

Mounted Wheels

**BAY
UNION**

BAY UNION PHILOSOPHY

**We believe grinding is the key to precision.
Pursuing the perfection of every detail
is our way to provide the best grinding solution.**



COMPANY HISTORY

Bay Union Abrasive Technology Co., Ltd. was founded in 1987. We have focused on producing vitrified bonded grinding wheels for many years. Bay Union has advanced vitrified bonds and special self-developed equipment, so we can supply high quality mounted wheels in a very fast and steady way. We have supplied worldwide famous customers with a good reputation for years, especially in North America and Europe market.

Since 2010, Bay Union has produced precision grinding wheels based on unique producing technique and expanded the business to precision machining industry in Taiwan. High performance, high-quality stability, and fast delivery are our strength, and that is why we can expand very fast in the internal grinding market at the beginning. After years of R&D, we successfully developed new low-temperature vitrified bonds. The series of SG wheels and CBN wheels were launched soon after the new bond development, so to speak, Bay Union entered the high-end market.

In order to satisfy customers' various needs, Bay Union started to produce surface grinding and cylindrical grinding wheels in 2018, and our target is to be the high-end import substitution. For all product series of other brands, we have corresponding wheels for replacement with more value. We believe BAYUNION is the best grinding wheel choice for all customers.

BAYUNION ENERGY

Grinding wheel industry has a centennial foundation, and predecessors have accumulated a good knowledge of grinding wheel; we carefully retain the essence and keep the know-how of making grinding wheel. Meantime, with many new technologies quickly developed, such as outstanding machines from equipment supplier, new alloy material from the R&D department, and precision demand from the client, the grinding challenge of grinding wheel becomes bigger and bigger.

We keep studying of

- Property of new abrasive materials.
- Matching between abrasives and grinding application.
- Stability of grinding wheels production.
- Integration of precision factors on machining application.

All of this is for only one purpose: Provide a better grinding solution for the customers.

GENERAL INFORMATION

Standard Wheel Markings

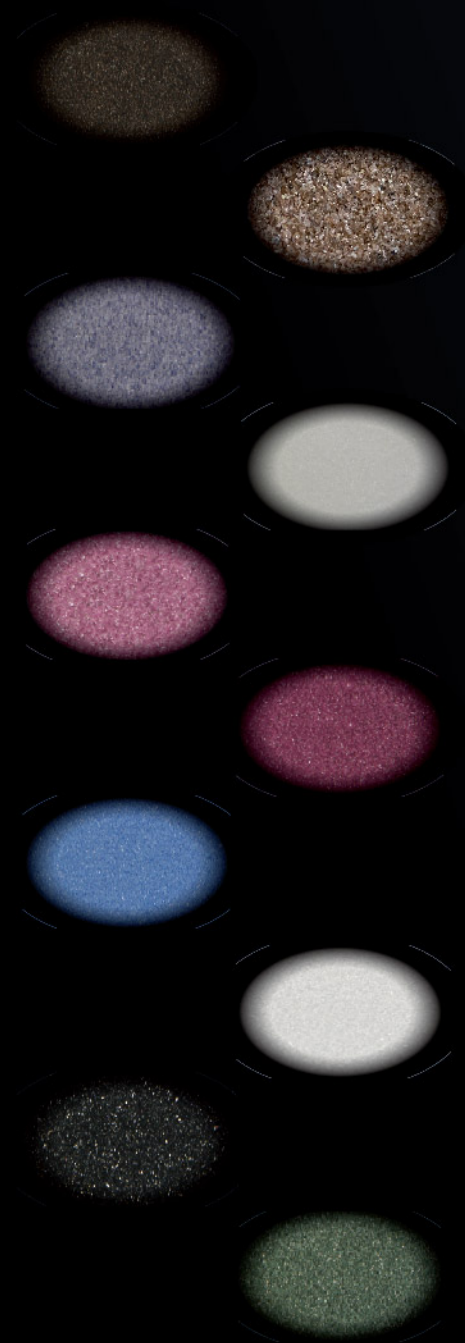
Our company complies with the standard designation of wheel specification which was developed by ISO, standards such as CNS, JIS and AS all use this uniform standard.



