes
Felt Bobs
Abrasive Compounds & Polishing Tools
NSK Exclusive Tools

FLAP WHEELS



Nylon fabric polishing tools. High quality fibers are highly resistant to loading and very flexible for polishing irregular shapes.

SHANK $\phi 3.0, \phi 6.0$
10 pcs./pack



Grit	Color	48871	48881	48891	48931
#120	Gray	48871	48881	48891	48931
#240	Purple	48872	48882	48892	48932
#320	Red	48873	48883	48893	48933
#600	Blue	48874	48884	48894	48934
#800	Violet	48875	48885	48895	48935
#1000	Orange	48876	48886	48896	48936
#1500	Yellow	48877	48887	48897	48937

Assorted Set

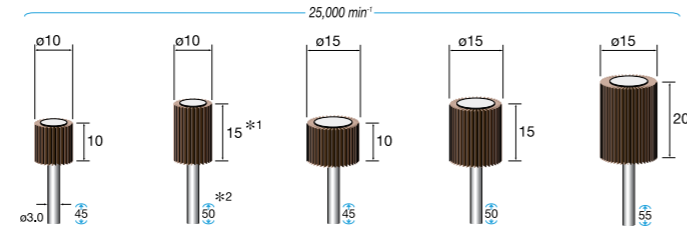
48889
Set (7 pieces)
(48881~48887)

48899
Set (7 pieces)
(48891~48897)



Flap wheels are made from many tightly, evenly packed abrasive cloth affixed to steel mandrels. They are highly effective for finishing of irregular shapes and flat surfaces.

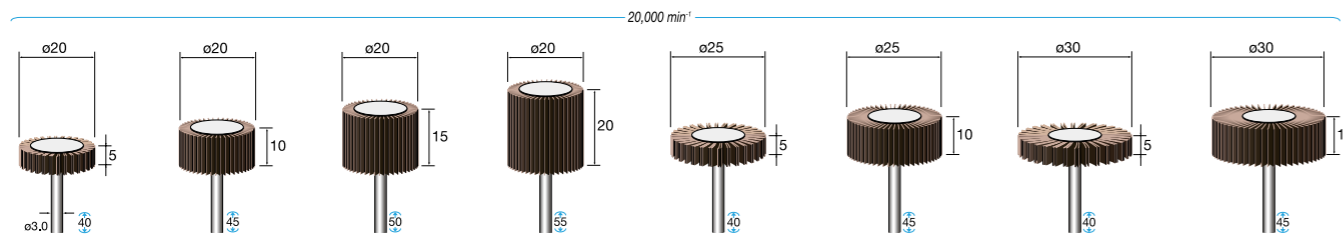
SHANK $\phi 3.0$
5 pcs./pack



Grit	49101	*1:*2 49111	49121	49131
#60	49102	49112	49122	49222
#120	49103	*1:*2 49113	49123	49133
#150	49104	49114	49124	49224
#240	49105	49115	49125	49225
#320	49106	49116	49126	49226
#600	49107	*1:*2 49117	49127	49137

*1: 49111, 49113, 49117 is Head Length 20mm.
*2: 49111, 49113, 49117 is Total Length 55mm.

SHANK $\phi 3.0$
5 pcs./pack



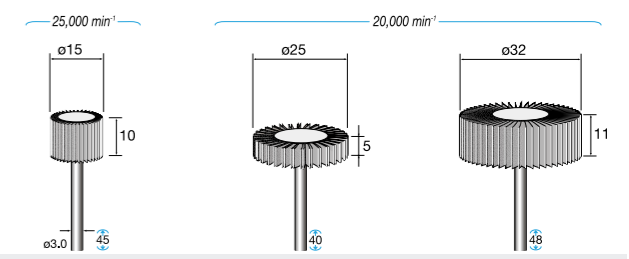
Grit	49141	49151	49161	49171	49181	49191	49201
#80	49142	49152	49232	49162	49172	49182	49202
#120	49143	49153	49233	49163	49173	49183	49203
#150	49144	49154	49234	49164	49174	49184	49204
#240	49145	49155	49235	49165	49175	49185	49205
#320	49146	49156	49236	49166	49176	49186	49206
#600	49147	49157	49237	49167	49177	49187	49207

FLAP WHEELS



Diamond flap wheel made of electroplate diamond abrasive cloths. Perfect for polishing ceramics, glass, FRP, super hard alloys, etc.

SHANK $\phi 3.0$
1 pc./pack



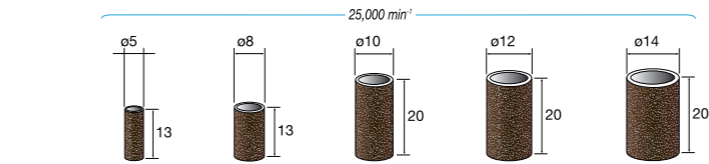
Grit	49303	49313	49323
#120	49304	49314	49324
#240	49305	49315	49325
#400	49306	49316	49326
#600	49307	49317	49327

SHANK $\phi 3.0$



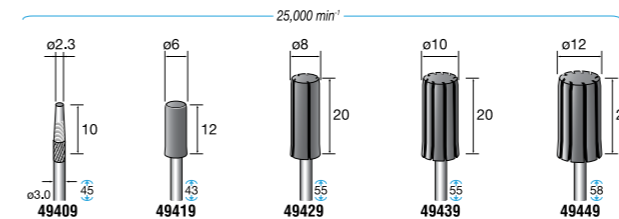
Seamless abrasive cartridges are easily pushed onto a rubber holder and can be quickly changed. They are ideal for finishing wide open areas.

20 pcs./pack **Cartridge (Seamless Abrasives)**



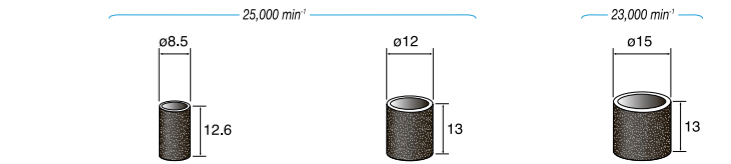
Grit	49401	49411	49421	49431	49441
#120	49402	49412	49422	49432	49442
#180	49403	49413	49423	49433	49443
#240	49404	49414	49424	49434	49444
#320	49405	49415	49425	49435	49445
#400	49406	49416	49426	49436	49446
#600	49407	49417	49427	49437	49447

3 pcs./pack **Cartridge Seamless Abrasives (Special Rubber Holder)**



(49409 is made from metal)

200 pcs./pack **Cartridge (Seamless Abrasives)**



Grit	49461	49471	49481
#120	49462	49472	49482
#180	49463	49473	49483

3 pcs./pack **Cartridge Seamless Abrasives (Screw Type Special Rubber Holder)**



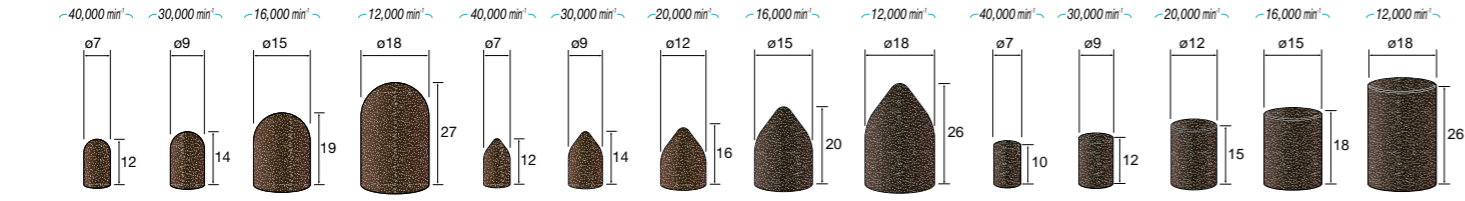
FLAP WHEELS

SHANK $\phi 3.0$



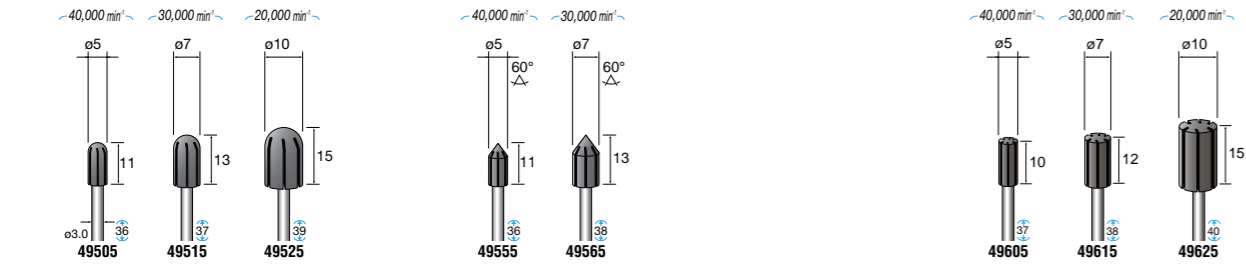
Seamless cap abrasives are easily pushed onto a rubber holder and can be quickly changed. Both the sides and ends can be used for polishing and finishing.

20 pcs./pack Cap (Seamless Abrasives)



Grit														
#60	49502	49531	49541	49551	49561	49571	49581	49591	49601	49612	49622	49632	49642	49641
#150	49503	49532	49542	49552	49562	49572	49582	49592	49602	49613	49623	49633	49643	49643
#320	49503	49533	49543	49553	49563	49573	49583	49593	49603	49613	49623	49633	49643	49643

3 pcs./pack Cap Seamless Abrasives (Special Rubber Holder)



POLISHING BRUSHES

Selection and Use of Polishing Brushes

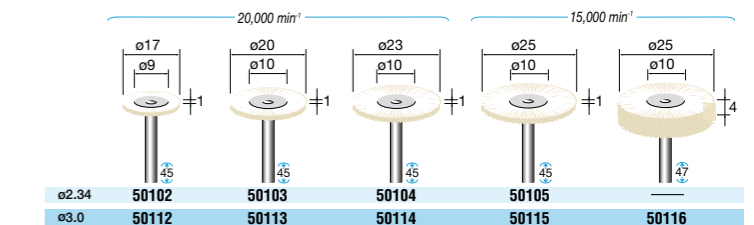
- ◆ **Selection of Brush Materials :**
Brushes should be selected according to the desired finish.
- ◆ **Length and Diameter of Wire :**
Longer brush wires are very flexible and best suited to polishing. Shorter brush wires are suited to heavier cutting. Before using, cut the brush wires to the required length.
- ◆ **Density of Wire Material :**
Higher density wires cut quicker due to their greater rigidity.
- ◆ **Brushing Pressure :**
Using the edge of the applied perpendicular brush to the polishing surface is the most effective method. Use pressure sufficient to deflect the brush tips 1 to 2 mm.
- ◆ **Rotation Direction of Brush :**
Set rotation direction of the micro-grinder considering the lay of the bristles. (Nakanishi micro-grinders can rotate in either direction)
- ◆ **Suitable Brush Rotation Speed :**
Using brushes at less than the maximum allowable speed makes the brush last longer. Confirm suitable rotation speed by test brushing a small area at first.
- ◆ **Features of Polishing Brushes :**
The brushes conform to the polishing surface and result in uniform surface finishes. Brushes are superior tools for finishing compared to other tools.



Polishing brushes with $\phi 2.34$ mm and $\phi 3.0$ mm shanks. They are made from bristle, goat and horse hair.

