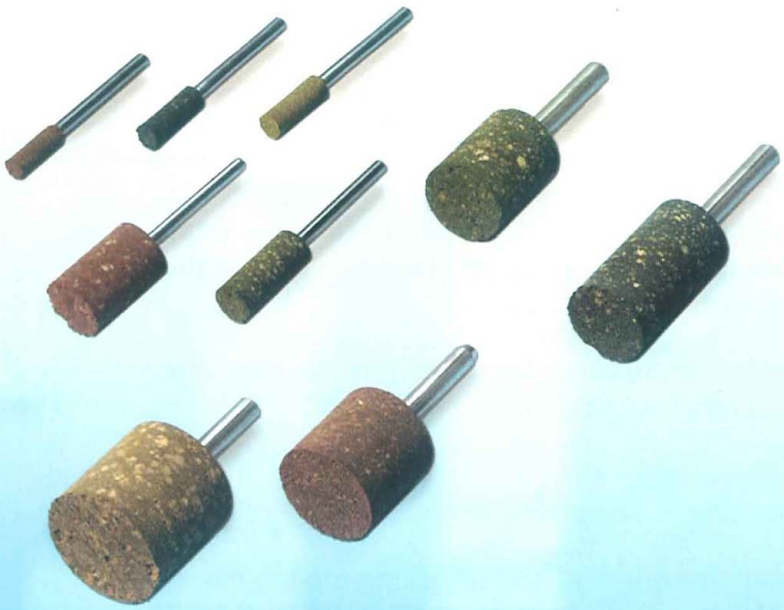
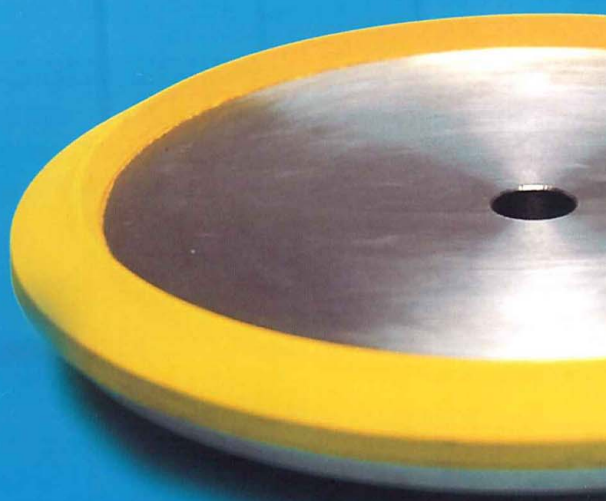


Grinding is sharply and polishing is softly, that is *"DAIWA RABIN"*.

It is applicable from grinding, polishing
and de-burring after processing to finishing.

DAIWA RABIN

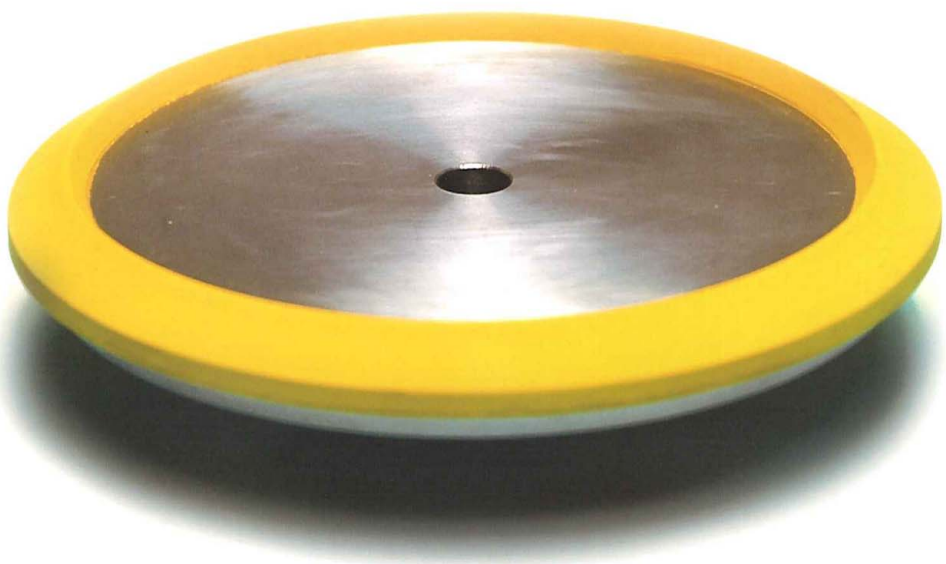
S E R I E S



CERTIFIED IQNet MANAGEMENT SYSTEM
JQA-QM9770

Features of "DAIWA RABIN"

- "DAIWA RABIN" provides an evenly polished surface without leaving any deep scratches, unlike conventional papers and hard grinding stones, reducing the number of processes and improving surface roughness.
- "DAIWA RABIN" is possible to operate continuously for aluminum die cast due to it won't leave any scratches and cause clogging easily.
- "DAIWA RABIN" provides the most suitable product for de-burring that is troublesome with a wide range of materials, sizes and any shapes.
- "DAIWA RABIN" has sharpness enough for grinding and removing tooling marks and burrs even high hardened work materials (such as SKD, HSS and FCD that are around HRC60).
  It is also able to remove weld bead of stainless steel and make a polished surface when it is thin.
- No follow-up is necessary since it does not make any return or secondary burr.
- It prevents chipping, and no work can be grind too much. No product of poor quality is produced.
- "DAIWA RABIN" fits curved surfaces well, providing steady grinding without any jumping and chattering.
- It won't cause clogging easily for work materials such as gold and copper, and also it is easy to have a dressing.
- Compared with other elastic grinding stones and part of conventional grinding stones, "DAIWA RABIN" was realized a higher wear resistance.
- "DAIWA RABIN" is able to use in both of dry and wet conditions.
- It helps minimize dust to an extent, improving the working environment.
  Also depending on conditions, "DAIWA RABIN" is able to prevent sparks.



