



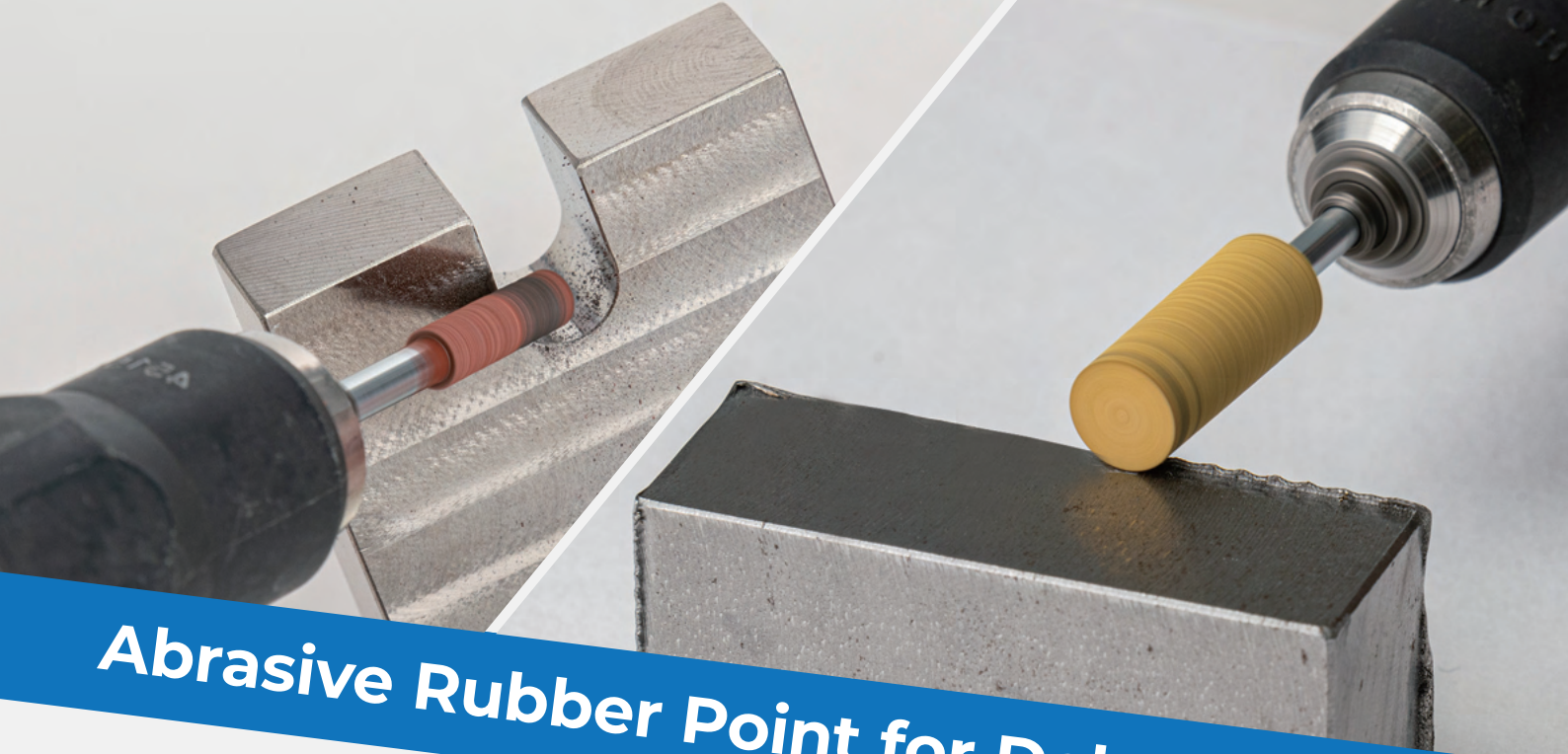
NEW PRODUCT SENTAN TOOL

DIGEST vol.2



Minimo[®]

 MINITOR CO., LTD. JAPAN



Abrasive Rubber Point for Deburring

Comparison after Edge Processing

Less losing shape compared to standard abrasive rubber point!



Standard Abrasive Rubber Point



Abrasive Rubber Point for Deburring



High Strength Abrasive Rubber Point Pursuing Cutting Performance Less Shape Change and Great for Burrs on Sharp Edge

POINT

Made of special tough rubber and having excellent grinding force against burrs

POINT

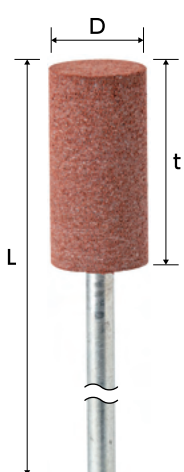
Raised grinding performance with graceful finishing as same as abrasive rubber point works

POINT

Less shape change against burr on edge




1Pack
10Pieces

Shank $\Phi 3$ WA



MAX SPEED 30,000r.p.m.

MAX SPEED 20,000r.p.m.