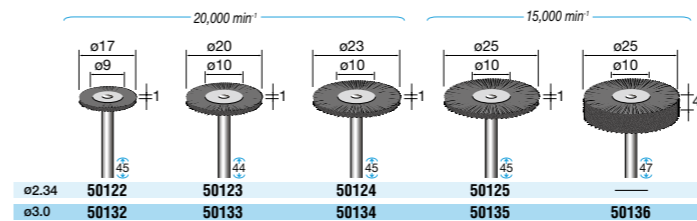
SHANK $\phi 2.34, \phi 3.0$

10 pcs./pack Hard Type • Hardness : Hard • Color : White • Material : Bristle

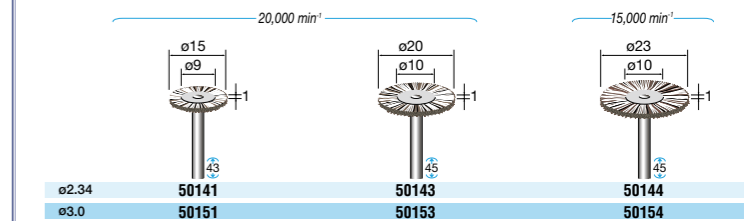


SHANK $\phi 2.34, \phi 3.0$

10 pcs./pack Hard Type • Hardness : Hard • Color : Black • Material : Bristle



10 pcs./pack Medium Type • Hardness : Medium • Color : Brown • Material : Horse Hair

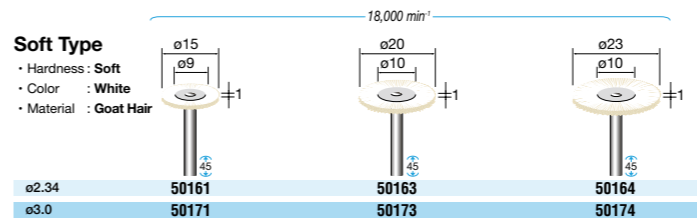


SHANK $\phi 2.34, \phi 3.0$

10 pcs./pack

Soft Type

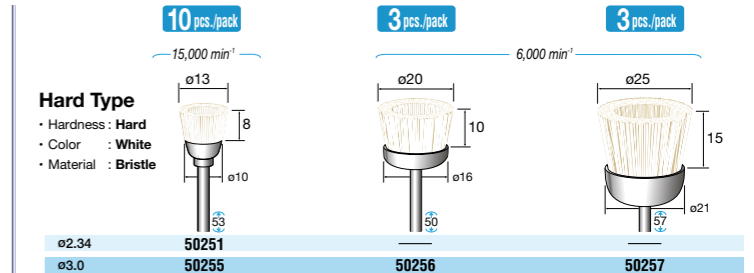
- Hardness : Soft
- Color : White
- Material : Goat Hair



10 pcs./pack

Hard Type

- Hardness : Hard
- Color : White
- Material : Bristle

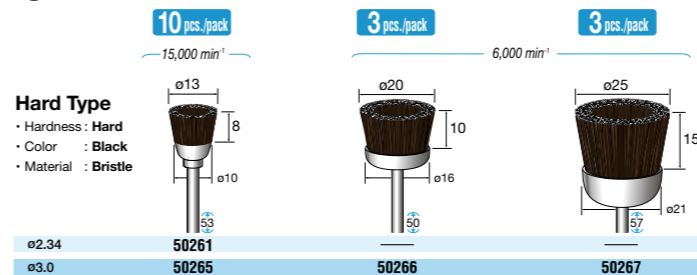


SHANK $\phi 2.34, \phi 3.0$

10 pcs./pack

Hard Type

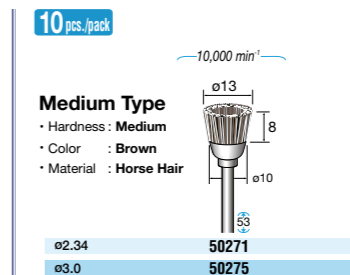
- Hardness : Hard
- Color : Black
- Material : Bristle



10 pcs./pack

Medium Type

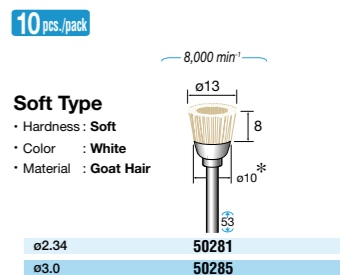
- Hardness : Medium
- Color : Brown
- Material : Horse Hair



10 pcs./pack

Soft Type

- Hardness : Soft
- Color : White
- Material : Goat Hair



* 50285 is diameter $\phi 11$.

*Order in standard package quantities.

POLISHING BRUSHES

SHANK **ø2.34, ø3.0**

10 pcs./pack

Hard Type
 • Hardness: Hard
 • Color: White
 • Material: Bristle

~25,000 min⁻¹ ~16,000 min⁻¹ ~15,000 min⁻¹

ø2.34	50311	50312	50317
ø3.0	50315	50316	50317

10 pcs./pack

Hard Type
 • Hardness: Hard
 • Color: Black
 • Material: Bristle

~25,000 min⁻¹ ~16,000 min⁻¹ ~15,000 min⁻¹

ø2.34	50321	50322	50327
ø3.0	50325	50326	50327

SHANK **ø2.34, ø3.0**

10 pcs./pack

Medium Type
 • Hardness: Medium
 • Color: Brown
 • Material: Horse Hair

~16,000 min⁻¹ ~8,000 min⁻¹

Soft Type
 • Hardness: Soft
 • Color: White
 • Material: Goat Hair

ø2.34	50331	50341
ø3.0	50335	50345



SHANK **ø2.34, ø3.0** **Stainless**

10 pcs./pack

~20,000 min⁻¹ ~15,000 min⁻¹

Wire Diameter 0.1 mm

ø2.34	50412	50413	50414	50415
ø3.0	50422	50423	50424	50425

SHANK **ø3.0** **Stainless**

5 pcs./pack **10 pcs./pack** **5 pcs./pack**

~10,000 min⁻¹ ~15,000 min⁻¹ ~6,000 min⁻¹

0.15 mm 0.1 mm 0.15 mm

t=4mm	50426	50511	50516
t=7mm	50427	50515	50516

SHANK **ø2.34, ø3.0** **Stainless**

10 pcs./pack **10 pcs./pack**

~15,000 min⁻¹ ~10,000 min⁻¹

0.1 mm 0.1 mm

ø2.34	50521	50526
ø3.0	50525	50526

SHANK **ø2.34, ø3.0** **Steel**

10 pcs./pack

~20,000 min⁻¹ ~15,000 min⁻¹

Wire diameter 0.1 mm

ø2.34	50432	50433	50434	50435
ø3.0	50442	50443	50444	50445

SHANK **ø3.0** **Steel**

5 pcs./pack

~10,000 min⁻¹

0.15 mm

t=4mm	50446
t=7mm	50447

SHANK **ø2.34, ø3.0** **Steel**

10 pcs./pack **5 pcs./pack** **10 pcs./pack**

~15,000 min⁻¹ ~6,000 min⁻¹ ~15,000 min⁻¹ ~10,000 min⁻¹

0.1 mm 0.1 mm 0.1 mm 0.1 mm

ø2.34	50531	50536	50541	50546
ø3.0	50535	50536	50545	50546

SHANK **ø2.34, ø3.0** **Brass**

10 pcs./pack

~20,000 min⁻¹ ~15,000 min⁻¹

Wire diameter 0.1 mm

ø2.34	50452	50453	50454	50455
ø3.0	50462	50463	50464	50465

SHANK **ø3.0** **Brass**

5 pcs./pack

~10,000 min⁻¹

0.15 mm

t=4mm	50466
t=7mm	50467

SHANK **ø2.34, ø3.0** **Brass**

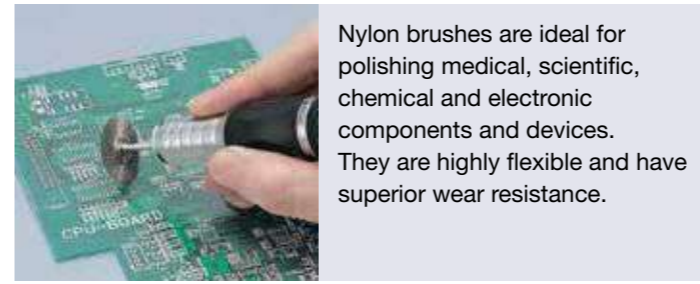
10 pcs./pack **5 pcs./pack** **10 pcs./pack**

~15,000 min⁻¹ ~6,000 min⁻¹ ~15,000 min⁻¹ ~10,000 min⁻¹

0.1 mm 0.1 mm 0.1 mm 0.1 mm

ø2.34	50551	50556	50561	50566
ø3.0	50555	50556	50565	50566

POLISHING BRUSHES



Nylon Brush
Wire diameter [0.2 mm]

Heatproof Nylon Brush
Wire diameter [0.2 mm]

Nylon Brush
contained proof material against static electricity
Wire diameter [0.15 mm]

SHANK **ø2.34, ø3.0**

Nylon Brush Wire diameter [0.2 mm]

10 pcs./pack **10 pcs./pack** **10 pcs./pack** **5 pcs./pack** **10 pcs./pack** **10 pcs./pack**

~20,000 min⁻¹ ~15,000 min⁻¹ ~15,000 min⁻¹ ~6,000 min⁻¹ ~15,000 min⁻¹ ~10,000 min⁻¹

ø2.34	50711	50712	50713	50724	50725	50726
ø3.0	50721	50722	50723	50724	50725	50726

Heatproof Nylon Brush Wire diameter [0.2 mm]

5 pcs./pack

Armid Fiber
 • Melted Temperature : 420°C
 • Continuous Use Limit Temperature : 210°C

~20,000 min⁻¹ ~15,000 min⁻¹ ~15,000 min⁻¹ ~10,000 min⁻¹

ø3.0	50731	50732	50733	50735	50736
------	-------	-------	-------	-------	-------

SHANK **ø3.0**

5 pcs./pack **Nylon Brush** contained proof material against static electricity Wire diameter [0.15 mm]

~20,000 min⁻¹ ~15,000 min⁻¹ ~15,000 min⁻¹ ~10,000 min⁻¹

ø3.0	50741	50742	50743	50745	50746
------	-------	-------	-------	-------	-------



Abrasive Impregnated (GC) Nylon Brush
Wire diameter [0.2-0.5 mm]

Diamond Impregnated Nylon Brush
Wire diameter [0.2-0.5 mm]

SHANK **ø2.34, ø3.0**

5 pcs./pack **Abrasive Impregnated (GC) Nylon Brush** Wire diameter [0.2-0.5 mm]

~15,000 min⁻¹ ~10,000 min⁻¹ ~6,000 min⁻¹ ~15,000 min⁻¹ ~10,000 min⁻¹

ø2.34	51755	51765	51785	51795	51805
ø3.0	51756	51766	51786	51797	51806

1 pc./pack **Diamond Impregnated Nylon Brush** Wire diameter [0.2-0.5 mm]

~15,000 min⁻¹ ~10,000 min⁻¹ ~15,000 min⁻¹ ~10,000 min⁻¹

ø2.34	51011	51031	51041
ø3.0	51012	51032	51042
ø3.0	51013	51033	51043
ø3.0	51014	51034	51044
ø3.0	51015	51035	51045
ø3.0	51016	51036	51046
ø3.0	51017	51037	51047
ø3.0	51018	51038	51048

INSIDE POLISHING BRUSHES



Inside diameter brushes are made from wire fixed to a straight shank. Ideal for polishing internal surfaces, ID threads and curved surfaces.

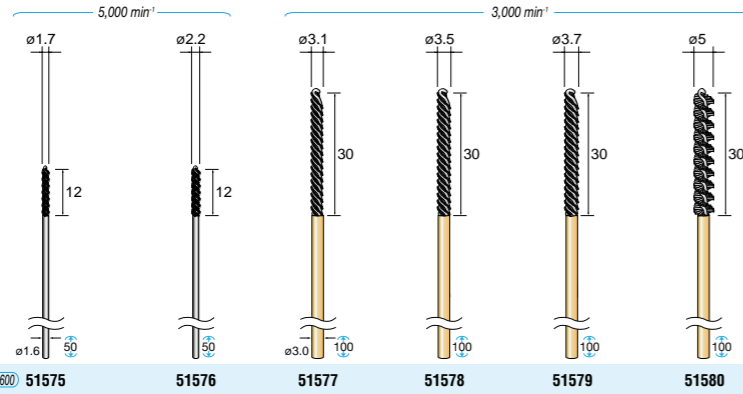


- Abrasive Impregnated Nylon Brush
- Bristle Brush
- Wire Brush

⚠ Do not exceed the maximum rotating speed. Long length brushes are highly susceptible to shank and brush deflection.