Grinding is sharply and polishing is softly, that is *"DAIWA RABIN"*.

It is applicable from grinding, polishing and de-burring after processing to finishing.

New "DAIWA RABIN"

- It helps make more efficient mirror finish in buffing for aluminum and stainless steel, improving the working environment a lot.
- It is useful in polishing for difficult to cut materials such as ceramic, carbide and glass, also ultra-high hardened surface treated surface.
- It spreads the grinding possibilities of fixed grinding stones for super finishing and mirror finishing, enhancing the working efficiency as a whole.
- "DAIWA RABIN" has started to be applied to such a field of sharpening for cutters that conventional rubberized grinding stones are not easy.

Especially in #120 grit size, we would like to provide the optimal product for your grinding work with our more than 100 kinds of grinding stone materials and items that are more than 10,000 and several thousand shapes and sizes.

We would recommend "DAIWA RABIN" for automation of grinding.

"DAIWA RABIN" is able to follow fine irregularities of the state of working with elastic rubber, allowing the operator to select the proper grinding condition depending a variety of grinding stone types of material and with careful balancing.

It is able to pinpoint grinding and de-burring for specific part of work with several shapes, use grinding stone's efficiency to the full, and is able to prevent getting rough to the other parts.

We are ready to serve you in improving the tool life by adjusting the quality of a grinding stone material.

Features of bonding materials

Type CM

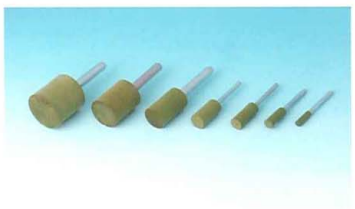
A long-selling product. Sharp and excellent in polishing with its own elasticity. Characterized also by versatility applicable to aluminum die cast and stainless steel including molds.

Abrasive Grain WA-CM grain (Our original abrasive grain has been used.)
Available Grain Sizes (46), 60, 80, 120, 180, 220, 320

Type UN

It is harder than Type CM and suitable for corner chamfering and de-burring sharp burrs and hard materials, it won't lose its shape easily. Proper for processing that does not need high elasticity. In addition, it is efficient when you do not want to lose working form of work piece. Utilizable for removing fine burrs from and finishing precision parts, too.

Abrasive Grain WA, A, C, GC
Available Grain Sizes 36, 46, 60, 80, 120, 180, 220, 320, 400, 600, 800, 1000, 1500, 3000



Type OX

Use the type when emphasis is put on polishing. It removes rust and maintains molds, giving almost no damage to the ground. Proper for polishing gold, copper and other non-ferrous metals. A well balanced combination of abrasive grain, abrasive grain ratio, rubber quality and hardness is available for hairline processing.

Abrasive Grain WA, A, C, GC
Available Grain Sizes (36), (46), 60, 80, 120, 180, 220, 320, 400, 600, 800, 1000, 1500, 2000, 3000

Diamond Rabin (D) *Please refer to P.12.

Diamond Rabin that has been bound diamond abrasive grain with rubber makes efficiency for the polishing of ceramic, carbide, glass, stainless steel and other difficult to cut materials. It is also used for the polishing of silicon wafers.

Type Urethane (AF) *Please refer to P.13.

With newly developed urethane foam, the type made it easy mirror finish for aluminum materials, which was conventionally difficult to do. And also, we would like to provide products that are large-diameter wheel series which was not common to conventional "DAIWA RABIN" and make it possible finishing of high meshes with a soft touch.

Type Silicon (SI)

The selection of an abrasive and a basic rubber material is greatly influential in high-level polishing. Special combinations of a variety of rubber materials have been so far developed, and now the type serves to polish silicon wafers.

Abrasive Grain General Abrasive Grain, Diamond Abrasive Grain

"SENRAP" (cerium oxide elastic grinding stone for glass) *Please refer to P.14.

We started to manufacture "SENRAP" in August 2003, which had been provided by Tohoku Kako for the mirror-polishing of sheet glass, mirror bevel and vertical sides.
On top of the conventional specifications, a new "SENRAP" is under development, using a new combination of well prepared rubber materials, to enable cerium oxide fixed grindstones to be used more for the mirror-polishing of glass.

Other special materials

*There are a lot of special combinations for specific users. See the page detailing them.
*Also ask us about special materials that are used with fine powder.

Main applications and applicable materials of "DAIWA RABIN"

Materials of work

- ***General Steels*** Polishing general steel and removing cutting traces and tooling marks .. CM
  Corner-chamfering and de-burring after processing ..... UN
  In case of higher hardness of work materials ..... GC-UN
  Improving surface roughness ..... OX
  In case of higher hardness of work materials ..... GC-OX
  Mirror finish Diamond ..... D

- ***Aluminum alloy*** Retouching casting surface ..... CM
  De-burring ..... CM, UN
  In case of higher hardness of work materials ..... UN
  Improving surface roughness ..... CM (Up to #320) ~AF
  Maintenance of die cast molds ..... CM

- ***Stainless steel*** Retouching of thin welded bead and bead cut surfaces ..... CM
  Improving surface roughness ..... OX, AF
  De-burring of pressed end face and tooled portions ..... CM, UN
  *Removing fine burrs from precision parts ..... GC·WA-UN
  Mirror finish··· Depends on the mirror surface level ..... AF, Diamond

- ***Iron based cast parts, forged parts, molds***
  De-burring after grinding and cutting ..... CM, UN
  In case of higher hardness of work materials ..... UN
  Processed surfaces of a certain shape, burrs ..... UN
  *Including FCD, depends on the processing level

- ***Non-ferrous metals including gold and copper*** *(Soft materials)* ..... WA-OX
  Mirror surface level ..... AF

- ***Cobalt chrome, Nickel chrome***
  Intermediate process ..... CM, GC-OX
  Mirror finish ..... Diamond

- ***Cutting tools for industrial use***
  Sharpening ..... Special blending
  Intermediate process ..... CM, special blending
  Edge processing ..... Special blending

- ***Titanium alloy*** ..... GC-UN, diamond
  *It depends largely on the operated conditions.

