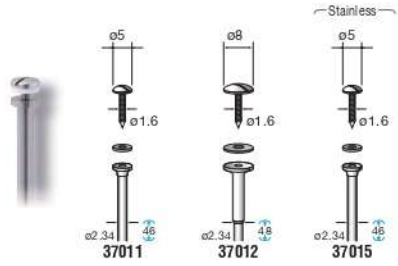
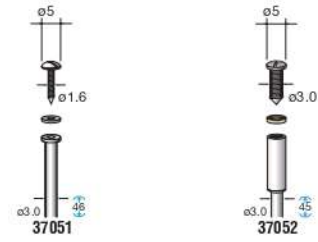


SPECIALTY TOOLS

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

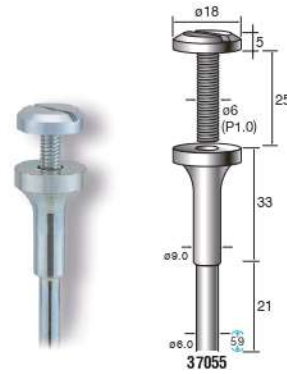


SHANK $\phi 3.0$
10 pcs./pack Mandrels

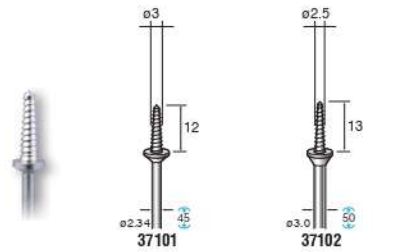


3 pcs./pack Mandrels

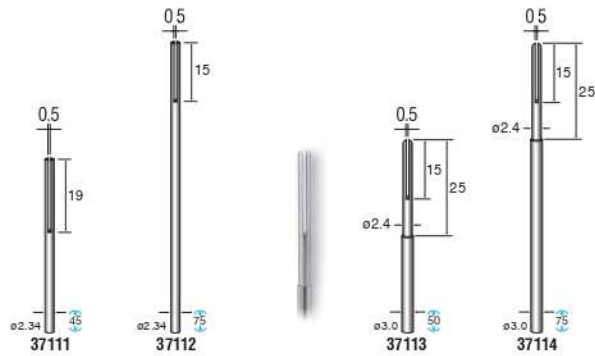
SHANK $\phi 6.0$
1 pc./pack Mandrels



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



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)

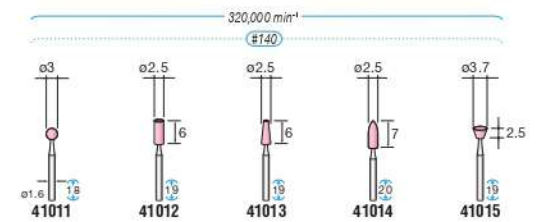
Hardness Grade

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.

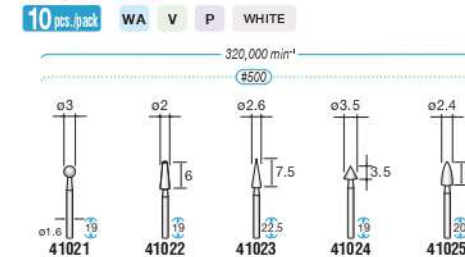


1.6 mm shank diameter series.
Short Shank Type grindstones for high-speed rotation. Ideal for very small parts.