SHANK $\phi 1.6, \phi 3.0$

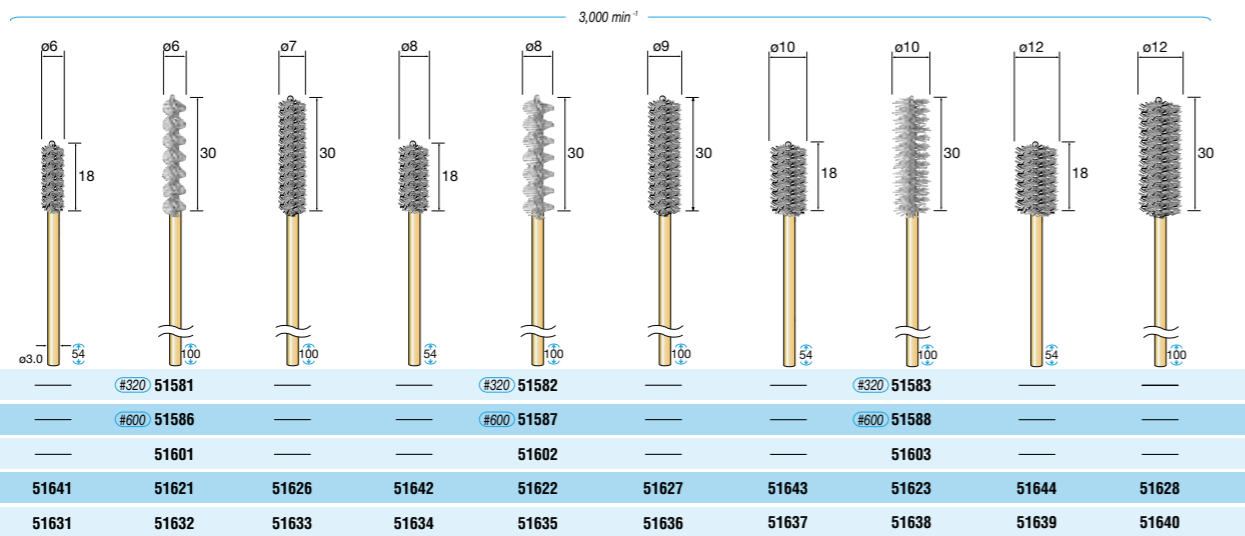
2 pcs./pack



Brush Materials
Abrasive Impregnated Nylon Brush (G/C)

SHANK $\phi 3.0$

1 pc./pack



Brush Materials
Abrasive Impregnated Nylon Brush (G/C)

Abrasive Impregnated Nylon Brush (G/C)

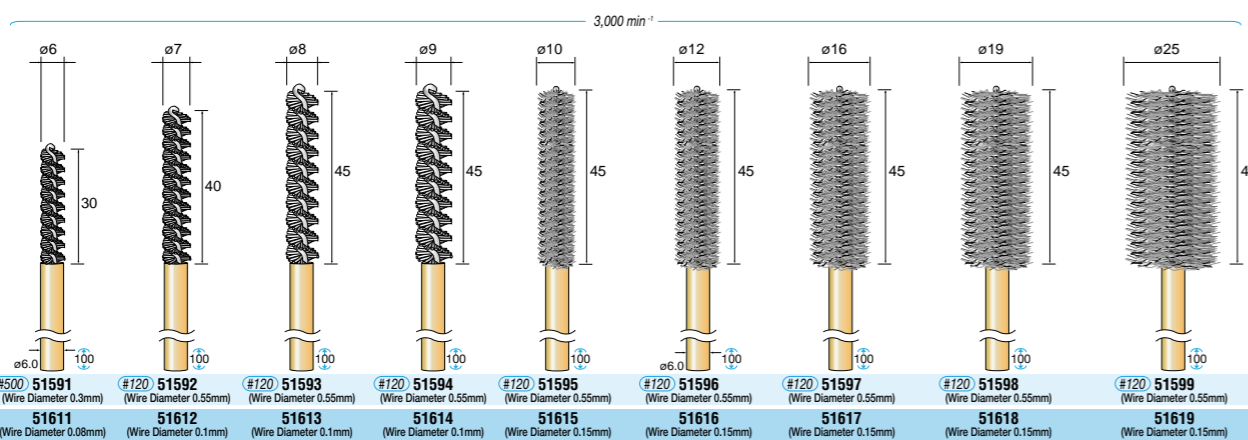
Bristle Brush (Quality: Bristle / Hard / Black)

Wire Brush (Stainless Wire: Wire Diameter 0.1mm)

Wire Brush (Stainless Wire: Wire Diameter 0.15mm)

SHANK $\phi 6.0$

1 pc./pack



Brush Materials
Abrasive Impregnated Nylon Brush (G/C)

Wire Brush (Stainless Wire)

WIRE LAPPING TOOLS

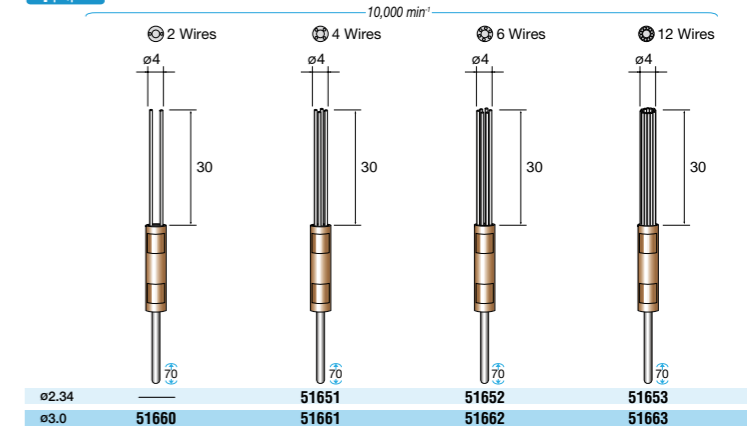


Wire lapping tools are made from banded piano wire. Ideal for burr removal and finishing of metals and plastics. They are also suited to polishing with abrasive compounds.

⚠ Do not exceed the maximum rotating speed. Long length brushes are highly susceptible to shank and brush deflection.

SHANK $\phi 2.34, \phi 3.0$

1 pc./pack



Brush Materials
Wire Lapping Tool

Diamond / CBN
Carbide Cutters
Specialty Tools
Mounted Points
Rubberized Abrasives
Flap Wheels
Polishing Brushes
Felt Bobs
Abrasive Compounds & Polishing Tools
NSK Exclusive Tools

Diamond / CBN

Carbide Cutters

Specialty Tools

Mounted Points

Rubberized Abrasives

Flap Wheels

Polishing Brushes

Felt Bobs

Abrasive Compounds & Polishing Tools

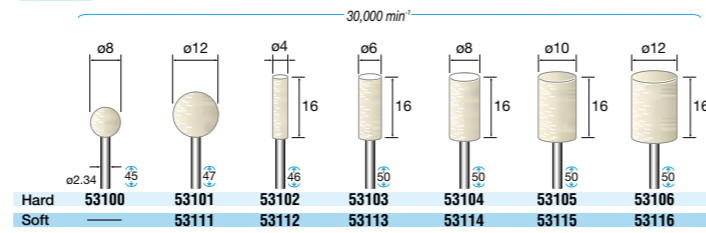
NSK Exclusive Tools

FELT BOBS

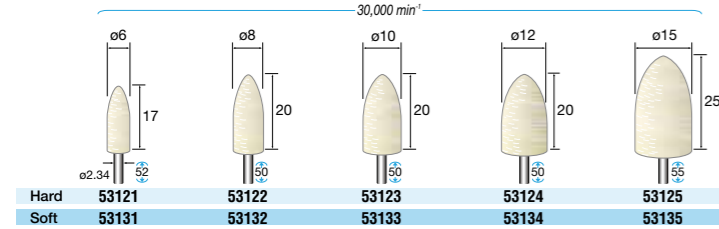


Felt bobs are made from 100% high quality wool. They are designed for superior finishing with abrasive compounds or with their embedded abrasives.

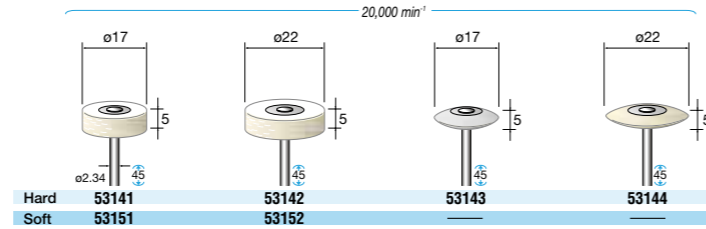
SHANK ϕ 2.34
10 pcs./pack



SHANK ϕ 2.34
10 pcs./pack

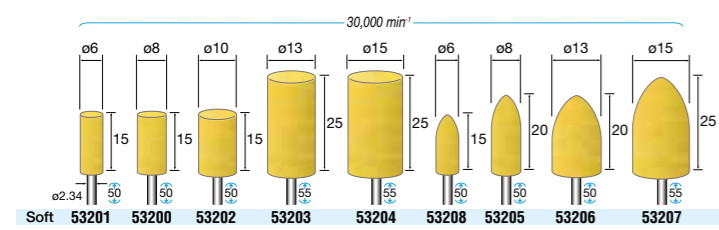


10 pcs./pack

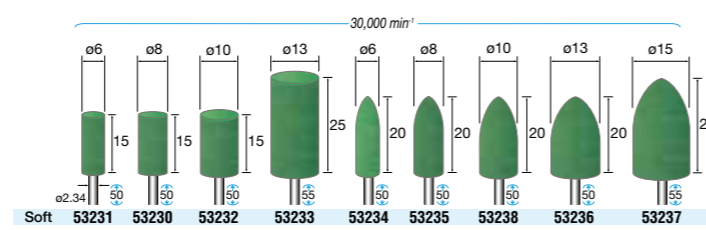


SHANK ϕ 2.34
10 pcs./pack

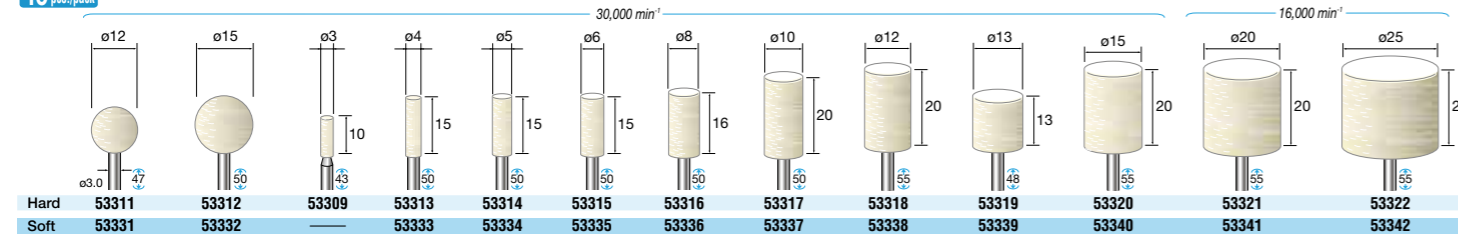
Yellow Polishing Felt Bobs WA (Alumina) Embedded Type



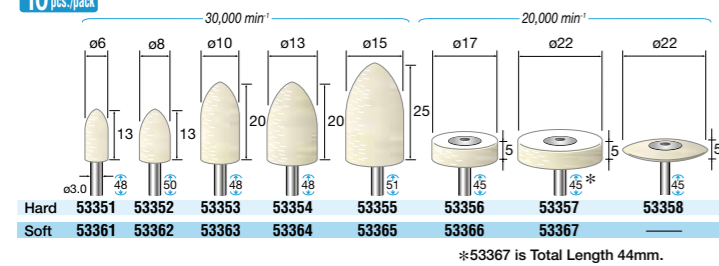
Green Polishing Felt Bobs Chromium Oxide (Blue Rouge) Embedded Type