- ***Glass*** Intermediate process ..... GC·C-OX
  Mirror finish ..... Senrap, Diamond

- ***Ceramic*** ..... Diamond

- ***Carbide*** ..... Diamond
  Very fine processing, polishing ..... GC-OX

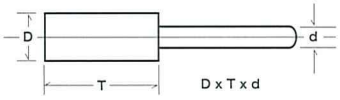
Other applications
- ·Polishing brazed parts ..... CM, OX
- ·De-rusting ..... CM, OX, AF
- ·Processing burns at grinding and maintenance ..... CM, OX
- ·Removing plating and coating ..... CM, GC-OX, Diamond
- ·Retouching high hardened surface coated surface ..... Diamond, GC-OX
  Hard chrome plating ..... SI, diamond
- ·Removing adhesions to the surface at the maintenance of molds ..... CM, OX
- ·Removing black scale ..... CM, special blending
- ·Retouching scratches and dents after processing: Materials and grain sizes are selectable according to the work material and the condition of scratch.

The above shows some examples, and in fact there is a wider variety of materials available. The finish of polished surfaces, effect and efficiency of grinding and polishing depend largely on the state of a work and the operating conditions. When selecting, refer to the page 17.

Mounted Point

Shape and size designation

Shape A (Straight type)



Small diameter

Outer diameter (D)	Thickness (T)	shank diameter (d)
1	5	3
2	5	3
3	8(13)	3

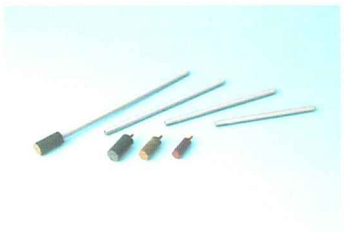
*One-touch Rabin (3-7-1.6)

One-touch Rabin

Rabin size	3 x 7 x 1.6
holder	3 x 30
Available grit sizes	WA80, 120, 180, 320

With the holder chucked in the grinder,
you can attach/detach the tip of the Rabin.

Threaded-type with long shank



Rabin size	4 x 11 x 1.7
	5 x 12 x 1.7
	6 x 13 x 1.7
Special long shank	3 x 50, 60, 70, 80
Available grit sizes	WA80, 120, 180, 220

With a long shank type, you can change the Rabin.
This is of a threaded type. Do not reverse the shank.

Mounted Point · 3.0mm shank

Outer diameter (D)	Thickness (T)	shank diameter (d)	
4	13(15)	3	(15 : Only UN)
5	15	3	
6	17	3	
	20	3	
8	20	3	
10	3	3	
	20	3	
13	20	3	
	30	3	Shape O
15	4	3	
	17(20)	3	(17 : Only CM43)
20	3	3	Shape B
	6	3	
	8	3	
	10	3	
	13	3	
	15	3	
25	3	3	Shape B
	6	3	
	8	3	
	10	3	
	13	3	
30	3	3	Shape B
	6	3	Shape B

CMK for high speed

*CMK for high speed Max. R.P.M : 50,000 r.p.m.
Type CM is now available with an air grinder.

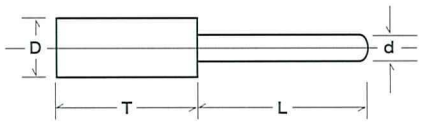
Size 6 x 15 x 3 8 x 15 x 3 10 x 15 x 3

Available grit size Coarse(WA80) Medium(WA120) Fine(WA220)

*This item is for domestic market only. Please ask us about item for overseas market.

● Long shank products can be also produced. Specify the size under the neck.

Long shank specifications



D x T x d L= • •
(* *L= • • Length under neck*)

- We are ready to process products into shapes of all kinds.
- The inventory is limited in terms of size and material.
- We are ready to manufacture with various materials according to the application.
- The maximum r.p.m. of hand grinder varies according to the size and material of Rabin.
  Check with the package box or product designation red label enclosed.
- 1.6, 2.35 and 10mm shank are also available. Please ask us about other special shanks.

Mounted Point· 6.0mm shank

8	20	6	
	25	6	
10	20	6	
	25	6	
13	20	6	
	25	6	
	30	6	
15	20	6	
	25	6	
	30	6	
	35	6	
20	3	6	Shape B
	4	6	
	6	6	
	8	6	
	10	6	
	13	6	
	15	6	
	20	6	
	25	6	
	30	6	
	37(40)	6	(37 : Only CM43)
	40	6	Shape O
25	3	6	Shape B
	4	6	
	6	6	
	8	6	
	10	6	
	13	6	
	15	6	
	20	6	
	25	6	
	30	6	
	35	6	
	40	6	
30	3	6	Shape B
	4	6	Shape B
	6	6	Shape B
	8	6	Shape B
	10	6	Shape B
	13	6	
	15	6	
	20	6	
	25	6	
	30	6	
	40	6	
40	6	6	Shape B
	4	6	Shape B
	8	6	Shape B
	10	6	Shape B
	13	6	
	15	6	
	20	6	
	25	6	
	30	6	
	40	6	
50	5	6	Shape B
	6	6	Shape B
	8	6	Shape B
	10	6	Shape B
	13	6	
	15	6	
	20	6	