50A	80	K	8	V
Abrasive	Grit	Grade	Structure	Bond

Abrasives

Raw Material

Application



- | | |
|-----|---|
| 10A | Brown fused regular aluminum oxide
Unhardened steel / Cast iron. |
| 20A | Semi-friable aluminum oxide
Carbon steel / Cast iron |
| 30A | Monocrystalline aluminum oxide
Tool steel / Alloy steel |
| 40A | White aluminum oxide
All kinds of steel |
| 50A | Pink aluminum oxide
Tool steel / Hardened steel / Bearing steel |
| 60A | Ruby aluminum oxide
Tool steel / Hardened steel (heat sensitive) |
| 80A | Micro-crystalline aluminum oxide-Blue 
High hardness alloy steel |
| 90A | Micro-crystalline aluminum oxide-White 
High hardness alloy steel |
| 10C | Black silicon carbide
Stone / Marble / Rubber / Ceramics |
| 20C | Green silicon carbide
Cemented carbide alloy / Titanium / Nonferrous metal |

GENERAL INFORMATION

Grits

	Grit mesh	Grit Avg. size μm	Wheel dia.			
			2.5-8mm	8-16mm	16-25mm	25-50mm
Coarse	#20	1000				
	#24	710				
Medium	#36	500				
	#40	425				
	#46	355				
	#54	305				
	#60	250				
	#70	210				
	#80	180				
	#90	150				
Fine	#100	125				
	#120	106				
	#150	75				
	#180	66				
	#220	55				

Grades

Very Soft	D	E	F	G
Soft	H	I	J	K
Medium	L	M	N	O
Hard	P	Q	R	S
Very Hard	T	U	V	W

Structure

Symbol	0	1	2	3	4	5	6	7
Abrasive Ratio %	62	60	58	56	54	52	50	48
Symbol	8	9	10	11	12	13	14	
Abrasive Ratio %	46	44	42	40	38	36	34	

Bond Type

Vitrified Bond (Ceramic Bond) is the select bond for precision grinding applications requiring high accuracy and tense dimensional tolerances, wheels made with this bond give high stock removal and their rigidity helps to attain high precision. Not affected by water, acid, oil or ordinary temperature variations.

MOUNTED WHEELS - TYPE A



MOUNTED WHEELS - TYPE A

Type A is designed mainly for offhand applications in foundries, steel mills, metal fabrication plants and stone industries.

Standard shank	ø6x30mm or ø1/4" x 1-1/2"
Standard abrasive	50A (Pink Aluminum Oxide)

Specification Standard Marking:

<u>A1</u>	<u>19x65x6x30mm</u>	<u>50A</u>	<u>46</u>	<u>P</u>	<u>7</u>	<u>V</u>
Type	D x T x d x L	Abrasive	Grit	Grade	Structure	Bond

Standard Specification and Packing :

Type	D mm	T mm	d mm	Standard spec.	Packing @box
A1	19	65	6	46 P	30 pcs
A2	25	32	6	46 P	50 pcs
A3	25	70	6	46 P	25 pcs
A4	32	32	6	46 P	50 pcs
A5	19	28	6	46 P	50 pcs
A6	19	28	6	46 P	50 pcs
A11	22	50	6	46 P	50 pcs
A12	18	32	6	60 P	50 pcs
A13	28	28	6	46 P	30 pcs
A14	18	22	6	60 P	50 pcs
A15	6	27	6	80 Q	100 pcs
A21	25	25	6	46 P	50 pcs
A22	19	16	6	46 P	50 pcs
A23	19	25	6	46 P	50 pcs