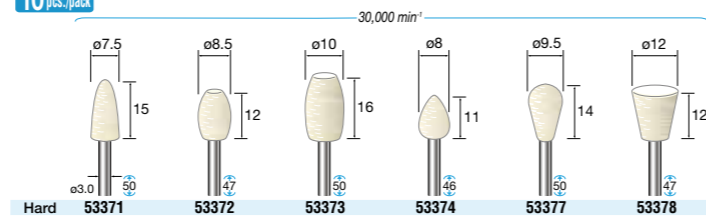
SHANK ϕ 3.0
10 pcs./pack



SHANK ϕ 3.0
10 pcs./pack

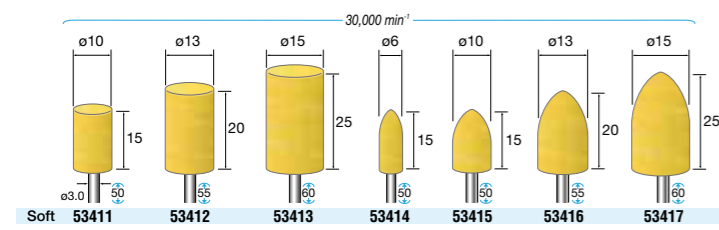


10 pcs./pack

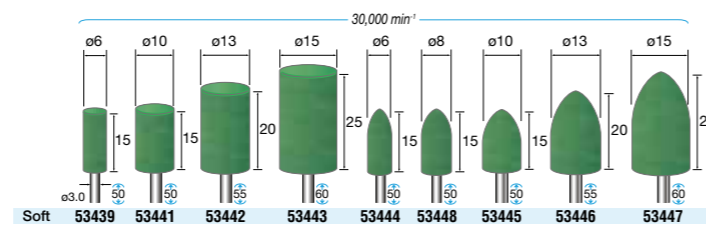


SHANK ϕ 3.0
10 pcs./pack

Yellow Polishing Felt Bobs WA (Alumina) Embedded Type

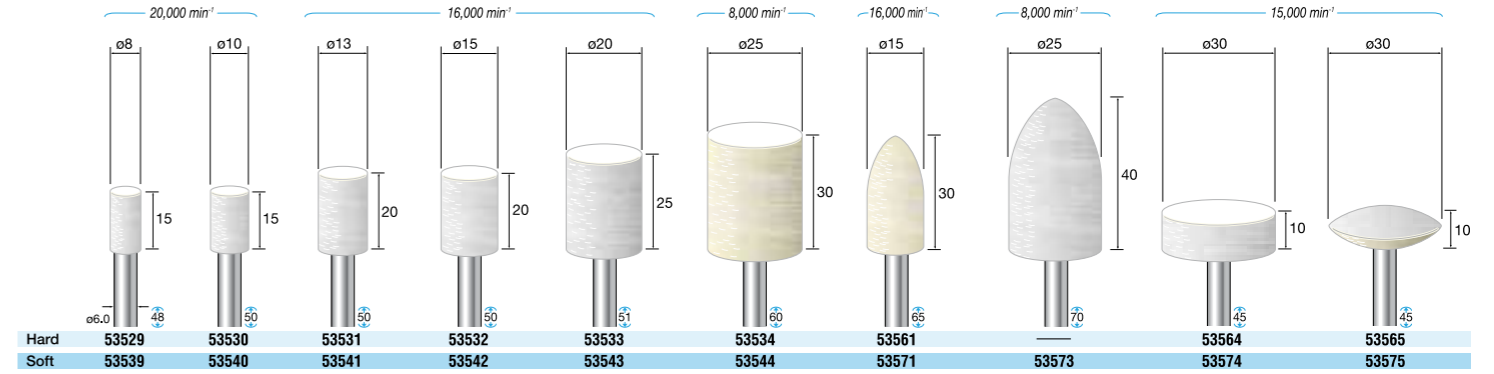


Green Polishing Felt Bobs Chromium Oxide (Blue Rouge) Embedded Type



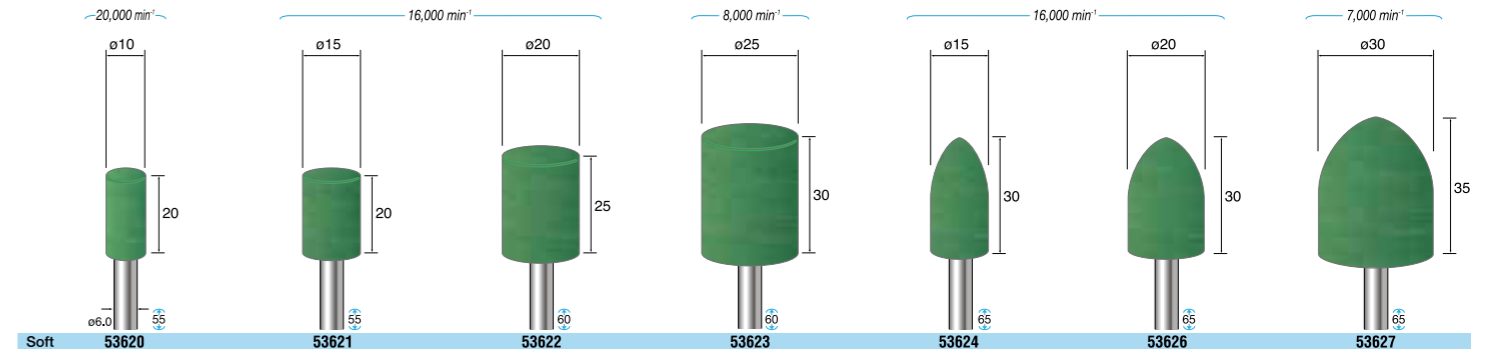
FELT BOBS

SHANK ϕ 6.0
5 pcs./pack

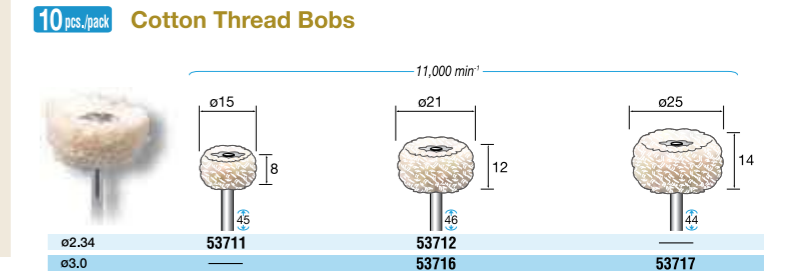


SHANK ϕ 6.0
5 pcs./pack

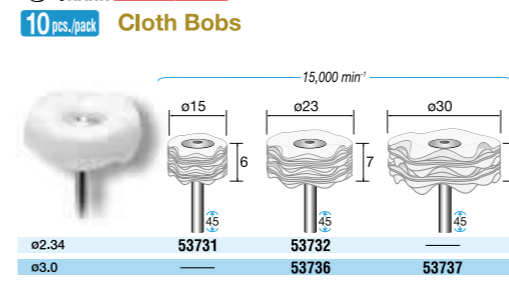
Green Polishing Felt Bobs Chormium Oxide (Blue Rouge) Embedded Type.



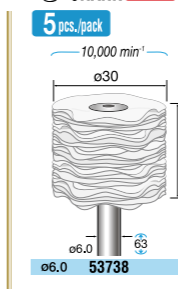
SHANK ϕ 2.34, ϕ 3.0
10 pcs./pack



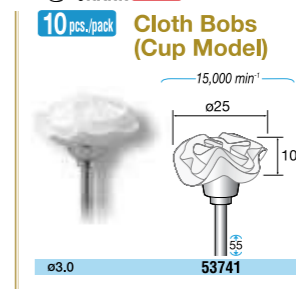
SHANK ϕ 2.34, ϕ 3.0
10 pcs./pack



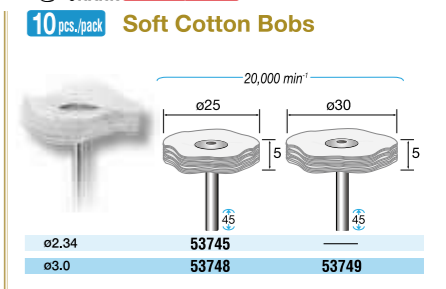
SHANK ϕ 6.0
5 pcs./pack



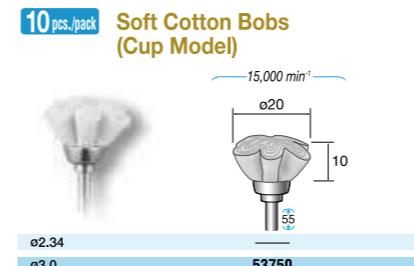
SHANK ϕ 3.0
10 pcs./pack



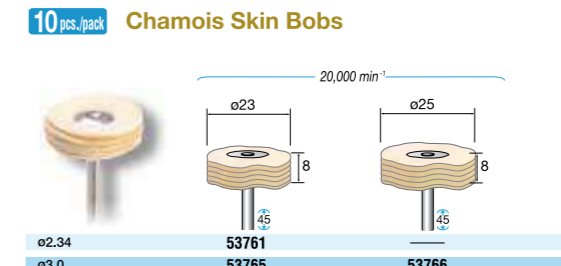
SHANK ϕ 2.34, ϕ 3.0
10 pcs./pack



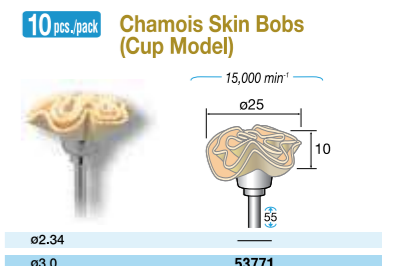
SHANK ϕ 2.34, ϕ 3.0
10 pcs./pack



10 pcs./pack



10 pcs./pack



Diamond / CBN
Carbide Cutters
Specialty Tools
Mounted Points
Rubberized Abrasives
Flap Wheels
Polishing Brushes
Felt Bobs
Abrasive Compounds & Polishing Tools
NSK Exclusive Tools

Diamond / CBN

Carbide Cutters

Specialty Tools

Mounted Points

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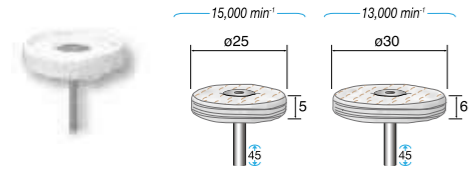
Abrasive Compounds & Polishing Tools

NSK Exclusive Tools

FELT BOBS

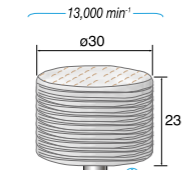
SHANK $\phi 2.34, \phi 3.0$

5 pcs./pack Cotton Bobs



$\phi 2.34$	53782	53783
$\phi 3.0$	53787	53788

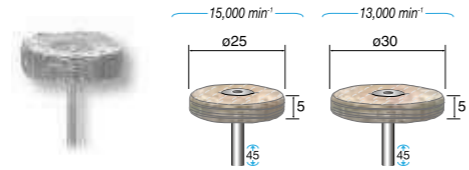
3 pcs./pack



53790

5 pcs./pack Dark Brown Cotton Bobs

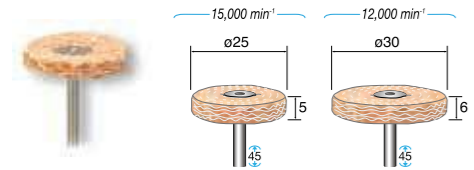
For metal semi-finishing. Using polishing materials.



$\phi 2.34$	53792	53793
$\phi 3.0$	53797	53798

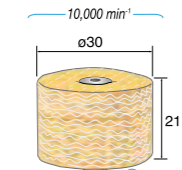
SHANK $\phi 2.34, \phi 3.0$

5 pcs./pack Sisal Bobs



$\phi 2.34$	53802	53803
$\phi 3.0$	53807	53808

3 pcs./pack



53810

SHANK $\phi 3.0$

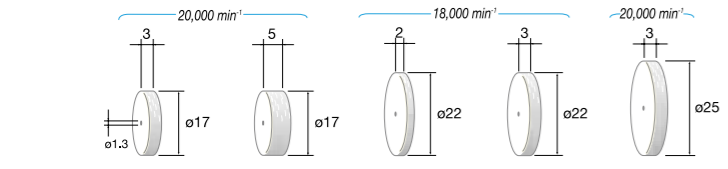
7 pcs./pack Polishing Piled Bobs Assorted Set



53811	
Set (7 pieces) (Each code No. one piece-pack)	
Soft	Hard
53717	53787
53736	53797
53757	53807
53766	

SHANK $\phi 1.3$

10 pcs./pack

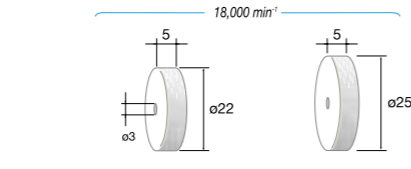


Hard	53901	53902	53903	53904	53921
Soft	53911	53912	53913	53914	53925

*Use after attaching to mandrel P.29 (No. 37011, 37012, 37015, 37051).
*Mandrel needs to be purchased separately.

SHANK $\phi 3.0$

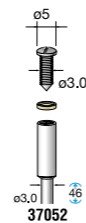
10 pcs./pack



Hard	53907	53923
Soft	53917	53927

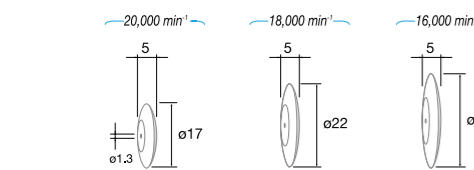
*Use after attaching to mandrel (No. 37052).
*Mandrel needs to be purchased separately.

3 pcs./pack Mandrels



SHANK $\phi 1.3$

10 pcs./pack Knife Edge Type



Hard	53931	53932	53933
------	-------	-------	-------

*Use after attaching to mandrel P.29 (No. 37011, 37012, 37015, 37051).
*Mandrel needs to be purchased separately.

SHANK $\phi 2.34$

16 pcs./pack Polishing Piled Bobs Assorted Set



54101			
Set (16 pieces) (Each code No. one piece-pack)			
53101	53123	53201	53712
53103	53124	53205	53732
53105	53142	53232	53751
53121	53144	53235	53761

SHANK $\phi 3.0$

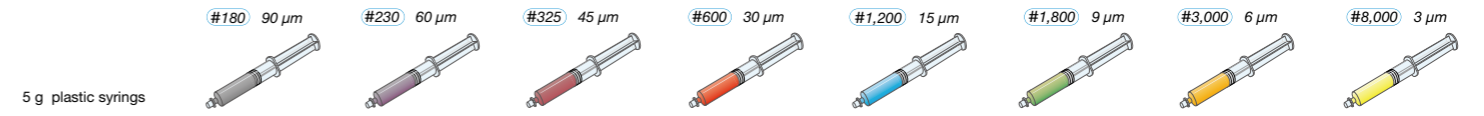
16 pcs./pack Polishing Piled Bobs Assorted Set



54105			
Set (16 pieces) (Each code No. one piece-pack)			
53312	53351	53412	53716
53316	53353	53416	53736
53318	53355	53442	53741
53320	53357	53446	53765

ABRASIVE COMPOUNDS & POLISHING TOOLS

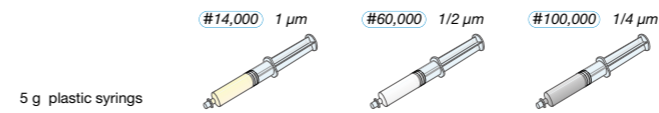
1 pc./pack Diamond Compounds



Standard	Water Soluble	55101 (Black)	55102 (Violet)	55103 (Brown)	55104 (Red)	55106 (Blue)	55108 (Green)	55109 (Orange)	55110 (Yellow)
	Oil-Based	55121 (Black)	55122 (Violet)	55123 (Brown)	55124 (Red)	55126 (Blue)	55128 (Green)	55129 (Orange)	55130 (Yellow)
Heavy	Oil-Based		55242 (Violet)	55243 (Brick-red)	55244 (Red)	55246 (Blue)	55248 (Green)	55249 (Orange)	55250 (Yellow)

The color in the illustration is the standard type.
* The micron grades indicate median range of grain diameters. * We recommend weak solutions for grinding, polishing, etc.