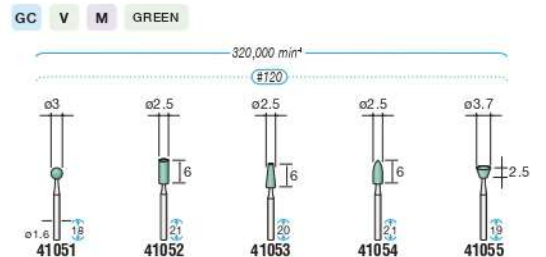
SHANK $\phi 1.6$
10 pcs./pack



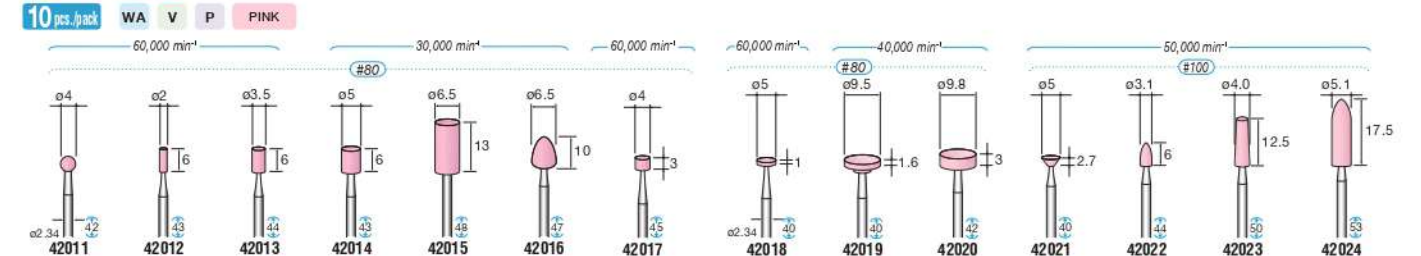
SHANK $\phi 1.6$
10 pcs./pack



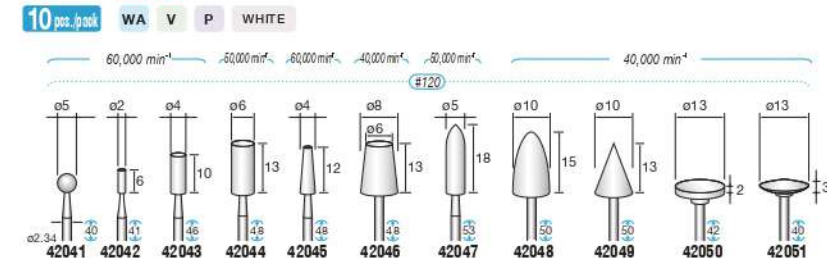
10 pcs./pack



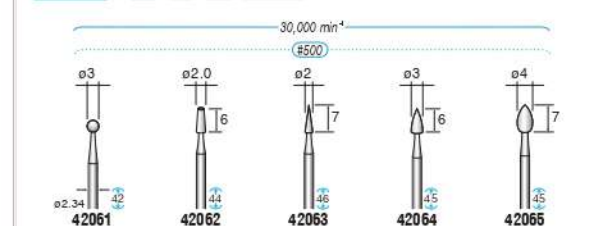
SHANK $\phi 2.34$
10 pcs./pack



SHANK $\phi 2.34$
10 pcs./pack

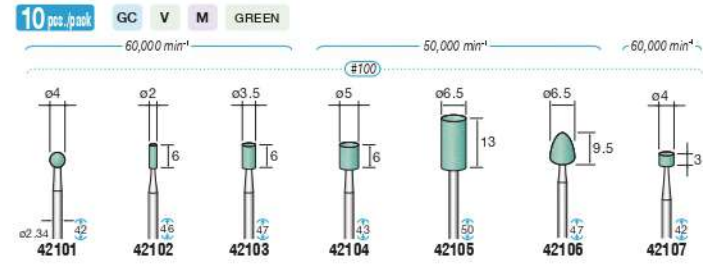


10 pcs./pack



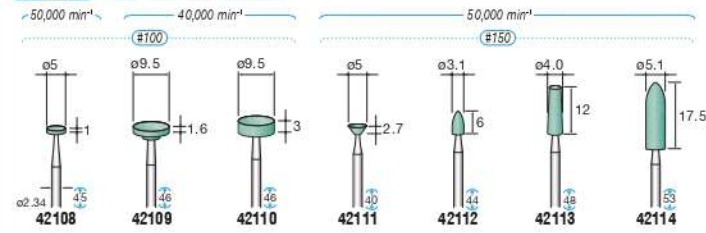
MOUNTED POINTS

SHANK $\phi 2.34$

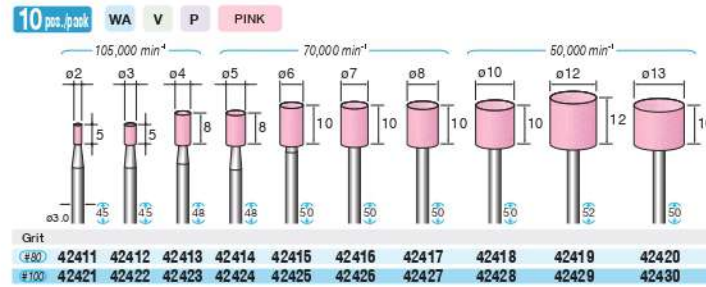


3.0 mm shank diameter series. Perfect for high surface finishing, precision work.