Outer Diameter (D)	$\Phi 4$	$\Phi 6$	$\Phi 8$	$\Phi 10$	$\Phi 13$
Thickness X Total Length (t x L)	13 x 43	17 x 47	20 x 50	20 x 50	20 x 50
 #80	DB2611	DB2621	DB2631	DB2641	DB2651
 #120	DB2612	DB2622	DB2632	DB2642	DB2652
 #220	DB2613	DB2623	DB2633	DB2643	DB2653



High Durable Abrasive Rubber Point

Next-Generation Abrasive Rubber Point
Changing Impression that Abrasive Rubber
Point Has Low Durability

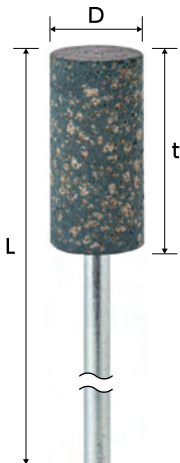
POINT
Not only making rubber harder, but also controlling composition of grain and bond for higher durability

POINT
Approx. 30 % improved durability compared to standard abrasive rubber point








1Pack
10Pieces

Shank $\Phi 3$ WA



MAX SPEED 30,000r.p.m.

Outer Diameter (D)	$\Phi 4$	$\Phi 6$	$\Phi 8$	$\Phi 10$
Thickness X Total Length (t×L)	13×43	17×47	20×50	20×50
 #80	DB2511	DB2521	DB2531	DB2541
 #120	DB2512	DB2522	DB2532	DB2542
 #180	DB2513	DB2523	DB2533	DB2543
 #220	DB2514	DB2524	DB2534	DB2544
 #320	DB2515	DB2525	DB2535	DB2545

Diamond Rubber Point

Abrasive rubber point containing the hardest grain diamond
Suitable for difficult-to-cut materials such
as ceramics, carbide and glass



POINT Enable to grind in high speed by excellent grinding performance



Enable to use for semi-finishing of high hardness metal as never before because diamond grain is contained.

POINT Can be reshaped although diamond tool



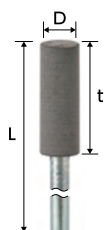
Special dresser is not necessary and it is easy for reshaping to fit polishing surface by our dressers.

POINT For grinding ceramic and glass







1Pack
1Piece

Shank $\Phi 3$

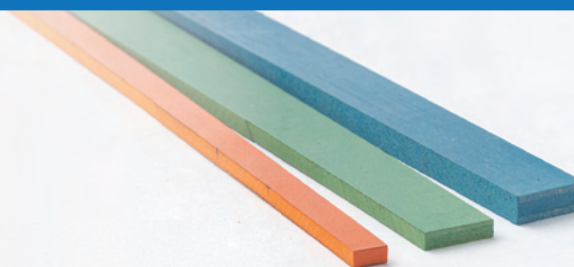


MAX SPEED 30,000r.p.m.

Outer Diameter (D)	$\Phi 4$	$\Phi 6$
Thickness X Total Length (t×L)	13×43	17×47
 #320	AD4401	AD4411
 #600	AD4402	AD4412
 #1000	AD4403	AD4413
 #3000	AD4404	AD4414

Rubber Stone Stick

Enable to be bent and reshaped
Convenient for polishing on curved surface
by hard-to-break stone stick



POINT Graceful finishing with less scratch

Because abrasive grains are pushed inside moderately, the rubber stone stick fits on workpiece softly and brings more beautiful finishing compared to grindstone and sandpaper with same roughness.

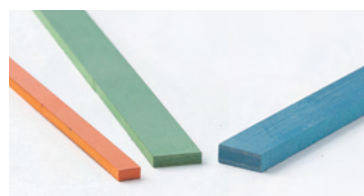
POINT Suitable for deburring




Easy to press against workpiece by flexibility as rubber with less secondary burr!

1Pack
2Pieces

WA

Total Length 150mm



Size	3×6	3×13	5×13
 #120	RD2011	RD2021	RD2031
 #220	RD2012	RD2022	RD2032
 #320	RD2013	RD2023	RD2033

Slit Felt Point

More flexibility by layered felts with radial slits
Suitable for polishing curved and irregular surfaces



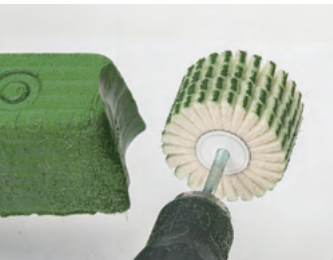
POINT

More flexibility by slits
Enable to fit into irregular surface such as curved surface and groove by soft touch



POINT

Taking polishing compound well and it enables for polishing quickly



1Pack
3Pieces

Shank $\Phi 3/\Phi 2.34$

MAX SPEED 10,000r.p.m.