1 pc./pack Diamond Compounds



Standard	Water Soluble	55111 (Ivory)	55112 (White)	55113 (Gray)
	Oil-Based	55131 (Ivory)	55132 (White)	55133 (Gray)

The color in the illustration is the standard type.
* The micron grades indicate median range of grain diameters.
* We recommend weak solutions for grinding, polishing, etc.

1 pc./pack Diamond Micron Powder

Micron Range μm (Grit)	10 Carats	50 Carats	Micron Range μm (Grit)	10 Carats	50 Carats
80-100 (#200)	55301	55311	6-12 (#1,800)	55306	55316
40-60 (#400)	55302	55312	4-6 (#3,000)	55307	55317
30-40 (#600)	55303	55313	2-4 (#8,000)	55308	55318
20-30 (#800)	55304	55314	0-2 (#14,000)	55309	55319
10-20 (#1,200)	55305	55315	0-1 (#28,000)	55310	55320

1 pc./pack Diamond Compound, Weak Solution



Water Soluble 500 cc	55331
Oil-based 500 cc	55332

2 pcs./pack Polishing Compound (Solid Type)

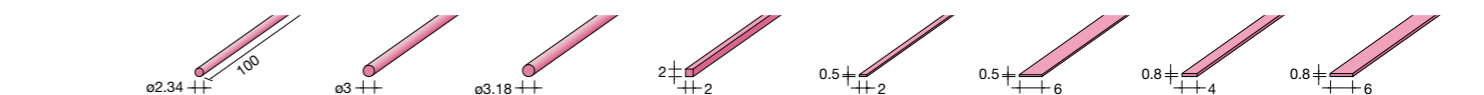


		Applications
For Metals	Alumina for metal pre-finishing (white rouge)	55341 \blacklozenge Aluminum, stainless steel, brass, chrome, etc.
	Tripoli for metal pre-finishing (red rouge)	55342 \blacklozenge Iron, aluminum, etc.
	Chrome oxide for metal finishing (blue rouge)	55343 \blacklozenge Precious metals, aluminum, stainless steel, brass, copper alloys, etc.
For Resins	For resin pre-finishing (white rouge)	55345 \blacklozenge For synthetic resins and coated surfaces
	For resin finishing (white rouge)	55346 \blacklozenge For synthetic resins and acrylics for coated surfaces



The latest technology in polishing. These stones are very flexible and can be ground to shape. They are very long lasting and will hold the desired shape even after long use.

1 pc./pack Ceramic Fiber Grindstone (Total Length 100 mm)



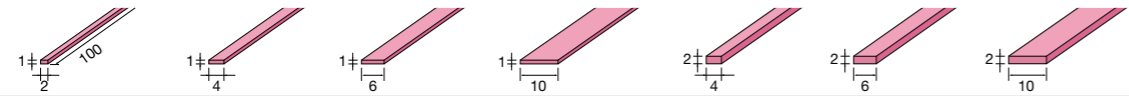
Grit	Color						
#180	Ivory	55514	55534	55554	55584	55604	
#300	Brown		55535	55555	55585	55605	
#400	Orange	55516	55526	55536	55556	55576	55596
#600	Black			55537	55557	55587	55607
#800	Blue			55538		55588	
#1000	White	55519	55529	55539	55559	55579	55599
#1200	Pink	55520	55530	55540	55560	55580	55600

Diamond / CBN
Carbide Cutters
Specialty Tools
Mounted Points
Rubberized Abrasives
Flap Wheels
Polishing Brushes
Felt Bobs
Abrasive Compounds & Polishing Tools
NSK Exclusive Tools

Diamond / CBN
Carbide Cutters
Specialty Tools
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Polishing Brushes
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Abrasive Compounds & Polishing Tools
NSK Exclusive Tools

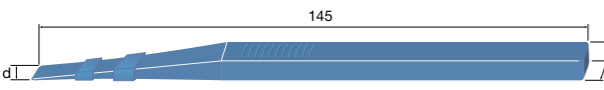
ABRASIVE COMPOUNDS & POLISHING TOOLS

1 pc./pack Ceramic Fiber Grindstone (Total Length 100 mm)



Grit	Color	100 mm				50 mm			
#180	Ivory	55614	---	---	---	55744	55764	---	---
#300	Brown	---	---	---	---	55745	55765	---	---
#400	Orange	55616	55626	55656	55686	55726	55766	---	---
#600	Black	55617	---	---	---	55747	55767	---	---
#800	Blue	---	---	---	---	55748	55768	---	---
#1000	White	---	55629	55659	55689	55729	55749	55769	---
#1200	Pink	---	55630	55660	55690	55730	55750	55770	---

2 pcs./pack Special Hand Holder For Ceramic Fiber Grindstones




Flat (hold thickness 0.5~2 mm) Weight: 13 g

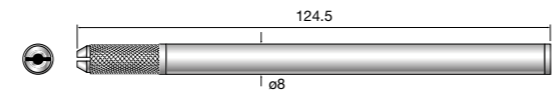
d	Part No.
For 2 mm width	55461
For 4 mm width	55462
For 6 mm width	55463
For 10 mm width	55464

4 Types
(for 2, 4, 6 and 10 mm width) 55465

Abrasive Stone Sticks with high quality performance. They are highly effective for polishing.



1 pc./pack Rounded Hand Holder (Pin Vice)

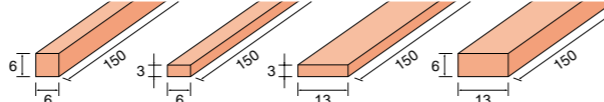


Weight: 22 g

• Attachable shank diameter is $\phi 2.7\text{--}3.0$ mm

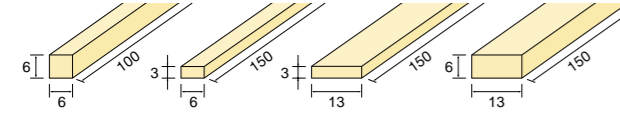
$\phi 3$ mm **57631**

6 pcs./pack WA Abrasive Fiber Grindstone



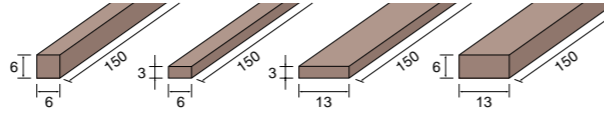
Grit	150 mm			
#150	56156	56161	56166	---
#220	56122	56157	56162	56167
#320	56123	56158	56163	56168
#400	56124	56159	56164	56169
#600	56125	56160	56165	56170

6 pcs./pack WA Abrasive Fiber Grindstone



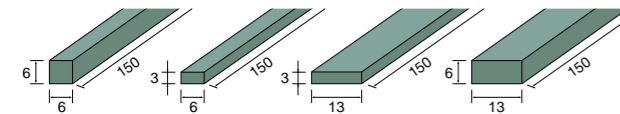
Grit	100 mm			
#120	56231	56241	56245	---
#180	56232	56242	56246	---
#220	56218	56233	56243	56247
#320	56234	56244	56248	---

6 pcs./pack WA Abrasive Fiber Grindstone



Grit	150 mm			
#100	56341	56361	56371	56381
#120	56342	56362	56372	56382
#180	56343	56363	56373	56383
#320	56345	56365	56375	56385
#600	56346	56366	56376	56386


6 pcs./pack GC/Sic Abrasive Fiber Grindstone



Grit	150 mm			
#240	56417	56432	56437	56442
#320	56418	56433	56438	56443
#400	56419	56434	56439	56444
#600	56420	56435	56440	56445

1 pc./pack Electroplated Diamond Sheet (Dot-Pattern Electroplated Type)

• Strongly bonded diamond-electroplated nickel alloy sheets.

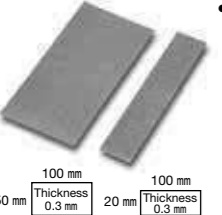


Grit	Grain Diameter	Color	Part No.
# 60	250 μ	Green	56701
# 120	125 μ	Black	56702
# 200	74 μ	Red	56703
# 400	40 μ	Yellow	56704
# 800	20 μ	Gray	56705

Adhesive Back

1 pc./pack Electroplated Diamond Sheet (Fully Electroplated Type)

• Ultra-thin copper alloy is used for base material. Diamond abrasive is electroplated on the full sheet.




Grit	Size (mm)		Grit	Size (mm)	
	100 x 20	100 x 50		100 x 20	100 x 50
# 120	56731	56741	# 600	56736	56746
# 150	56732	56742	# 800	56737	56747
# 200	56733	56743	# 1,200	56738	56748
# 300	56734	56744	# 1,800	---	56749
# 400	56735	56745	---	---	---

Adhesive Back

ABRASIVE COMPOUNDS & POLISHING TOOLS

1 pc./pack Diamond Lapping Film (Film Coated Type)

• Fine grain diamond is coated on a strong polyester film.




Grit	Grain Diameter	Color	Part No.
# 400	40 μ	Ivory	56802
# 800	25 μ	Ivory	56804
# 1,000	15 μ	Ivory	56805
# 1,500	12 μ	Ivory	56806
# 3,000	6 μ	Ivory	56807

Adhesive Back

1 pc./pack Felt Sheet

• Ideal for fine finishing with various abrasive compounds.




Thickness	Part No.
1 mm	56901
2 mm	56902
3 mm	56903

Adhesive Back

1 pc./pack Abrasive Embedded Felt Sheet


• Chrome oxide (green rouge) is embedded into the felt sheet.



Size: (A4)

Thickness	Part No.
1 mm	56911

5 pcs./pack Lapping Film Sheet



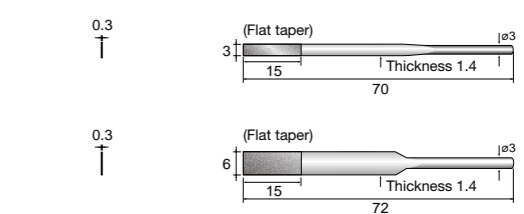
Grit	Grain Diameter	Color	Part No.
# 400	40 μ	Ivory	56962
# 600	30 μ	Green	56963
# 800	20 μ	Blue	56964
# 1,000	15 μ	Purple	56965
# 1,500	10 μ	Yellow Ocher	56967
# 3,000	5 μ	Yellow	56968
# 6,000	2 μ	Light Blue	56969
# 10,000	1 μ	Yellow	56970

Adhesive Back

Diamond files for precise finishing. Highly durable, they retain sharpness even after long use.