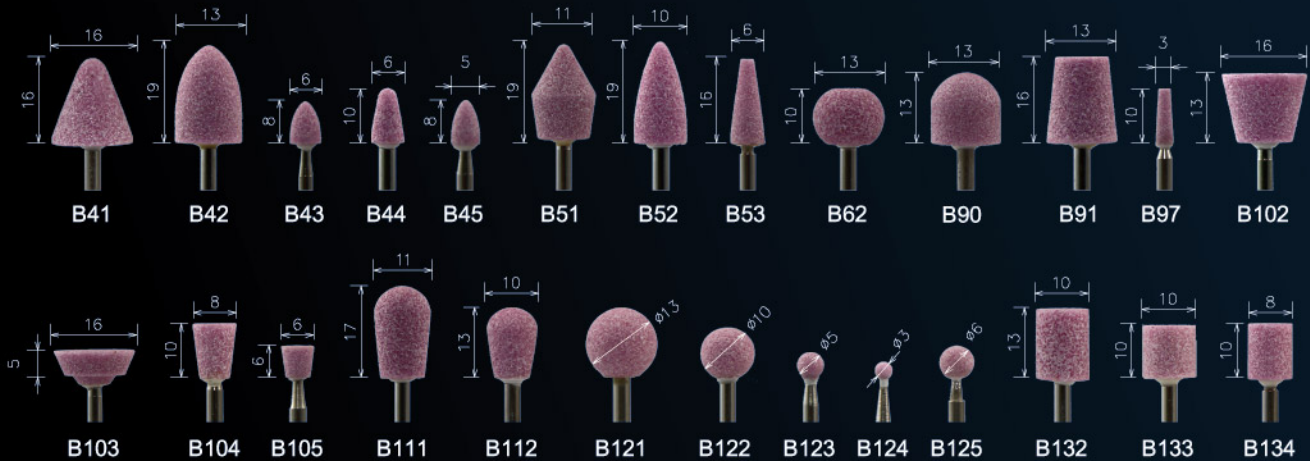
Type	D mm	T mm	d mm	Standard spec.	Packing @box
A24	6	19	6	80 Q	100 pcs
A25	Φ 25	6	6	46 P	50 pcs
A26	Φ 16	6	6	60 P	100 pcs
A31	35	25	6	46 P	30 pcs
A32	25	16	6	46 P	50 pcs
A33	25	13	6	46 P	50 pcs
A34	38	10	6	46 P	30 pcs
A35	25	10	6	46 P	50 pcs
A36	42	10	6	60 P	30 pcs
A37	32	6	6	60 P	50 pcs
A38	25	25	6	46 P	50 pcs
A39	19	19	6	46 P	50 pcs
A40	Φ 19	6	6	60 P	50 pcs

*Any other available specification and shank size can be offered on request.

MOUNTED WHEELS - TYPE B

Type B is designed mainly for light deburring application in the tools and die industries.

Standard shank	3x30mm, $\phi 1/8" \times 1-1/4"$, or $\phi 1/4" \times 1-1/2"$
Standard abrasive	50A (Pink Aluminum Oxide)



Standard Specification and Packing :

Type	D mm	T mm	d mm	Standard spec.	Packing @box
B41	16	16	3	80 Q	100 pcs
B42	13	19	3	80 Q	100 pcs
B43	6	8	3	80 Q	500 pcs
B44	6	10	3	80 T	500 pcs
B45	5	8	3	80 T	500 pcs
B51	11	19	3	80 T	200 pcs
B52	10	19	3	80 T	200 pcs
B53	6	16	3	80 T	500 pcs
B62	13	10	3	80 Q	200 pcs
B90	13	13	3	80 Q	200 pcs
B91	13	16	3	80 Q	200 pcs
B97	3	10	3	100 T	500 pcs
B102	16	13	3	80 Q	100 pcs

Type	D mm	T mm	d mm	Standard spec.	Packing @box
B103	16	5	3	80 Q	200 pcs
B104	8	10	3	80 T	500 pcs
B105	6	6	3	80 T	500 pcs
B111	11	17	3	80 T	200 pcs
B112	10	13	3	80 T	200 pcs
B121	ϕ 13	13	3	80 Q	200 pcs
B122	ϕ 10	10	3	80 T	200 pcs
B123	ϕ 5	5	3	80 T	500 pcs
B124	ϕ 3	3	3	80 T	500 pcs
B125	ϕ 6	6	3	80 T	500 pcs
B132	10	13	3	80 Q	100 pcs
B133	10	10	3	80 Q	100 pcs
B134	8	10	3	80 Q	200 pcs

*Any other available specification and shank size can be offered on request.