(mm)

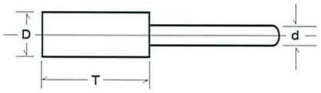
Mounted Point· 2.35mm shank

3	13	2.35	
4	13	2.35	
5	15	2.35	
	15	2.35	Shape O
6	17	2.35	
8	20	2.35	
	25	2.35	Shape O
10	2	2.35	Shape B
	20	2.35	
	25	2.35	Shape O
12	2	2.35	Shape B
	2	2.35	Abacus type
13	25	2.35	Shape O

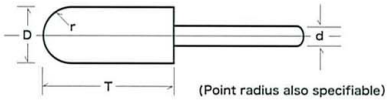
(mm)

Shape and size designation

Shape A (Straight type) D x T x d

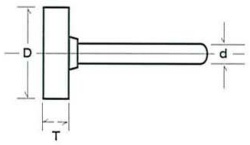


Shape K (Ball-nose type) D x T x d

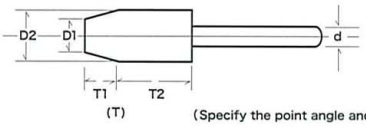


(Point radius also specifiable)

Shape B (with a navel type) D x T x d

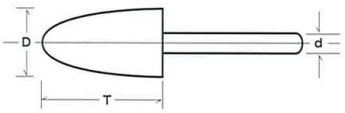


Shape Q (Stepped taper type) D1/D2 x (T1+T2) x d

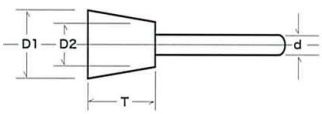


(Specify the point angle and D1 at least)

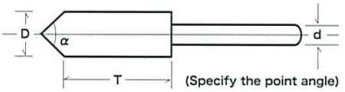
Shape O (Bullet type) D x T x d



Shape D (Reverse-tapered type) D1/D2 x T x d

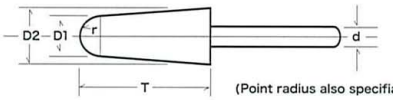


Shape G (Peak type) D x T x d (G=α)



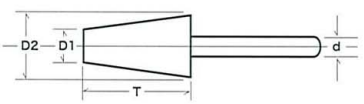
(Specify the point angle)

Shape I D1 / D2 x T x d

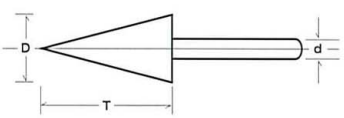


(Point radius also specifiable)

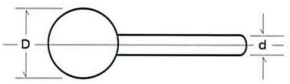
Shape C (Tapered type) D1/D2 x T x d



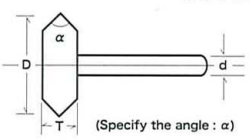
Shape F (Conical type) 1/D x T x d



Shape R (Spherical type) D x d



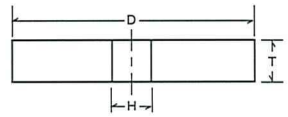
Shape E D x T x d (α°)



(Specify the angle : α)

Wheel Type

Shape and size designation



Wheel Type : Small diameter

Outer diameter (D)	Thickness (T)	Hole diameter (H)	
10	2	1.8	
	3	1.8	
15	1	1.8	
	2	1.8	
	3	1.8	
	4	1.8	
20	1	1.8	
	2	1.8	
	3	1.8	
	4	1.8	
	5	3	
	6	3	
22	1	1.8	
	2	1.8	
	2	1.8	Abacus type
	3	1.8	
25	1	1.8	
	1.5	1.8	
	2	1.8	
	3	1.8	
	3.2	3	Abacus type
	4	1.8	
	5	3	
30	1	1.8	
	2	1.8	
	3	1.8	
	4	1.8	
	5	3	
	6	3	
	8	6	
	10	6	
	13	6	
40	1	1.8	
	2	1.8	
	3	1.8	
	4	3	
	5	3	
	6	3	
	8	6	
	10	6	
	13	6	
	20	6	
	80	15.88	
45	5	6	
	8	6	
	10	6	
	13	9.53	

Outer diameter (D)	Thickness (T)	Hole diameter (H)
50	3	6
	4	6
	5	6
	6	6
	8	6
	10	6
	13	6
	15	6
	20	9.53
	30	12.7
	40	22.2
60	3	6
	4	6
	6	6
	8	6
	10	6
	13	9.53
	15	12.7
	40	16
65	6	6
	8	6
	10	9.53
	13	12.7
	15	12.7
	20	12.7
75	2	6
	3	6
	4	6
	6	6
	8	6
	10	9.53
	13	9.53
	15	12.7
	20	12.7
90	3	9.53
	4	9.53
	5	9.53
	6	9.53
	8	9.53
	16	15.88

(mm)