SHANK $\phi 3.0$



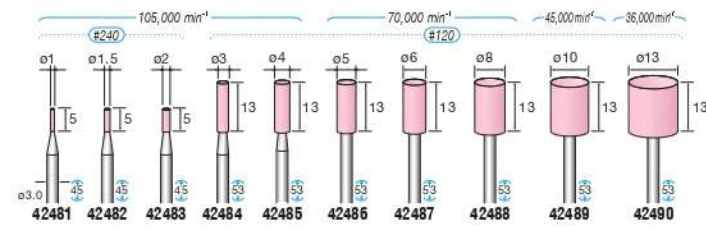
SHANK $\phi 3.0$



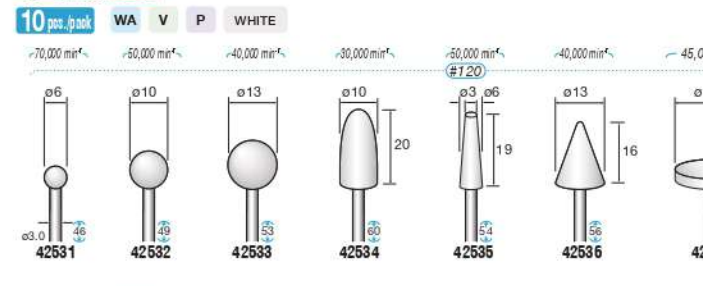
SHANK $\phi 3.0$



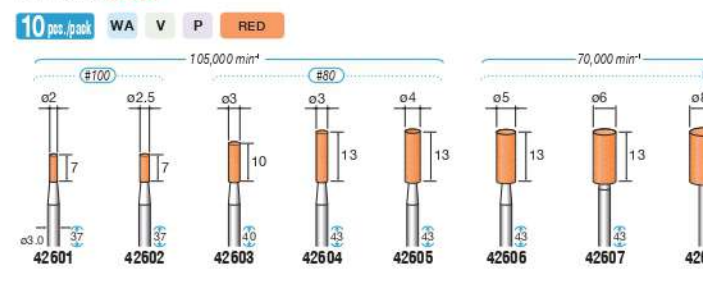
SHANK $\phi 3.0$



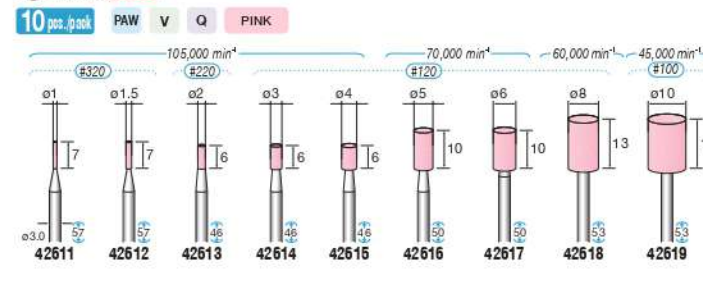
SHANK $\phi 3.0$



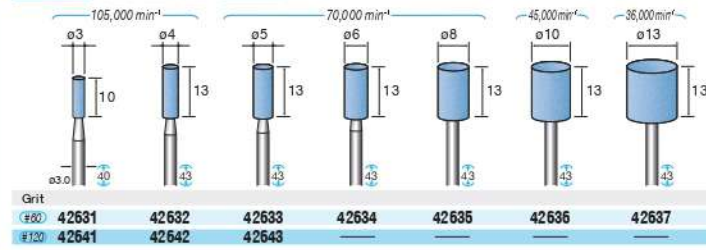
SHANK $\phi 3.0$