MOUNTED WHEELS - TYPE W

Type W is suitable for offhand and precision grinding, where involving medium to heavy stock removal is needed.

Standard shank	ø6x30mm for coarse grits, rough grinding
	ø3x30mm, for fine grits, for finishing
Standard abrasive	50A (Pink) / 40A+(Orange)



Standard Specification and Packing :

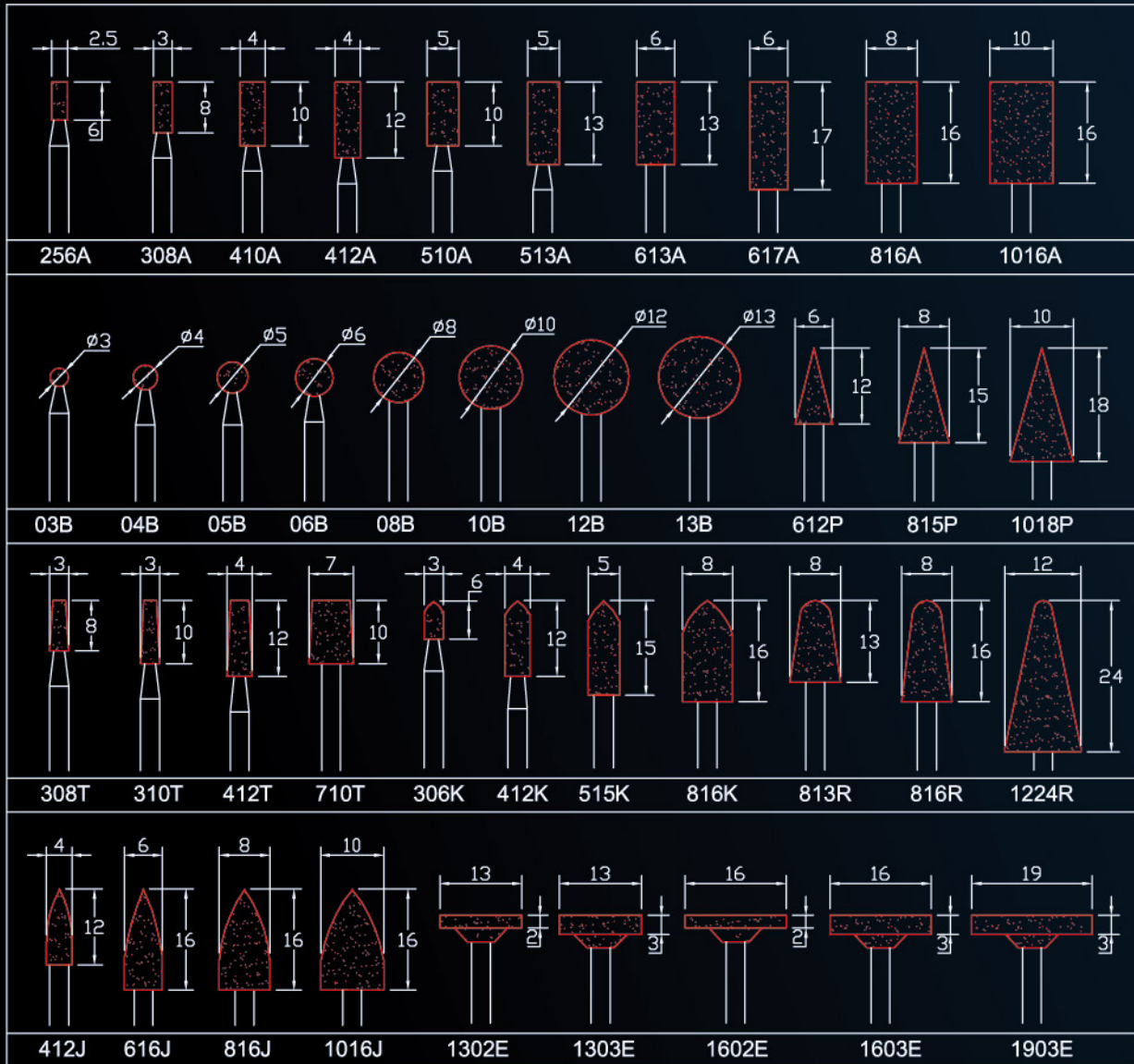
Type	D mm	T mm	d mm	Standard spec.	Packing @box	Type	D mm	T mm	d mm	Standard spec.	Packing @box
W145	3	10	3	100 T	500 pcs	W196	16	25	6	60 P	50 pcs
W146	3	13	3	100 T	500 pcs	W200	19	3	6	60 Q	50 pcs
W149	4	6	3	100 T	500 pcs	W202	19	10	6	60 Q	50 pcs
W153	5	10	3	100 T	500 pcs	W203	19	13	6	60 Q	100 pcs
W154	5	13	3	100 T	500 pcs	W204	19	19	6	46 P	50 pcs
W162	6	10	3	100 T	100 pcs	W205	19	25	6	46 P	50 pcs
W163	6	13	3	100 T	100 pcs	W206	19	32	6	46 P	50 pcs
W164	6	19	3	100 T	100 pcs	W207	19	38	6	46 P	50 pcs
W170	8	13	3	80 Q	100 pcs	W208	19	50	6	46 P	50 pcs
W171	8	19	3	80 Q	200 pcs	W215	25	3	6	80 Q	50 pcs
W175	10	10	3	80 Q	100 pcs	W216	25	6	6	60 Q	100 pcs
W176	10	13	3	80 Q	100 pcs	W217	25	10	6	60 Q	100 pcs
W177	10	19	3	80 Q	100 pcs	W219	25	19	6	46 P	50 pcs
W178	10	25	3	80 Q	100 pcs	W220	25	25	6	46 P	50 pcs
W179	10	32	3	80 Q	100 pcs	W221	25	38	6	30 Q	50 pcs
W182	13	3	3	80 Q	100 pcs	W222	25	50	6	30 Q	25 pcs
W184	13	10	3	80 Q	100 pcs	W226	32	10	6	46 Q	50 pcs
W185	13	13	3	60 Q	100 pcs	W227	32	13	6	46 P	50 pcs
W186	13	19	3	60 Q	100 pcs	W228	32	19	6	30 Q	40 pcs
W187	13	25	6	60 Q	100 pcs	W229	32	25	6	30 Q	30 pcs
W188	13	38	6	60 Q	100 pcs	W230	32	32	6	30 Q	30 pcs
W191	16	3	6	80 Q	50 pcs	W231	32	38	6	30 Q	30 pcs
W193	16	10	6	80 Q	50 pcs	W236	38	13	6	30 Q	40 pcs
W194	16	13	6	60 Q	50 pcs	W237	38	25	6	30 Q	25 pcs
W195	16	19	6	60 Q	50 pcs	W238	38	38	6	30 Q	20 pcs

