

MASTER®

Masterflex Products

SOLUTIONS FOR INDUSTRY



Introduction

Master Abrasives

The **MASTER®** brand is known internationally as a high-quality brand of abrasives, tools and consumables by Master Abrasives, accredited to ISO 9001 standards. As an independent UK owned company with over 50 years' experience in the abrasives market, we supply industry with high performance polishing products.

We aim to provide solutions for industry through both our products and professional service. Masterflex® products are manufactured at our location in Daventry. Our technical application team works with customers worldwide to find solutions for applications and help to achieve improved productivity with high quality, cost-effective products.

Our comprehensive range of mounted points, type 1 and type 27 wheels and finishing sticks are available in various sizes and grades to ensure we can offer products that meet the most demanding applications.



Product types

Mounted points

For grinding and finishing applications on stainless steel, aluminum castings and fabrications. Various A,B and W-shapes are available, *see pages 4-5 for more information.*

T1, Straight sided wheels

Widely used for deburring and finishing of ferrous and non-ferrous fabrications. Available in wide range of sizes between 25-250mm outer diameter and 0.8-25mm thickness, and grades, featuring long life, controlled grinding and non-loading. *See page 6 for more information.*

T27, Depressed centre discs

Used generally in the metal fabrication industry for grinding, polishing and blending stainless steel and aluminium welds. Available in 100,115 and 180mm diameters and 4.5 and 6mm thicknesses. *See page 6 for more information.*

Finishing sticks

Used for hand deburring, finishing and polishing. Available in 100 and 150mm length in 6-13mm thicknesses. *See page 6 for more information.*



How to Order



B111 3MM A120 GFX



Technical information

Abrasives

Aluminium Oxide

Grit size

The size of the grit is indicated by a number ranging from coarse to fine:

Coarse	24	36
Medium	54	80
Fine	120	180
Very Fine	220	320

Hardness

The hardness is a measure of the bond strength which retains the abrasive grain. It is expressed by letters G or M, G (soft) being for blending and finishing and M (hard) for stock removal. The hardness of the products is closely linked to the bond used.

Bond

The bond is the matrix which holds together the abrasive grit:

Latex – FX FX Bond is a unique flexible bond that blends, finishes and polishes in one single operation.



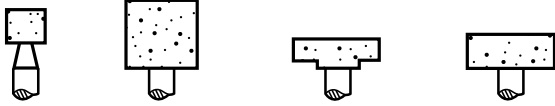
Resin – TX TX Bond is a strong resin bond that combines the resilience and cutting ability with long life and better finishes.



Applications

Reference / abrasive type	Steel (mild)	Aluminium	Steel (stainless)	Other non-ferrous metals such as brass, bronze and copper	Wrought iron
Weld removal	A24 MTX	A24 MTX	A24MTX		
Blending	A36 GFX	A36 GFX	A36 GFX	A36 GFX	A36 GFX
Light deburring	A24 MTX	A36 MTX	A54 MTX	A36 MTX	
Finishing	A54GFX	A80GFX	A80GFX	A80 GFX	
Polishing	A120 GFX	A120GFX	A120 GFX	A120 GFX	A120 GFX

Mounted Points - W Shapes



Shape	Dimensions mm Diameter × Length	Shank diameter	Maximum Operating Speed RPM
W154	5 × 13	3mm	70,000
W160	6 × 6	3mm	81,000
W162	6 × 10	3mm	68,000
W163	6 × 13	3mm	60,000
W164	6 × 20	3mm	45,000
W174	10 × 6	3mm	69,000
W175	10 × 10	3mm	54,000
W176*	10 × 13	3mm	45,000
W177*	10 × 20	3mm	33,000
W178*	10 × 25	3mm	26,000
W183*	13 × 6	3mm	51,000
W184*	13 × 10	3mm	41,000
W185*	13 × 13	3mm	34,000
W186*	13 × 20	3mm	26,000
W201*	20 × 6	3mm	38,000
W202*	20 × 10	3mm	30,000
W203*	20 × 13	3mm	25,000
W216*	25 × 6	3mm	30,000
W179	10 × 32	6mm	45,000
W187	13 × 25	6mm	40,000
W188	13 × 38	6mm	30,000
W189	13 × 50	6mm	24,000