SHANK $\phi 3.0$

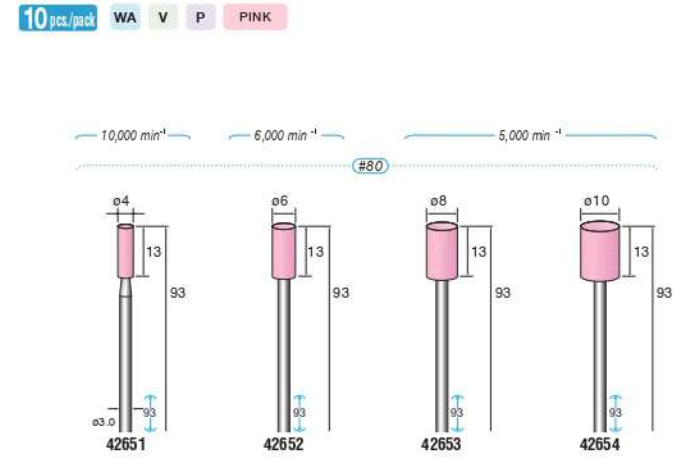


SHANK $\phi 3.0$

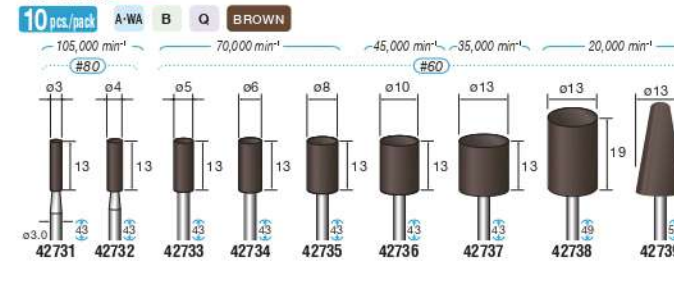


MOUNTED POINTS

SHANK $\phi 3.0$

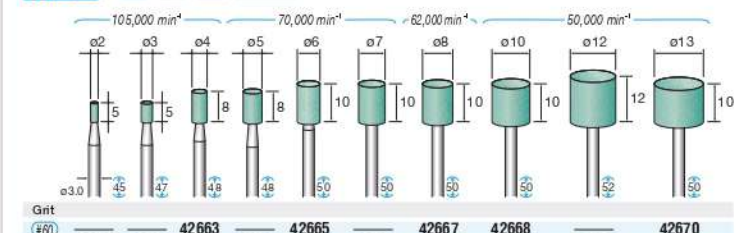


SHANK $\phi 3.0$

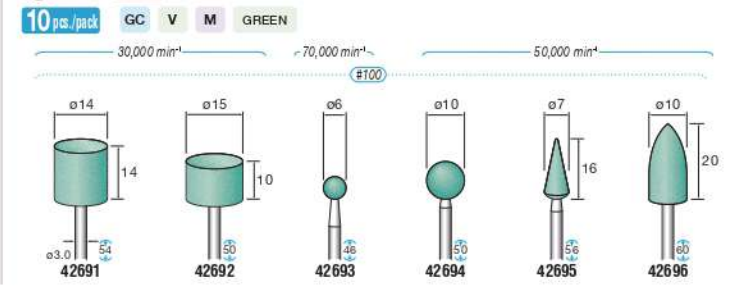


6.0 mm shank diameter series. High quality finishing grindstones.