Outer Diameter	$\Phi 20$
Thickness X Total Length	10×50
Shank $\Phi 2.34$	GA4451
Shank $\Phi 3.0$	GA4461

1Pack
3Pieces

Shank $\Phi 3/\Phi 2.34$

MAX SPEED 10,000r.p.m.



Outer Diameter	$\Phi 30$
Thickness X Total Length	20×60
Shank $\Phi 2.34$	GA4452
Shank $\Phi 3.0$	GA4462

Blade Sander

Sandpaper cut into shape of blades
Suitable for deburring on end face and polishing inside of pipe due to flexibility



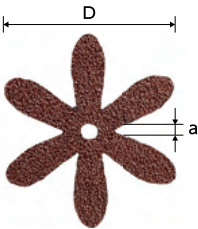
POINT

High flexibility to fit into inner surface
For deburring on cross hole!

POINT

Can be used with mandrel (optional)
Enable to adjust grinding performance by layering

1Pack
10Pieces



	MAX SPEED 15,000r.p.m.	MAX SPEED 10,000r.p.m.	MAX SPEED 7,000r.p.m.	MAX SPEED 6,000r.p.m.
Outer Diameter (D)	$\Phi 20$	$\Phi 30$	$\Phi 40$	$\Phi 50$
Center Hole Diameter (a)	$\Phi 1.6$	$\Phi 1.6$	$\Phi 3.0$	$\Phi 3.0$
Recommended Applicable Hole Diameter	$\Phi 7\sim 15$	$\Phi 10\sim 20$	$\Phi 15\sim 25$	$\Phi 20\sim 40$
#60	ES6001	ES6011	ES6021	ES6031
#80	ES6002	ES6012	ES6022	ES6032
#120	ES6003	ES6013	ES6023	ES6033

Shank $\Phi 2.34$

For $\Phi 1.6$ mm Hole

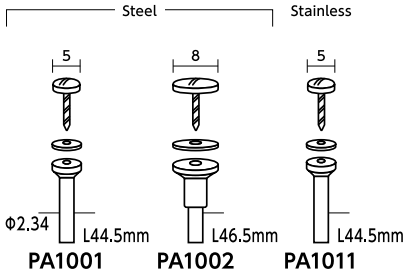
Shank $\Phi 3.0$

For $\Phi 1.6$ mm Hole

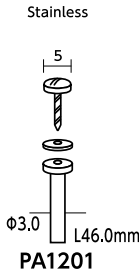
Shank $\Phi 3.0$

For $\Phi 3.0$ mm Hole

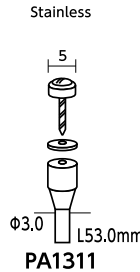
1Pack
10Pieces



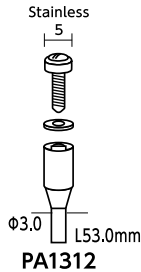
1Pack
10Pieces



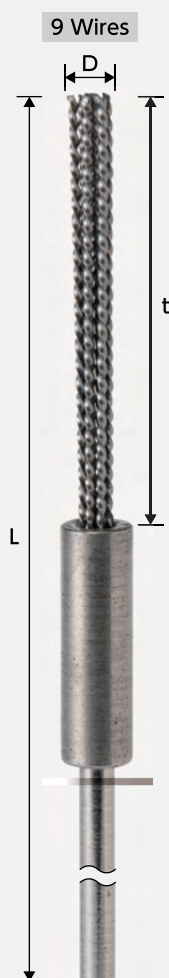
1Pack
5Pieces



1Pack
5Pieces



Waved Lapping Wire Brush



POINT

Adopted twisted wires and biting better than conventional lapping wire brush



POINT

Can catch processing part flexibly and suitable for working on gear and special shape hole



POINT

Available for deburring on cross hole by using centrifugal force



Lapping Wire Brush Evolved for Deburring Catching and Removing Burrs by Twisted Wires!

1Pack

1Piece

Shank $\Phi 3$

MAX SPEED 10,000r.p.m.

Outer Diameter (D)	$\Phi 3$				
Brush Length X Total Length (t x L)	15x60	20x65	25x70	30x75	35x80
9 Wires	FD3341	FD3342	FD3343	FD3344	FD3345

三二一株式会社

Head Office 3-21-1, Ryogoku, Sumida-ku, Tokyo

Osaka br 2-4-2, Shinmachi, Nishi-ku, Osaka

Nagoya br 1-9-15, Kanayama, Naka-ku, Nagoya

Kyushu br 48-3, Umemitsumachi, Kurume, Fukuoka

<https://www.minitor.co.jp/>

TEL : 03-6630-5800 FAX : 03-6630-5795

TEL : 06-6531-5300 FAX : 06-6531-5417

TEL : 052-331-5222 FAX : 052-331-5223

TEL : 06-6531-5300 FAX : 06-6531-5417

MINITOR CO., LTD. JAPAN

21-1 Ryogoku 3-chome, Sumida-ku, Tokyo 130-0026 JAPAN

Phone.03 (6630) 5800 FAX (6630) 5795

● Contact