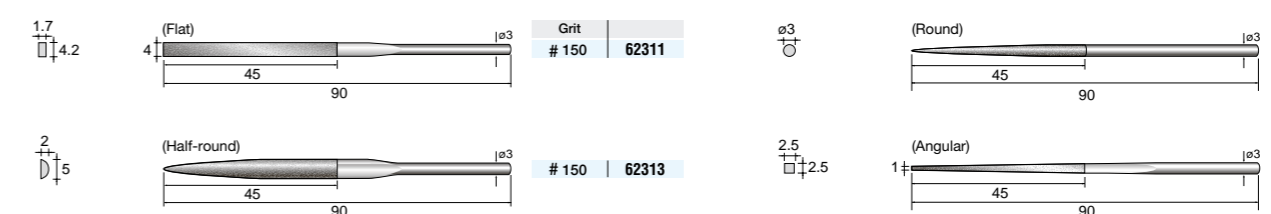


SHANK $\phi 3.0$ 1 pc./pack Diamond Files (Flat Taper)



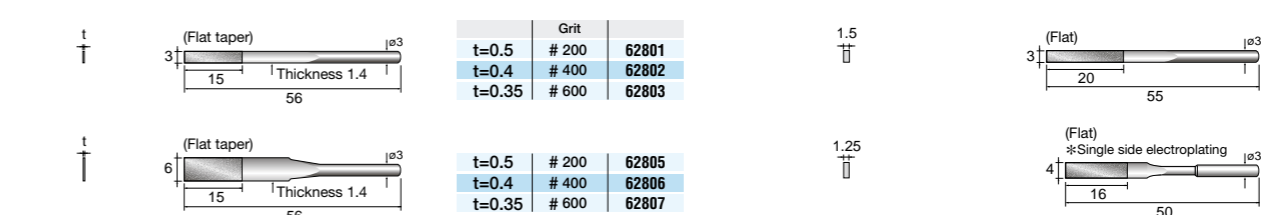
Grit	Part No.
# 200	62301
# 400	62302
# 600	62303
# 200	62305
# 400	62306
# 600	62307

SHANK $\phi 3.0$ 1 pc./pack Diamond Files (Flat, Half-Round, Round, Angular)



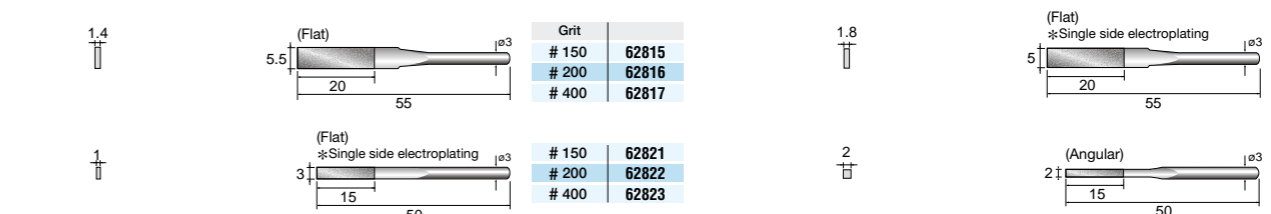
Grit	Part No.
# 150	62311
# 150	62315
# 150	62313
# 150	62317

SHANK $\phi 3.0$ 1 pc./pack Diamond Files (Flat Taper, Flat)



Grit	Part No.
t=0.5 # 200	62801
t=0.4 # 400	62802
t=0.35 # 600	62803
t=0.5 # 200	62805
t=0.4 # 400	62806
t=0.35 # 600	62807
# 150	62811
# 200	62812
# 400	62813
# 100	62814

SHANK $\phi 3.0$ 1 pc./pack Diamond Files (Flat, Angular)



Grit	Part No.
# 150	62815
# 200	62816
# 400	62817
# 150	62821
# 200	62822
# 400	62823
# 150	62825
# 200	62826
# 400	62827
# 150	62831
# 200	62832
# 400	62833

Diamond / CBN
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NSK Exclusive Tools

ABRASIVE COMPOUNDS & POLISHING TOOLS

SHANK $\phi 3.0$
1 pc./pack **Diamond Files (Round, Round taper)**

$\phi 1$	(Round)	Grit	
		# 100	62840
		# 150	62841
		# 200	62842
		# 400	62843
$\phi 2$	(Round)	Grit	
		# 150	62845
		# 200	62846
		# 400	62847
$\phi 3$	(Round)	Grit	
		# 150	62851
		# 200	62852
		# 400	62853
$\phi 0.5$	(Round Taper)	Grit	
		# 150	62855
		# 200	62856
		# 400	62857

SHANK $\phi 3.0$
1 pc./pack **Diamond Files (Half-Round, Triangular)**

$\frac{1.5}{\phi}$	(Half-round)	Grit	
		# 150	62865
		# 200	62866
		# 400	62867
$\frac{2}{\phi}$	(Half-round)	Grit	
		# 150	62871
		# 200	62872
		# 400	62873
$\frac{2.6}{\nabla}$	(Triangular)	Grit	
		# 150	62881
		# 200	62882
		# 400	62883



SHANK $\phi 3.0$
1 pc./pack **Diamond Files (Flat Taper)**

$\frac{0.6}{\nabla}$	(Flat taper) Thickness 1.7	Grit	
		# 200	57101
		# 400	57102
		# 600	57103
$\frac{0.6}{\nabla}$	(Flat taper) Thickness 1.7	Grit	
		# 200	57104
		# 400	57105
		# 600	57106

SHANK $\phi 3.0$
1 pc./pack **Diamond Files (Flat Taper, Thin Flat, Flat)**

$\frac{0.6}{\nabla}$	(Flat taper) Thickness 1.7	Grit	
		# 200	57107
		# 400	57108
		# 600	57109
$\frac{0.5}{\nabla}$	(Thin flat)	Grit	
		# 150	57110
		# 200	57111
		# 400	57112
$\frac{1.4}{\nabla}$	(Flat)	Grit	
		# 120	57116
		# 200	57117
		# 400	57118

SHANK $\phi 1.0, \phi 2.0, \phi 3.0, \phi 3.4$
1 pc./pack **Diamond Files (Round)**

$\phi 1$	(Round)	Grit	
		# 200	57131
		# 400	57132
$\phi 2$	(Round)	Grit	
		# 200	57133
		# 400	57134
$\phi 3$	(Round)	Grit	
		# 120	57135
		# 200	57136
		# 400	57137
$\phi 3.5$	(Round)	Grit	
		# 120	57138
		# 200	57139

SHANK $\phi 3.0, \phi 3.4$
1 pc./pack **Diamond Files (Half-Round)**

$\frac{2}{\nabla}$	(Half-round)	Grit	
		# 120	57141
		# 200	57142
$\frac{2}{\nabla}$	(Half-round)	Grit	
		# 120	57144
		# 200	57145

SHANK $\phi 3.0, \phi 3.4$
1 pc./pack **Diamond Files (Angular)**

$\frac{2.5}{\nabla}$	(Angular)	Grit	
		# 120	57151
		# 200	57152
$\frac{3}{\nabla}$	(Angular)	Grit	
		# 200	57154

ABRASIVE COMPOUNDS & POLISHING TOOLS

SHANK $\phi 3.0, \phi 3.4$
1 pc./pack **Diamond Files (Triangular, Elliptical, Blade)**

$\frac{3.5}{\nabla}$	(Triangular)	Grit	
		# 120	57155
		# 200	57156
$\frac{4}{\nabla}$	(Triangular)	Grit	
		# 100	57157
		# 200	57158
$\frac{1.7}{\nabla}$	(Elliptical)	Grit	
		# 120	57160
		# 200	57161
$\frac{1.7}{\nabla}$	(Blade)	Grit	
		# 120	57162
		# 200	57163

SHANK $\phi 3.0$
1 pc./pack **Diamond Files (Sickle Type)**
(Flat, Round, Half-Round, Angular, Triangular)

$\frac{6}{\nabla}$	(Flat)	Grit	
		# 150	57171
$\frac{6}{\nabla}$	(Round)	Grit	
		# 150	57173
$\frac{1.5}{\nabla}$	(Half-round)	Grit	
		# 150	57175
$\frac{2.5}{\nabla}$	(Angular)	Grit	
		# 150	57177
$\frac{3.5}{\nabla}$	(Triangular)	Grit	
		# 150	57179

SHANK $\phi 3.0, \phi 3.5$
3 pcs./pack **Precision Finishing Files (Flat, Round, Angular, Triangular, Half-Round)**

Total length The length of file	140mm		180mm	
	Standard	Fine	Standard	Standard
1.3(1.5) $\frac{5.1(6)}{\nabla}$	57301	57311	57321	
3(3.5) $\frac{\phi 3}{\nabla}$	57302	57312	57322	
2.5(2.7) $\frac{\phi 3}{\nabla}$	57303	57313	57323	

Total length The length of file	140mm		180mm	
	Standard	Fine	Standard	Standard
3.3(4.1) $\frac{\phi 3}{\nabla}$	57304	57314	57324	
2 $\frac{\phi 3}{\nabla}$	57305	57315	57325	

5 files-pack set

- Standard (total length 140mm) set (No.57301-No.57305 : 1 pc. each) 57309
- Fine (total length 140mm) set (No.57311-No.57315 : 1 pc. each) 57319
- Standard (total length 180mm) set (No.57321-No.57325 : 1 pc. each) 57329

* (Figures) means dimensions for standard file total length 180mm.

SHANK $\phi 3.0$
3 pcs./pack **Rasps for plastics and wood working (Flat, Round, Angular, Triangular, Half-Round)**

$\frac{2.2}{\nabla}$	(Flat)	57401
$\frac{3.8}{\nabla}$	(Round)	57402
$\frac{3.3}{\nabla}$	(Angular)	57403
$\frac{3.8}{\nabla}$	(Triangular)	57404
$\frac{2.3}{\nabla}$	(Half-round)	57405

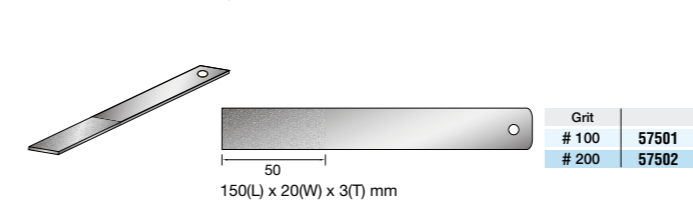
5 files-pack set

- Rasps set for plastics and wood working for plastics and wood working (No.57401-No.57405 : 1 pc. each) 57410

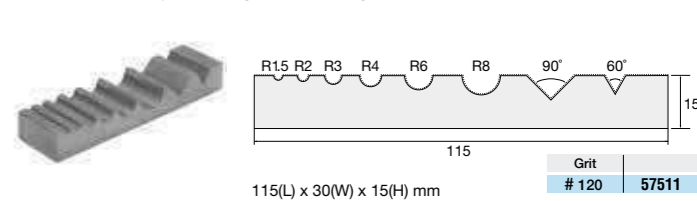
SHANK $\phi 3.0$
1 pc./pack **Special Grip Handle**
• Attachable shank diameter is $\phi 2-4$ mm



SHANK $\phi 3.0$
1 pc./pack **Diamond Hand Dresser**
• Light weight, electroplated diamond dresser. Ideally suited to a wide variety of applications.



SHANK $\phi 3.0$
1 pc./pack **Diamond Block Dresser**
• Can be molded for purpose use, by turning a work with axis, or by vibrating and pushing a stick abrasive material.



ABRASIVE COMPOUNDS & POLISHING TOOLS

1 pc./pack Grindstone Dresser
 • Used for dressing diamond / CBN wheels, metal or resin bond.



Handy Type	Size 75(W) x 25(D) x 8(H) mm	WA	GC
		57521 #80	57526 #80
Stick Type	50(W) x 7(D) x 7(H) mm	57531 #200	57536 #360
		57541 #200	57546 #360

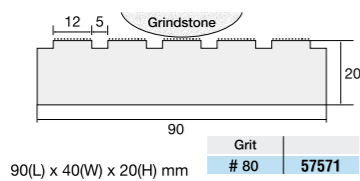
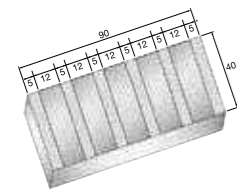
1 pc./pack Natural Diamond Single Stone Dresser
 • Used for dressing or shaping standard grindstones.



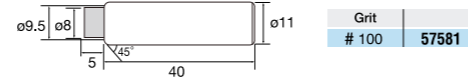
* Shank diameter : $\phi 11$ mm
 Length : 100mm

No. of Carats	Recommended Grindstone Outer Diameter	
1/2 (0.5ct)	$\phi 150\sim 200$ mm	57552
3/4 (0.75ct)	$\phi 255\sim 300$ mm	57553
1ct	$\phi 300\sim 355$ mm	57554

1 pc./pack Tooling Block Dresser
 • Dresser with electroplated diamonds on a block metal surface.



1 pc./pack Imprint Dresser For Truing
 • Used to adjust the grinding surface of diamond, CBN foil and standard grindstones.



NAKANISHI's EXCLUSIVE TOOLS

Exclusive Tools of Ultrasonic Polisher "SHEENUS ZERO"



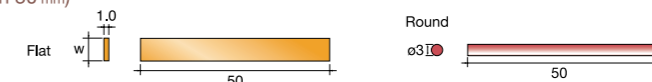
Special electroplated diamond files of Nakanishi's ultrasonic polisher "SHEENUS ZERO". Ideal for fine burr removal and rough finishing.

1 pc./pack Electroplated Diamond File

File Type	Dimensions	Grit	Part No.
Flat taper		# 200	60101
		# 320	60102
		# 600	60103
Flat		# 200	60105
		# 320	60106
		# 600	60107
Flat bent		# 200	60111
		# 320	60112
		# 600	60113
Column with the rounded edge		# 200	60151
		# 320	60152
		# 600	60153
Column with the rounded edge		# 200	60155
		# 320	60156
		# 600	60157
Round taper (cone-shaped)		# 200	60181
		# 320	60182
		# 600	60183
Triangular taper (Triangular pyramid)		# 200	60185
		# 320	60186
		# 600	60187
Oval taper		# 200	60191
		# 320	60192
		# 600	60193
Flat long		# 200	60115
		# 320	60116
		# 600	60117
Flat long taper		# 200	60231
		# 320	60232
		# 600	60233
Flat long taper		# 200	60235
		# 320	60236
		# 600	60237

2 pcs./pack Ceramic Fiber Grindstone (Total Length 50 mm)

• Alumina fiber abrasive with the strength and the flexibility for rough or fine finishing.