Wheel Type : Large diameter

Outer diameter (D)	Thickness (T)	Hole diameter (H)	Outer diameter (D)	Thickness (T)	Hole diameter (H)
100	1.5	9.53	205	3	25.4
	2	9.53		4	25.4
	3	9.53		5	25.4
	4	9.53		6	15.88
	5	9.53		8	15.88
	6	9.53		10	15.88
	8	12.7		13	15.88
	10	12.7		15	25.4
	13	12.7		20	25.4
	15	12.7		25	25.4
	20	22.2		50	25.4
	25	25.4	255	5	25.4
	40	25.4		6	25.4
110	3	9.53		8	25.4
	4	9.53		10	25.4
	5	9.53		13	25.4
	8	9.53		15	25.4
125	3	9.53		20	25.4
	4	12.7		25	25.4
	5	12.7		30	25.4
	6	12.7		35	25.4
	8	12.7		40	50.8
	10	12.7	305	6	25.4
	16	12.7		9	25.4
	19	19.05		10	25.4
	25	25.4		13	25.4
150	3	12.7		15	25.4
	4	12.7		20	25.4
	5	12.7		25	25.4
	6	15.88		30	25.4
	10	15.88		40	50.8
	13	15.88		50	50.8
	15	15.88	355	13	25.4
	20	15.88		20	50.8
	25	25.4		25	50.8
180	10	31.75		30	50.8
	15	31.75		40	50.8
	20	31.75		50	76.2
	25	31.75			

(mm)

- We provide you with custom-made products of your desired materials.
- Other sizes and hole diameters are also available.
  Please pay attention to your safety specially when you use smaller sizes than the above-mentioned hole diameter sizes.
  Also, we are ready to provide hole diameters in metric system besides the above hole diameters in inch system.
- Please check your device especially for hole diameter.

- The maximum r.p.m. varies according to the size and material of Rabin.
  Please check with the product seal or product designation red label enclosed.
- With an inverter equipped, DAIWA RABIN's potentiality will be greatly upgraded.
- Since this is an elastic rubberized abrasives, please take care not to tighten the flange too much.

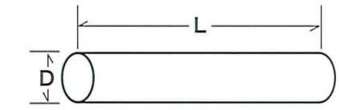
- The processing of products into various shapes may be available.
- We are ready to manufacture products to go with surface grinding, cylindrical grinding, centerless grinding machine and vertical grinding machine.

- Thin wheels are possible to grind and polish with using its bending to a curved surface with good care of safety.

Please give us orders of when thickness tolerance + addition are especially important in case of removal of or grinding groove processing traces.

Round bar

Shape and size designation



Round bar size

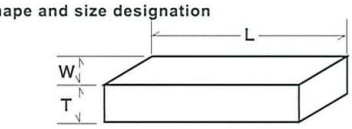
diameter (D)	length (L)	diameter (D)	length (L)
2.35	120	12	150
3	120	16	150
5	120	18	150
6	150	20	150
7	150	25	150
8	150	30	150
10	150	40	150

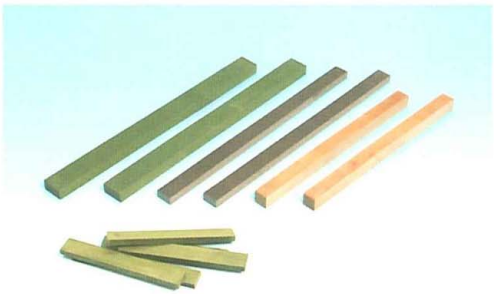
We provide you with custom-made round bar rabin according to your application.

Square bars

(Stick type and Brick type) · Square Sheet and Board

Shape and size designation





We provide you with custom-made square bar rabin according to your application.

Square bar size

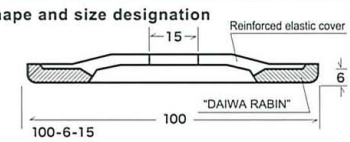
Thickness (T)	Width (W)	Length (L)	Thickness (T)	Width (W)	Length (L)
3	5	100	10	10	100
	10	100		13	100
4	5	100		15	100
	10	100		20	100
5	5	100		25	100
	10	100	13	13	100
	13	100	15	15	100
	15	100		20	100
	20	100		25	100
	25	100	20	20	100
6	6	100		25	100
8	8	100		40	100
			25	25	100
				30	100
				40	100
				50	100

Square sheet and board size

Length (L)	Width (W)	Thickness (T)	Length (L)	Width (W)	Thickness (T)
100	100	1	300	300	3
200	200	1.5		300	4
	200	2		300	5
	200	3		300	6
	200	4		300	8
	200	6		300	10
250	250	2		300	15
	250	3		300	20
	250	4		300	25
	250	5			
	250	6			
	250	8			
	250	10			
	250	15			

Offset

Shape and size designation



Offset

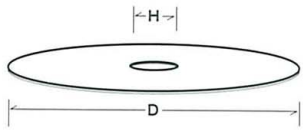
Size : 100 x 6 x 15
Bonding material : CM43
Available grit sizes : WA60, 80, 120, 180, 220, 320
Maximum r.p.m. : 13,000rpm

For 100mm electric disk grinder

For removing welded bead, grinding trace and de-burring.
We are planning to market high-mesh grinding stones using foamed urethane.

Cut

Shape and size designation



Size

(D)	(T)	(H)
30	0.5	2
30	1	2
50	1	6
50	1.5	6
75	1	6

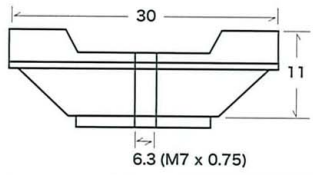
Grain size・Bonding Material type *WA80 CP*

Maximum r.p.m. *3,000 m/min*

The product has been used with a special purpose machine for de-burring and chamfering gear, and it is also effective in the chipping of hard materials.

IT cup

Shape and size designation



Size *30-11-6.3 (M7)*

Abrasive grain・Grit size *WA80,120,180,220,320*

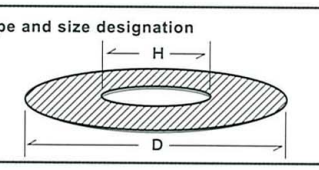
Maximum r.p.m. *23,000 r.p.m.*

For angle grinder

It is applicable for removing black scale and welded bead, de-burring and polishing.