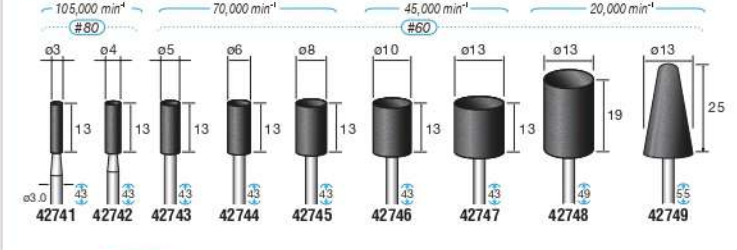
SHANK $\phi 3.0$



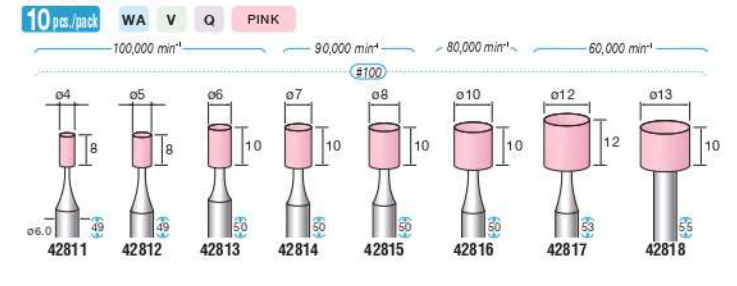
SHANK $\phi 3.0$



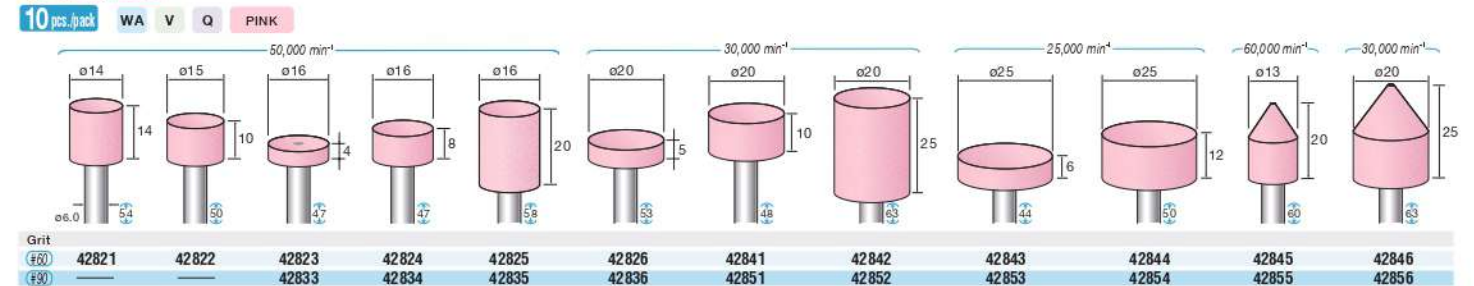
SHANK $\phi 3.0$



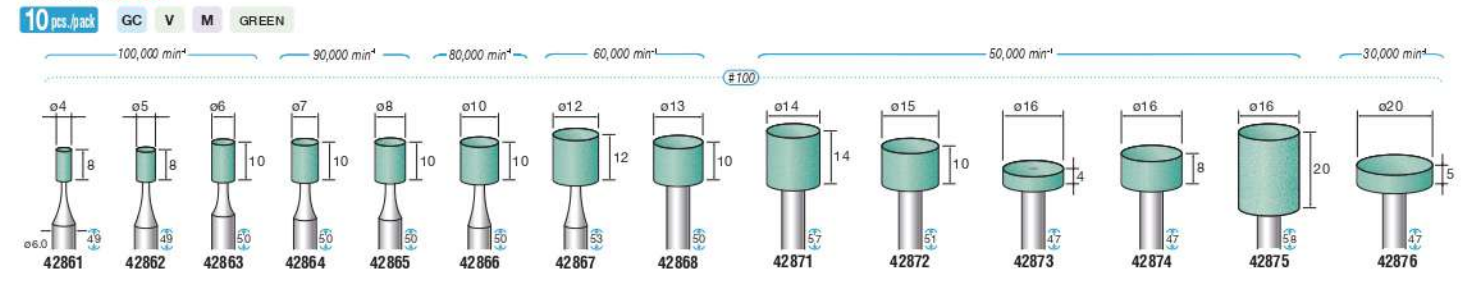
SHANK $\phi 6.0$



SHANK $\phi 6.0$



SHANK $\phi 6.0$



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

MOUNTED POINTS

SHANK Ø6.0
10 pcs./pack GC V M GREEN

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

42881 42882 42883 42884 42885 42886

SHANK Ø6.0
10 pcs./pack AWA 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

42901 42902 42903 42904 42905 42906 42907 42908

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

SHANK Ø2.34
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 42110
#120 42048	
#120 42050	
#120 42051	

SHANK Ø3.0
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	#120 42619	#60 42634	
		#60 42635	
		#60 42636	
		#60 42637	

SHANK Ø6.0
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

42911 42912 42913 42914 42915 42916 42917 42918

SHANK Ø3.0
10 pcs./pack WA

15,000 min⁻¹ 13,000 min⁻¹ 8,000 min⁻¹

43101 43103 43104 43105 43106

SHANK Ø3.0
18 pcs./pack Assorted Set

43405

Set (18 pieces) (Each code No. one piece-pack)		
WA	PA	GC
#90 42421	#90 42428	#120 42484
#90 42422	#90 42430	#120 42485
#90 42423	#90 42454	#120 42486
#90 42424	#90 42455	#120 42487
#90 42425	#90 42456	#120 42488
#90 42427		#120 42489
		#120 42490

SHANK Ø3.0
12 pcs./pack Assorted Set

43415

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