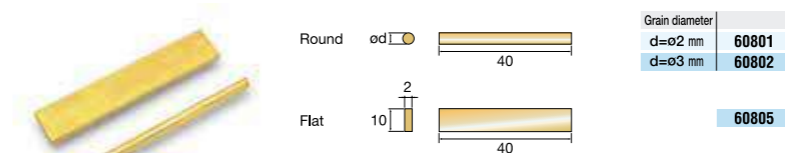
Grit	Color	W = 4 mm	W = 6 mm
# 120	Violet	60511	60516
# 220	Brown	60512	60517
# 400	Orange	60513	60518
# 800	Blue	60514	60519
# 1,200	Red	60515	60520

Grit	Color	$\phi 3$ mm
# 220	Gray	60551
# 300	Magenta	60552
# 400	Orange	60553
# 600	Black	60554
# 800	Blue	60555
# 1,000	White	60556
# 1,200	Red	60557



5 pcs./pack Brass Lapping Tip (Total Length 40 mm)

• Lapping tools for finishing using diamond or abrasive compounds.

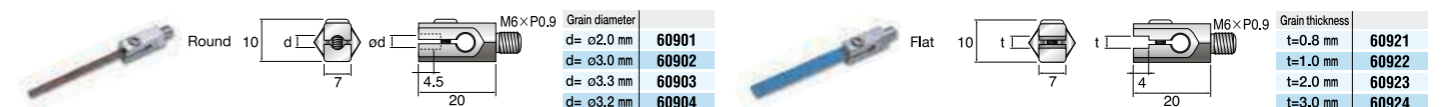


Grain diameter	Part No.
d= $\phi 2$ mm	60801
d= $\phi 3$ mm	60802

60805

* Use after clamping in Special Tip Holder

2 pcs./pack Special Tip Holder • Choose by tip size and shape.



• Used for Round Ceramic Fiber Grindstone. Best for soft materials.

• Used for Flat Ceramic Fiber Grindstone. Best for both hard and soft materials.

Grain diameter	Part No.
d= $\phi 2.0$ mm	60901
d= $\phi 3.0$ mm	60902
d= $\phi 3.3$ mm	60903
d= $\phi 3.2$ mm	60904

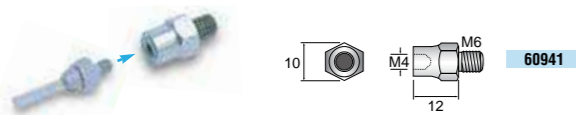
• Used for round tip (Brass Lapping Tip, Electroplated Diamond File: ● marked products on P.59). Best for hard materials.

Grain thickness	Part No.
t= $\phi 0.8$ mm	60921
t= $\phi 1.0$ mm	60922
t= $\phi 2.0$ mm	60923
t= $\phi 3.0$ mm	60924
t= $\phi 3.3$ mm	60925

NAKANISHI's EXCLUSIVE TOOLS

2 pcs./pack M4 Screw Joint Adaptor

- Connection adaptor for attaching M4 screw tool to SHEENUS handpiece (SHEENUS ID thread is M6).



Exclusive Tools of Electromotive Polisher "LUSTER", "MINI-LUSTER", "SWING-LUSTER"



LUSTER

Best for finishing large open work areas.

- Marked tools can be used for Sheenus neo with the Tip Holder. (60912)

SHANK $\phi 3.0$

1 pc./pack Electroplated Diamond File

Flat taper Thickness 1.4 # 200 62301 # 400 62302 # 600 62303	Half-round # 150 62313
Flat taper Thickness 1.4 # 200 62305 # 400 62306 # 600 62307	Round # 150 62315
Flat # 150 62311	Angular # 150 62317

1 pc./pack Diamond File Flat Type

- * Use with stone holder No.62502.
- * File part is flat taper.

# 150 t=0.7~1.3mm 62351	# 150 t=0.7~1.3mm 62361
# 200 t=0.6~1.2mm 62352	# 200 t=0.6~1.2mm 62362
# 400 t=0.5~1.0mm 62353	# 400 t=0.5~1.0mm 62363

SHANK $\phi 3.0, \phi 3.5$

3 pcs./pack Precision Finishing Files (Flat, Round, Angular, Triangular, Half-Round)

Total length The length of file	140mm 70mm		180mm 90mm	
	Standard	Fine	Standard	Fine
1.3(1.5) (Flat) 5.1(6)	57301	57311	57321	
3(3.5) (Round)	57302	57312	57322	
2.5(2.7) (Angular)	57303	57313	57323	
3.3(4.1) (Triangular)	57304	57314	57324	
2 (Half-round)	57305	57315	57325	

5 files-pack set

- Standard (total length 140mm) set (No.57301~No.57305 : 1pc. each) 57309
- Fine (total length 140mm) set (No.57311~No.57315 : 1pc. each) 57319
- Standard (total length 180mm) set (No.57321~No.57325 : 1pc. each) 57329

SHANK $\phi 3.0$

3 pcs./pack Rasps for plastics and wood working (Flat, Round, Angular, Triangular, Half-Round)

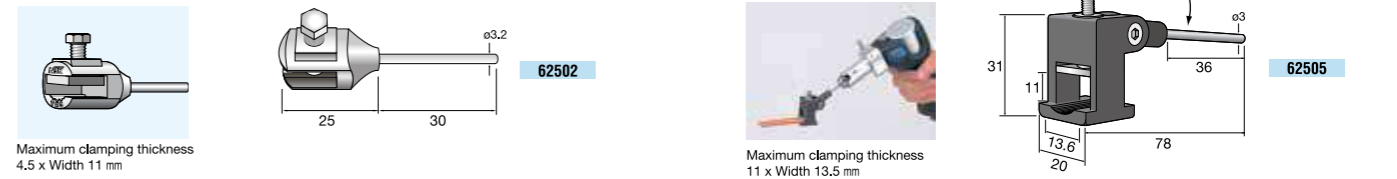
2.2 (Flat) 5.7	57401
3.8 (Round)	57402
3.3 (Angular)	57403
3.8 (Triangular)	57404
2.3 (Half-round) 5.7	57405

5 files-pack set

- Rasps set for plastics and wood working for plastics and woodworking (No.57401~No.57405 : 1pc. each) 57410

NAKANISHI's EXCLUSIVE TOOLS

1 pc./pack Stone Holder



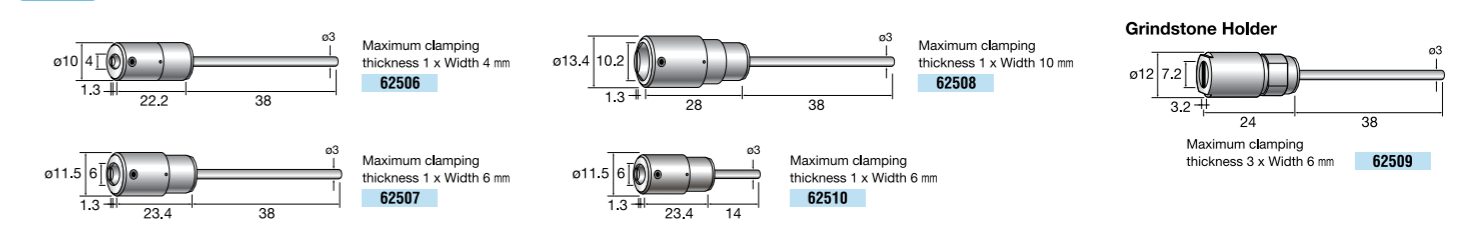
2 pcs./pack Ceramic Fiber Grindstone (Total Length 50 mm)

- Alumina fiber abrasive with the strength and the flexibility for rough or fine finishing.

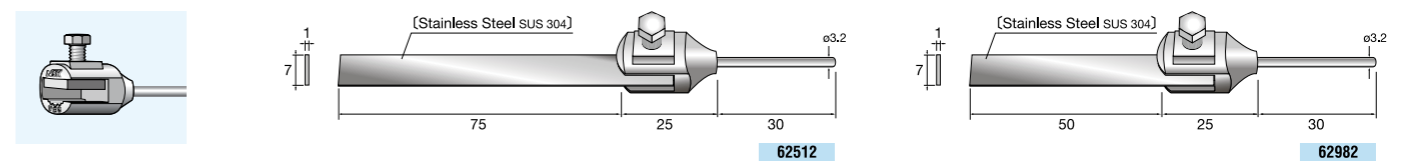


Grit	Color	Flat			Grit	Color	$\phi 3$ mm
		W = 4 mm	W = 6 mm	W = 10 mm			
# 120	Violet	60511	60516	60521	# 220	Gray	60551
# 220	Brown	60512	60517	60522	# 300	Magenta	60552
# 400	Orange	60513	60518	60523	# 400	Orange	60553
# 800	Blue	60514	60519	60524	# 600	Black	60554
# 1,200	Red	60515	60520	60525	# 800	Blue	60555
					# 1,000	White	60556
					# 1,200	Red	60557

1 pc./pack Ceramic Fiber Grindstone Holder · Grindstone Holder

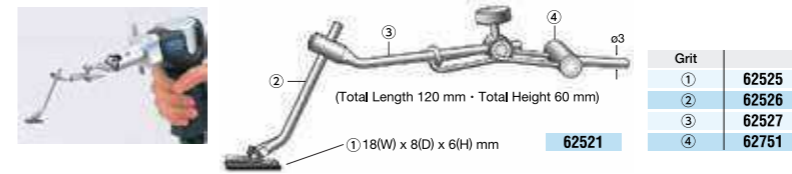


1 pc./pack Flat Holder • Tip for use with abrasive sheets.



1 pc./pack Angular Pad Holder

- Holder for use with abrasive tips for polishing flat surfaces.



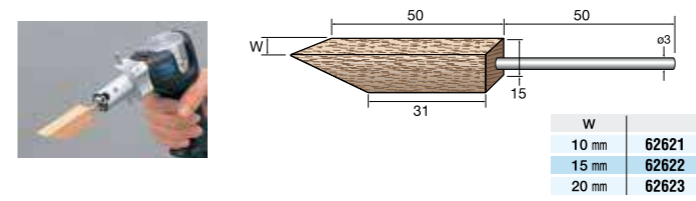
Abrasive Tip (For Flat Holder and Angular Pad Holder)

100 pcs./pack Sand Paper Tip

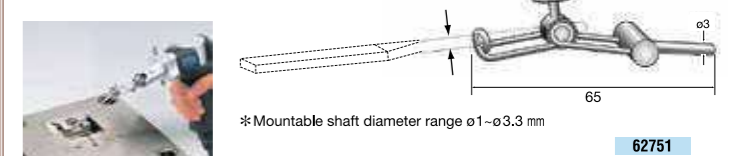
Grit	Color	$\phi 3$ mm
# 120	62552	# 1,000 62559
# 320	62555	# 1,500 62560
# 600	62557	

Adhesive Back

3 pcs./pack Wood Tip Holder



1 pc./pack Spring Holder



NAKANISHI's EXCLUSIVE TOOLS

SHANK ϕ 3.0
1 pc./pack Electroplated Diamond File

Flat taper		Thickness 1.4	t	Grit		Angular		Grit	
			0.5 mm	# 200	62801			# 150	62831
			0.4 mm	# 400	62802			# 200	62832
			0.35 mm	# 600	62803			# 400	62833
Flat taper		Thickness 1.4	0.5 mm	# 200	62805	Round		# 100	62840
			0.4 mm	# 400	62806			# 150	62841
			0.35 mm	# 600	62807			# 200	62842
								# 400	62843
Flat				# 150	62811	Round		# 150	62845
				# 200	62812			# 200	62846
				# 400	62813			# 400	62847
Flat (Single side electroplating)				# 100	62814	Round		# 150	62851
								# 200	62852
								# 400	62853
Flat				# 150	62815	Round taper		# 150	62855
				# 200	62816			# 200	62856
				# 400	62817			# 400	62857
				* 62815 is thickness 1.4mm.					
Flat (Single side electroplating)				# 150	62821	Half-round		# 150	62865
				# 200	62822			# 200	62866
				# 400	62823			# 400	62867
Flat (Single side electroplating)				# 150	62825	Half-round		# 150	62871
				# 200	62826			# 200	62872
				# 400	62827			# 400	62873
						Triangular		# 150	62881
								# 200	62882
								# 400	62883

Exclusive Tools of "60° & 90° ANGLE"

Special tools for Nakanishi Micro-grinder "Angle Attachment". Highly efficient for grinding, polishing, finishing, etc.