Fit disk

Shape and size designation



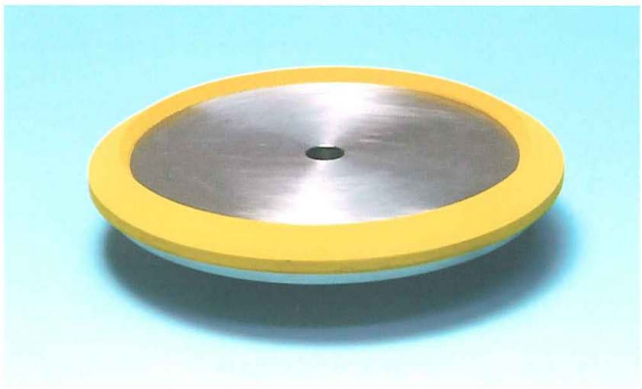
Size

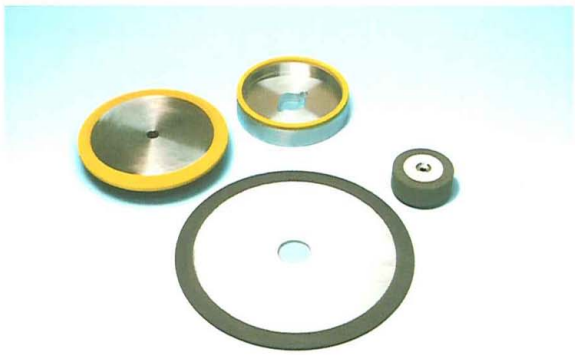
(D)	(T)	(H)
10	2	0
20	2	0
30	2	10

Abrasive grain・Grit size *WA46, 60, 80, 120, 180, 220, 320*

Please use Fit Disc with elastic disk pad (3mm-shank).

Diamond Rabin





Diamond Rabin that has been bound diamond abrasive grain with rubber realized to be excellent in polishing ability and polished surface under the overwhelming evaluation in ceramic, and polishing silicon wafer, mirror finishes stainless steel, and for difficult to cut materials and ultra high hardened surface treated surface.

On top of that, it has been successful in preventing electrodeposited/metal bonded tools from chipping and cracking and in solving such problems as clogging by papers and difficulty in handling paste.
It also demonstrates a higher ware resistance than any other elastic grinding stones. Being elastic, Diamond Rabin may need adjusting the grinding conditions and truing to secure flatness and circularity, but it serves a lot to shorten and reduce the processes and improves the surface roughness by processing accuracy and balance before polishing.

- ***Grain size*** : 60, 80, 120, 170, 230, 320, 400, 600, 800
  1000, 2000, 3000, 4000, 6000, 8000, 10000

  * *Since Diamond Rabin has been bound with rubber, it is different from other types of diamond tools in the relation between mesh designation and polished surface roughness. In some cases, there is difference between general mesh designation and the grain size used by Diamond Rabin.*

  #1000 : 10-20μ
  #2000 : 8-16μ
  #3000 : 6-12μ
  #4000 : 5-10μ
  #5000 : 4-8μ
  #6000 : 3-6μ
  #8000 : 2-3μ
  #10000 : 1-2μ

- ***Bonding Materials***

  Type OX66 is standard (with an concentration degree of 100 approximately) and Type UN79 is of a higher hardness and degree of concentration (200) with more sharpness. Type OX44 fits the curved surface well (less wear resistance, though). We are ready to provide you with such products well balanced in terms of grinding/polishing requirements such as work material and grinding level.

  For a higher level of grinding, such as silicon wafer, we use good care to select the best material including basic rubber material.

- ***Type***

  We are ready to manufacture Diamond Rabin by several types (such as mounted points, wheels) and shapes of all kinds, including wheel type with core, cup type and other types according to the work materials and the machines.

  We would suggest to have diamond rabin with thinner layer to lower cost for testing.

- ***Applicable Work Materials***

  Ceramic, carbide·cermets, carbide tools, stainless steel, mold materials inclusive of carbide, quartz glass, and others. It is also applicable for high hardened surface treated surface such as SiC plating (Hv2000).

Urethane type(AF)

Mounted Point

Wheel Type

Square bars

Urethane foam bond is used which was blended and developed for grinding material.
The product prevents clogging with a host of bubbles, leaving no scratch and produces a high-level polished surface. For aluminum and copper materials, the product is successful in upgrading conventional buffing efficiency and improving the working environment a lot. It also provides the polished surface of general steel and stainless steel without leaving buffing traces.
The urethane type gives a softer touch than the conventional "DAIWA RABIN" and readily polishes curves. It is able to use in both of dry and wet conditions.

Abrasive grain	C, WA, GC, WA-CM abrasive grain, New abrasive grain for Type AF, Cerium oxide for glass polishing, Diamond abrasive grain
Grain size	80, 120, 180, 220, 320, 400, 600, 800, 1000, 1500, 3000, 6000
Bonding material	AFX ..... leaves minimum scratch. AFM (up to #320) .... removes polishing traces and fine scratches AFD (up to #320) .... retouching casting surface and de-burring with upgraded grinding ability. **AFD, AFM leave polishing traces often.*
Special blending	Upon special request, we adjust balancing the degree of foaming, abrasive grain ratio and bonding strength. We are planning to market grinding stones with diamond abrasive grain for the polishing of high hardness and vulnerable materials and those of special blending (rough mesh such as #36) for hairline processing.