*Any other available specification and shank size can be offered on request.

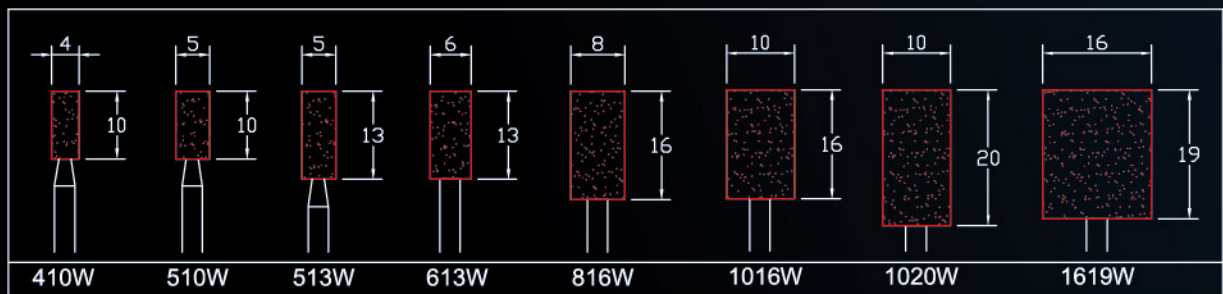
MOLD-MAKING MOUNTED WHEELS

1. The standard shank is 3x30mm, while other shank sizes can be customized.
2. The grit sizes #80~#120 are available for different shapes.