SHANK ϕ 3.0
5 pcs./pack Special Rubber Pad For Abrasive and Felt Disks

64101	64102	64103

100 pcs./pack Sand Paper Disk

Cloth Type
• For Metals ... Both for dry and wet finishing (Adhesive is resistant to water and oil)

	Grit	ϕ 11	ϕ 21	ϕ 31
For Metals	# 60	64111	64121	64141
	# 80	64112	64122	64142
	# 120	64113	64123	64143
	# 180	64114	64124	64144
	# 240	64115	64125	64145
	# 320	64116	64126	64146
	# 400	64117	64127	64147
	# 600	64118	64128	64148
	# 800	64119	64129	64149
	# 1,000	64120	64130	64150

Adhesive Back

Paper Type
• For Metals ... Both for dry and wet finishing (Adhesive is resistant to water and oil)

	Grit	ϕ 11	ϕ 21	ϕ 31
For Metals (Black)	# 80	64131	64151	64171
	# 120	64132	64152	64172
	# 180	64133	64153	64173
	# 240	64134	64154	64174
	# 320	64135	64155	64175
	# 400	64136	64156	64176
	# 600	64137	64157	64177
	# 800	64138	64158	64178
	# 1,000	64139	64159	64179
	# 1,500	64140	64160	64180

Adhesive Back

Paper Type
• Dry type ... For Metal, Woodwork, Paint, Putty polishing, Dry use

	Grit	ϕ 11	ϕ 21	ϕ 31
For Dry type (White)	# 80	64201	64211	64221
	# 120	64202	64212	64222
	# 180	64203	64213	64223
	# 240	64204	64214	64224
	# 320	64205	64215	64225
	# 400	64206	64216	64226
	# 600	64207	64217	64227

Adhesive Back

NAKANISHI's EXCLUSIVE TOOLS

100 pcs./pack Zirconium Disk
• Best for finishing aluminum, stainless steel, copper alloy, brass, etc.

	Grit	ϕ 11	ϕ 21	ϕ 31
Adhesive Back	# 60	64251	64261	64271
	# 80	64252	64262	64272
	# 120	64253	64263	64273
	# 150	64254	64264	64274

20 pcs./pack Fiber Disk
• Soft finishing can be done on flat & curved surfaces, due to superior flexibility.

	Grit	Color	ϕ 11	ϕ 21	ϕ 31
Adhesive Back	# 120	Brown	64281	64291	64301
	# 240	Violet	64282	64292	64302
	# 320	Red Brown	64283	64293	64303
	# 600	Dark Blue	64284	64294	64304
	# 800	Gray	64285	64295	64305
	# 1,000	Orange	64286	64296	64306

* Thickness 3 mm

20 pcs./pack Felt Disk
• Ideal for finishing using abrasives and diamond compounds.

	Description	ϕ 11	ϕ 21	ϕ 31
Adhesive Back	Soft Type Felt Disk (1mm thickness)	64331	64332	64333
	Soft Type Felt Disk (2mm thickness)	64335	64336	64337

20 pcs./pack Felt Disk Chromium Oxide (Blue Rouge) Embedded Type.
• Useful for speedy finishing because of Chromium Oxide (Blue Rouge) Embedded.

	Description	ϕ 11	ϕ 21	ϕ 31
Adhesive Back	Felt Disk Chromium Oxide (Blue Rouge) Embedded Type. (2mm thickness)	64341	64342	64343

20 pcs./pack Rubber Points Disk
• Best for coarse finishing, pre-finishing with great polishing power.

	Grit	Color	ϕ 20	ϕ 30
Adhesive Back	# 60	Brown	64391	64401
	# 80	Red	64392	64402
	# 120	Dark Green	64393	64403
	# 180	Olive	64394	64404
	# 220	Green	64395	64405
	# 320	Brown	64396	64406

* Thickness 3mm

SHANK ϕ 3.0
5 pcs./pack Mounted Rubber Disks (Rubber Pad Integration)

• Moderately hard abrasive grain have great polishing ability.
* Rubber Disk Thickness 2.5mm

	Grit	Color	WA	GC
For finishing	# 80	Pink	64411	—
	# 80	Purple	—	64421
	# 120	Blue	64412	64422
	# 180	Yellow	64413	—
	# 180	Green	—	64423
	# 220	Green	64414	64424
	# 320	Purple	64415	64425
	# 500	Orange	64416	—
	# 500	Brown	—	64426

	Grit	Color	WA
For preliminary finishing (Fast grinding)	# 80	Black (Red Line)	64431
	# 120	Black (Blue Line)	64432

1 pc./pack Diamond Disk (Fully Electroplated Type)
• Superior in sharpness and durability.

	Grit	ϕ 11	ϕ 21	ϕ 31
Adhesive Back	# 100	64451	64461	64471
	# 140	64452	64462	64472
	# 200	64453	64463	64473
	# 280	64454	64464	64474
	# 400	64455	64465	64475
	# 600	64456	64466	64476
	# 800	64457	64467	64477
	# 1,000	64458	64468	64478

1 pc./pack Diamond Disk (Dot Electroplated Type, Wet Type)
• Electroplated nickel-alloy pellet is strongly adhered to resin base.

	Grit	Color	ϕ 11	ϕ 21	ϕ 31
Adhesive Back	# 60	Green	64501	64511	64521
	# 120	Black	64502	64512	64522
	# 200	Red	64503	64513	64523
	# 400	Yellow	64504	64514	64524
	# 800	Gray	64505	64515	64525

NAKANISHI's EXCLUSIVE TOOLS

3 pcs./pack Resin Bond Diamond Disk Star Pattern

Grit	ø11	ø21	ø31
# 80	64531	64541	64551
# 120	64532	64542	64552
# 180	64533	64543	64553
# 240	64534	64544	64554
# 400	64535	64545	64555
# 800	64537	64547	64557
# 1,000	64538	64548	64558
# 2,000	64539	64549	64559

*Patterns may be changed without notice

3 pcs./pack Lapping Film Disk Diamond Abrasive

Diamond Film (Diamond)	Grit	Color	ø11	ø21	ø31
	# 400	Ivory	64601	64606	64611
	# 800	Ivory	64602	64607	64612
	# 1,500	Ivory	64603	64608	64613
	# 3,000	Ivory	64604	64609	64614

Adhesive Back

50 pcs./pack Lapping Film Disk WA Abrasive

Random Film (WA)	Grit	Color	ø11	ø21	ø31
	# 320	Pink	64621	64626	64631
	# 600	Green	64622	64627	64632
	# 1,000	Orange	64623	64628	64633
	# 1,500	Olive	64624	64629	64634
	# 3,000	Violet	64625	64630	64635

Adhesive Back

Exclusive Tools of "90° MINI ANGLE TYPE ATTACHMENT"

Steel cutters for radius grinding of deep cross holes for "Mini-Angle attachment". Ideal for radius grinding of holes or removing burrs from cross jigs, precision parts and inside surfaces of pipes.

MINI ANGLE TYPE E-max Evolution (Very Small Head)

MINI ANGLE TYPE E-max Evolution

SHANK ø1.6 1 pc./pack Steel Cutters For Deep Cross Hole Finishing

15,000 min⁻¹

ø2.1 110°

ø1.6 1.1

64801

SHANK ø1.6 1 pc./pack Diamond Coated Burs For Deep Cross Hole Finishing

320,000 min⁻¹ (ø130)

ø2.5 30°

ø3 30°

ø4 30°

ø1.6 1.9

11131 11132 11133

5 pcs./pack Diamond and CBN Coated Burs For Deep Cross Hole Finishing

320,000 min⁻¹ (ø140)

60° 90° 110°

ø3 1.8 2.0

ø5 4.4 2.0

ø3 1.8 2.0

ø5 2.8 2.0

ø3 (1.0)* 2.0

ø5 2.1 2.0

Diamond 11151 11152 11153 11154 11155 11156

CBN 11161 11162 11163 11164 11165 11166

*11165 is Cut Length 1.4mm.

NAKANISHI's EXCLUSIVE TOOLS

Exclusive Tools of "IMPULSE"

Special tools for Nakanishi Micro-grinder "IMPULSE". Excellent for grinding or polishing flat surfaces, edges with Nakanishi's high-power air grinder.

90° ANGLE IMPULSE · NA90-230

60° ANGLE IMPULSE · NA45-230

5 pcs./pack Special Rubber Pad for Disk Abrasives

23,000 min⁻¹

ø20 M7 x 0.75 64821

ø30 M7 x 0.75 64822

12 pcs./pack Cup Wheel

23,000 min⁻¹

ø20 M7 x 0.75 64830

ø30 M7 x 0.75 64836

Grit	Grade Hardness	ø20	ø30
# 36	Standard	64830	64835
# 46	Hard	64831	64836
# 80	Standard	64832	64837
# 80	Hard	—	64838

5 pcs./pack Polishing Sander

• Abrasive Disk for high speed rotation is made from overlapping abrasive cloths.

23,000 min⁻¹

ø30 M7 x 0.75

Grit	
# 80	64842
# 120	64844
# 180	64846
# 240	64847
# 400	64849

• Convenient Assorted set for trial polishing
All grain size (5 types x each 1 pc.)
Total 5 pcs.-pack 64850

10 pcs./pack Rubber Cup Wheel

• Rubber Cup Wheel with high elasticity for grinding & polishing.

23,000 min⁻¹

ø30 M7 x 0.75

Grit	Color	
# 60	Brown	64851
# 80	Red	64852
# 120	Blue	64853
# 180	Olive	64854
# 220	Green	64855
# 320	Brown	64856

• Convenient Assorted set for trial polishing
All grain size (6 types x each 2 pcs.)
Total 12 pcs.-pack 64859

Exclusive Tools of "FINE BELT SANDER"

FINE BELT SANDER E-max Evolution

30 pcs./pack Abrasive Belts

• High Quality Abrasive Belts are superior in grinding & durability.

For Grinding or Polishing of Metals (Length 300 mm)

Grit	W = 4 mm	W = 6 mm	W = 8 mm
# 80	64901	64911	64921
# 120	64902	64912	64922
# 180	64903	64913	64923
# 240	64904	64914	64924
# 320	64905	64915	64925
# 400	64906	64916	64926
# 600	—	—	64927
# 800	—	—	64928

For Woodwork (Length 300 mm)

Grit	8 mm Width
# 80	64941
# 120	64942
# 240	64943

• Assorted set for preliminary finishing (● Mark)
Grain size (4 types x each 10 pcs.), W = 8 mm
Total 40 pcs.-pack 64931

• Assorted set for finishing (● Mark)
Grain size (4 types x each 10 pcs.), W = 8 mm
Total 40 pcs.-pack 64932

NAKANISHI's EXCLUSIVE TOOLS

3 pcs./pack Diamond Belt

• For grinding and polishing of Carbide, Hardened steel, Steel, Special steels, Ceramic, FRP, etc.



Hard Type (Length 300 mm)	
Grit	8mm Width
# 80	65011
# 120	65012
# 240	65014
# 320	65015
# 600	65017

• **Assorted set**
All grain size (5 types x each 1 pc.)
Total 5 pcs.-pack **65019**



Soft Type (Length 300 mm)			
Grit	8mm Width	Grit	8mm Width
# 120	65021	# 600	65025
# 180	65022	# 800	65026
# 240	65023	#1,000	65027
# 320	65024		
# 400	65028		

• **Assorted set**
All grain size (8 types x each 1 pc.)
Total 8 pcs.-pack **65030**

30 pcs./pack Silicone Belt

• Best for polishing aluminum, stainless steel, brass



(Length 300 mm)	
Grit	8mm Width
# 80	64971
# 100	64972
# 120	64973

• **Assorted set**
All grain size (3 types x each 10 pcs.)
Total 30 pcs.-pack **64975**

Protective Equipments

Always use safety glasses, mask, face guard for your safety.

Safety Eyewear

1 pack
1 pc.



Glasses Type

• Frame : Plastic
• Weight : 43 g

Code No.
69101



Goggles Type

• Frame : Soft vinyl
• Weight : 31 g

Code No.
69102

Face Shield

1 pack
1 pc.



Curved surface Type

• Lens : Acrylic resin
• Weight : 144 g

Code No.
69105



Flat surface Type

• Lens : Acetate resin
• Weight : 144 g

Code No.
69106

Disposable Dust-proof Mask

1 pack
5 pcs.



Dust-proof mask with exhaust valve

	Code No.
Head-mounted type	69112
Ear-mounted type	69115

Diamond / CBN
Carbide Cutters
Specialty Tools
Mounted Points
Rubberized Abrasives
Flap Wheels
Polishing Brushes
Felt Bobs
Abrasive Compounds & Polishing Tools
NSK Exclusive Tools