Type & Size

Mounted Point

10-20-3 (2.35)
20-20-3 (6)
25-25-6
40-20-6

We manufacture grinding stones as specified according to your device used.

Square bars

15 x 45 x 65
20 x 50 x 80

Wheel Type

100-13-9.53
120-20-10
150-10-15.88
-20-
205-25-12.7 (15.88、25.4、50.8、76.2)
305-15-25.4 (50.8)
-20
-25
-30
-50
355-25-25.4 (50.8)
-50

New product

DAIWA SOFRACS (Brick type)

- *Removing rust easily*
- *Cleaning molds*
- *Coarse・Medium・Fine meshes (3 pcs./set)*

Senrap *(Cerium oxide elastic grinding stone for glass)*

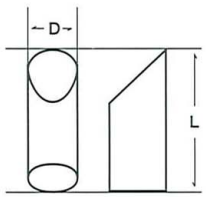
The product is made of cerium oxide carefully selected for the polishing of glass mirror surfaces and bound by specially blended rubber. Compared with the free abrasive grain method, it has succeeded in producing a much higher efficiency in grinding. This also makes waste solution disposition and work and device washing easier. Only with water, mirror polishing of mirror, sheet glass bevels and vertical sides can be well polished.

Bonding material	*CRB-H*
Type·Size·Shape	*We provide you with Senrap grinding stones for bevelling machines, edging machines by type, size and shape, and those in accordance with the work and device. (W-edgers are also available.)*

Other types of "DAIWA RABIN" are available for intermedium processing. We are developing blending balances of quartz glass and other glasses.

Daiwa Rabiton
(Special elastic media for barrel)

Shape and size designation



Size

(D)	(L)	(D)	(L)
φ6−20		φ4−15	

Shape : Straight Type, Single taper Type

DAIWA Rabiton is a rubberized barrel media, completely different from conventional media in performance. Unlike conventional hard media and nylon or other resin bonded media, it provides very soft polishing, causing no scratch or dent because of medium hardness. Such issues as contamination and clogging which happen to resin media can be well solved by DAIWA Rabiton.

Other features include excellencies in all aspects such as working environment and efficiency because it does not generate much dust when it is used in dry condition, and it does not need an additional dust collector which might reduce the working efficiency when it is used in dry condition with a vibratory barrel.

DAIWA Rabiton provides high-level grinding properties with dry, wet, vibrating and centrifugal application methods. It can polish works such as sintered precision metalling parts which can not be readily polished by conventional media.

Available grit sizes as a standard are #80, #120 and #220, but please feel free to ask us about other grit sizes.

Series for Dental industry

Series for Dental industry

"DAIWA RABIN" products in the dental series enjoy a global reputation for excellent performance in ceramic grinding/polishing. Compared with other kinds of elastic grinding stones, they successfully provide a higher sharpness and wear resistance in intermediate polishing of resin, metal and precious metal other than ceramic. Newly developed products are highly evaluated for the polishing of compound resin, zirconia. For further detail, please feel free to ask us anything.

Series for precious metal

"DAIWA RABIN" grinding stones made of various materials are available for rough, intermediate and finish polishing of precious metal products including silver, gold and platinum rings. Unlike other kinds of elastic grinding stones, they cause less clogging and are excellent in sharpness and wear resistance. Not only mounted points type but also thin wheel type grinding stones work well for polishing of the curved surface. A new product made of foamed urethane for conventional buffing is under development.

Mounted Point

5 x 15 x 2.35
6 x 17 x 2.35
8 x 20 x 2.35
10 x 20 x 2.35
10 x 20 x 2.35
10 x 25 x 2.35
13 x 30 x 2.35

***Shape A*, *Shape O* (*Bullet type*)**

3 x 7 x 1.6 (***Shape O***)
Usable with a high speed turbine

Wheel type

20 x 1 x 3 (Abacus type)
20 x 2 x 1.8
25 x 1.5 x 1.8
25 x 2 x 1.8
25 x 2 x 3 (Abacus type)
25 x 3 x 1.8

Other specialized shapes

* *The maximum r.p.m. varies according to the size and material of grinding stone. Please check with the product seal or product designation red label enclosed.*

Other special types

We manufacture products of special types, including those for vertical grinders, pellet for super finishing, segment grinding stone, rolls and those to go with special attachments for hand tools of all kinds. We are ready to manufacture grinding stones according to the shape of grinding part in the work material and the device, including those with metal fittings, cores or special shanks.

When you provide us with special shanks, you are requested to knurl where the grinding stone is bonded.

When selecting a "DAIWA RABIN" product

We think "Try first" is the best thing to do when selecting a "DAIWA RABIN" product.

Please be free to get in touch with and tell us the following as much as possible.

We would like to provide test samples if it is not specialized products.

- The content of operations (surface roughness of the grinding surface, de-burring, removing scratches, retouching surface treatment, removing rust and stain and others.)
- Work pieces and the materials
- Part and shape of a work to grind and polish, condition of the work prior to grinding
- Requirements (Required surface roughness, reducing or shortening the processes.)
- Equipment for use
- Type, size and shape of grinding stones
  (A similar product to your requested product may be provided for testing purposes.)

Please let us know when you need a special product for test, and we will try to meet your need as much as possible.

Try a "DAIWA RABIN" product, and tell us what you think of and want from the product in terms of the surface polished, sharpness in grinding, degree of wear, clogging, burning and what is left to be desired with the product, and we will do our best to satisfy your need of grinding/polishing. We don't think that "DAIWA RABIN" is able to satisfy every need of grinding/polishing, though.