Abrasives : 50A (Pink)

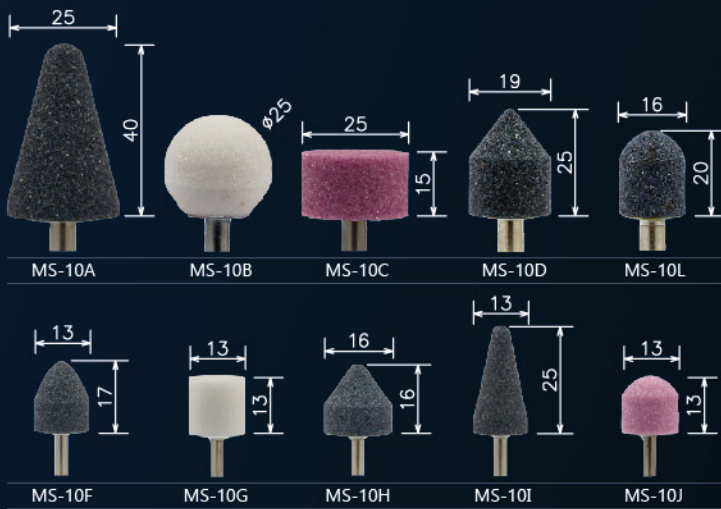


Abrasives : 40A+ (Orange)



*Any other available specification and shank size can be offered on request.

MOUNTED WHEEL SET



5pcs./set :
Shank of $\varnothing 3\text{mm}$
 $\varnothing 6\text{mm}$
 $\varnothing 1/8''$
 $\varnothing 1/4''$

10pcs./set :
5pcs $\varnothing 3\text{mm}$ + 5pcs $\varnothing 6\text{mm}$
or
5pcs $\varnothing 1/8''$ + 5pcs $\varnothing 1/4''$

DENTAL MOUNTED WHEELS

Please specify product number as of following for 3 categories of HP, FG and CA :

$\frac{\text{HP}}{\text{Category}} - \frac{\text{G}}{\text{Abrasives}} - \frac{60}{\text{Shape no.}}$

G : Green wheel P : Pink wheel
O : Orange wheel W : White wheel

*The standard stock for all 3 categories is grit #120

HP (Hand Piece) is suitable for chair-side system and lab system

Shank diameter : $\varnothing 2.34\text{mm}$.

Green wheels are suitable for fast contouring and finishing composites, alloys and porcelain.

Pink wheels are suitable for polishing nickel, cobalt and chrome alloys.

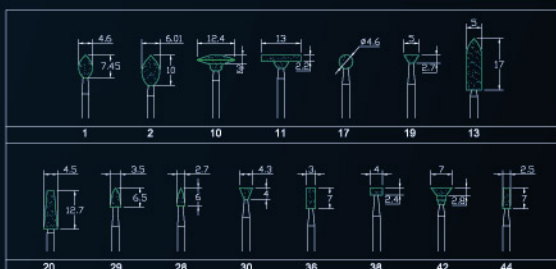
Orange wheels are suitable for cutting and rough polishing nickel, cobalt and chrome alloys.

White wheels are suitable for finishing metal and ceramics.

FG (Friction Grip) & CA (Contra-Angle) are suitable for intra-oral system

Shank diameter : $\varnothing 1.60\text{mm}$ (FG) ; $\varnothing 2.34\text{mm}$ (CA), the CA shank end is in flat shape as shown in picture. Both they are excellent for fine contouring and finishing of enamel, composites and porcelain.

Green wheels and white wheels are available on order.



www.bayunion.com.tw

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