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

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

SHANK Ø2.34
10 pcs./pack WA GC Green Polisher

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

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 Ø2.34
10 pcs./pack WA Silicon Polisher

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

46315 46316 46322 46326 46331 46342 46346

46311 46315 46322 46326 46331 46342 46346

46313 46317 46323 46327 46333 46343 46347

* 46344, 46345, 46348, 46349 is diameter ø1.2.
* 46344, 46345, 46348, 46349 is Total Length 42mm.
* 46311, 46314 is Total Length 50mm.

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

SHANK Ø1.6
10 pcs./pack WA Silicon Polisher

30,000 min⁻¹

46011 46012 46013 46014 46015

SHANK Ø2.34
10 pcs./pack WA High Shine Polisher

24,000 min⁻¹ 15,000 min⁻¹ 24,000 min⁻¹ 20,000 min⁻¹ 24,000 min⁻¹ 24,000 min⁻¹

46211 46215 46221 46225 46231 46235

46212 46216 46222 46226 46232 46236

46213 46217 46223 46227 46233 46237

SHANK Ø3.0
10 pcs./pack WA Silicon Polisher

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

46351 46352 46363 46367

46351 46352 46363 46367

SHANK Ø3.0
10 pcs./pack WA Power Polisher

30,000 min⁻¹ 20,000 min⁻¹

46601 46611 46621 46631 46641 46651

46602 46612 46622 46632 46642 46652

46603 46613 46623 46633 46643 46653

46604 46614 46624 46634 46644 46654

46605 46615 46625 46635 46645 46655

46606 46616 46626 46636 46646 46656

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

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