Abrasive grain (our own designation)

WA-CM	our own developed product *Available grain sizes : (46)、60、80、120、180、220、320
WA	White alumina abrasive material
A	Brown alumina abrasive material
C	Black silicon carbide abrasive material
GC	Green silicon carbide abrasive material
CRO	Chrome oxide
D	Diamond abrasive grain
CE	Cerium oxide
Available grain sizes	From #24 up to #10000 with an exception of Type CM. As to diamond type, please see the page 12.
Bonding material type	*Please see the page 4.*

We are ready to change and adjust abrasive grain, abrasive grain ratio and hardness to provide you with a wide range of grinding stone materials to meeting your needs.

For reference : *Standard type in all kinds of bonding material type*

- ***Type CM*** Diameter of mounted point 4～6mm ・・・・・・CM55
  More than 8mm ・・・・・・CM43
- ***Type OX*** OX44
- ***Type UN*** UN77
- ***Type Diamond*** OX66

We have provided special blending that are mentioned below, including main type's changes in balance and changes in basic rubber material.

・Final processing of hairdressing scissors ・For de-burring from fountain pen tips ・For oil seal surface ・For polishing line for bicycle rims
・Automobile tires ・For preventing atomic power related works from rusting ・For gear chamfering machines ・For finishing roll hard chrome plating
・For de-burring and lapping from injection nozzles ・For silicon wafer edge and notch ・For processing carbide chip edges
・For grinding glass, ceramic ferrule ・For maintenance aircraft engines ・For grinding needle tips ・For railway maintenance (derusting) equipment
・For de-burring from gear ・For hairline processing of aluminum and stainless steel ・For grinding cutters (for intermediate processing) ・For CRTs
・For sharpening band saws ・Pellet for mold super finishing ・For grinding ultra high hardened coated surface ・For testing automobile glass ・Others

It is thanks to the frank requests from our users and dealers who use and distribute grinding stones that have helped us develop other products.
Our R&D efforts continue to serve you more, satisfying your needs for grinding, meeting the requirements of various work materials, catching up with developing processing technology and surface treatment and improving better products.

Requests and frequently asked questions

Requests

- In the event that something unusual was observed with the grinding stone, stop using it immediately and contact us without losing time, telling us the product description and serial number. Make sure at the same time that the device is in condition.

- Be advised to keep the package or enclosed product description red label at hand.
- When inquiring a quotation and placing an order to us, please specify

Type	(mounted point, wheel, square bar or any other type),
Abrasive and bonding material	(WA180 CM55 or any other material), and
Size (shape)	(6-17-3 L=80 (Shape O) or any other size and shape).

- The grinding stone may be discolored with time, but it can be used as ever.
- We are ready to use your supplied metal fittings or shank to produce a grindstone on condition that you knurl the surface where the grinding stone is bonded.

FAQs

Dressing, truing

A commercially available square grinding stone (brick) such as vitrified abrasive material can be used for dressing and truing in the event the shape and dimensional precision don't matter so much.
It is advisable to use a diamond deposited rotary dresser when a certain precision is to be secured.

Shape processing

As mentioned above, it is able to make shape processing with a square grinding stone (brick) easily.
A diamond deposited rotary dresser is useful for sophisticated and highly accurate form processing.
In some cases, you can procure a grinding stone for truing at a lower price than our shape processing.

Coolant·cooling water

Our products are able to use generally used coolant and cooling water.

MSDS, chemical ingredients

Contact our Technical Department, letting us know about the material of grinding stone.

Guide to safety

"DAIWA RABIN" is an elastic rubberized grinding stone.

Operate your devices at the speed less than the maximum r.p.m.

(The maximum r.p.m. will be found on the package box, enclosed product description label (red) or posted seal.)

- In general, the "DAIWA RABIN" products are heavier than elastic grinding stones of other types with an exception of Type AF. Pay attention to the maximum r.p.m., in particular, when using a "DAIWA RABIN" as a substitute.
- Even when a "DAIWA RABIN" is used within the maximum r.p.m., it may be bent and damaged if pressed too hard.
- Uneven wear or a degree of wear may cause the grinding stone to be damaged.
  Since the product suffers uneven wear, it will become run out more because of elasticity than grinding stones of other types. Stop using and put it to the adjustment.
- Turn it at a low speed and nothing is wrong, including run out, before put it into operation.
- Take a safe position or orient the grinding stone to a safety position when starting using a tool or device.
- The grinding stone has rubber elasticity, and take care not to apply a sudden load to it.
- It may be damaged or cause an accident because overheat reduces rubber strength when the grinding stone has a large contact area, is applied a heavy load or used continuously. Let it be radiated and cooled.
- Ultra-violet rays deteriorate the grinding stone. Don't expose it to the sun when it is stocked.
- Putting on safety glasses, a safety helmet and gloves is indispensable for using a grinding stone.

On top of the above, observe such instructions on using and stocking grinding stone as given below.

- Use a grinder and any other devices which are well checked and maintenance.
  Use a specific covers for grinding stone.
- Fit your grinder and any other devices with a grinding stone in a proper and sure manner.
  Take care not to tighten the flange of a wheel type grinding stone too much.
- "DAIWA RABIN" grinding stones generate less dust than grinding stones of other types, but never fail to put on a dust protective mask. (The operator may suffer from a respiratory disease.)
- Sparks may set dust on fire. Take proper measures to remove dust and prevent sparking.
- Observe the basic instructions on stocking: Do not stock any grinding stone as it is left bent; Do not immerse it in water; Do not stock it in a highly humid place for a long period of time; Do not expose it to the direct sun; When unpacked, the grinding stone must be wrapped in a vinyl bag.

When subdividing grinding stones, show the operator the maximum r.p.m., hand in him such a guide book to safety attached to the product, and tell him to start using after being familiarized with how to use.