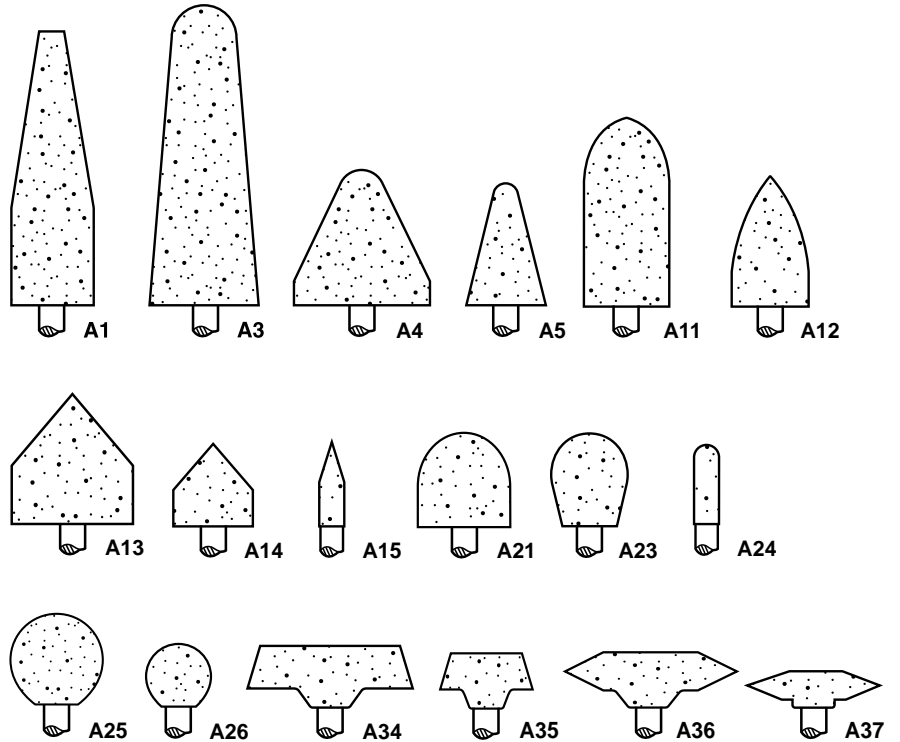
Shape	Dimensions mm Diameter × Length	Shank diameter	Maximum Operating Speed RPM
W196	16 × 25	6mm	35,000
W197	16 × 50	6mm	21,000
W204	20 × 20	6mm	42,000
W205	20 × 25	6mm	34,000
W207	20 × 38	6mm	24,000
W208	20 × 50	6mm	18,000
W217	25 × 10	6mm	38,000
W218	25 × 13	6mm	38,000
W220	25 × 25	6mm	25,000
W221	25 × 38	6mm	19,000
W222	25 × 50	6mm	15,000
W225	32 × 6	6mm	29,000
W226	32 × 10	6mm	29,000
W227	32 × 13	6mm	30,000
W228	32 × 20	6mm	29,000
W230	32 × 32	6mm	20,000
W232	32 × 50	6mm	14,000
W235	38 × 6	6mm	25,000
W236	38 × 13	6mm	25,000
W237	38 × 25	6mm	22,000
W238	38 × 38	6mm	15,000
W242	50 × 25	6mm	19,000

Shapes also available on 1/8" or 1/4" shank
Please contact us for further shapes.

The maximum safe operating speed RPM is stated at 13mm overhang, however if unsure please contact us.

Mounted Points - A & B Shapes

Shape	Dimensions mm Diameter x Length	Maximum Operating Speed RPM
A1	22 x 63	19,000
A3	25 x 70	16,000
A4	32 x 32	29,000
A5	20 x 28	45,000
A11	22 x 50	19,000
A12	20 x 32	48,000
A13	30 x 32	33,000
A14	20 x 22	53,000
A15*	6.5 x 27	72,000
A21	25 x 25	34,000
A23	20 x 25	39,000
A24**	6.5 x 20	76,000
A25	∅25	35,000
A26	∅16	59,000
A34	40 x 11	25,000
A35	25 x 11	38,000
A36	40 x 11	23,000
A37	30 x 7	29,000

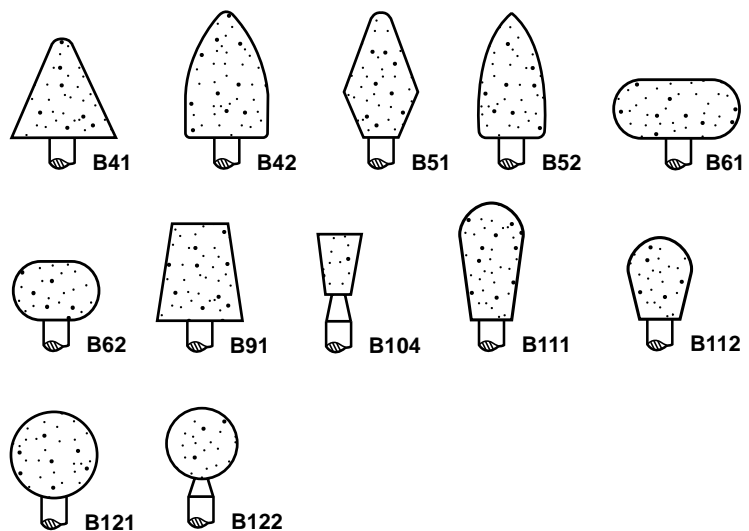


The above shapes are all available on 6mm or 1/4" shanks.
Shapes A15 & A24 are also available on 3mm or 1/8" shanks.

*A15 - 3mm - 39,000 RPM

**A24 - 3mm - 52,000 RPM

B41	16 x 16	33,000
B42	13 x 20	33,000
B51	11 x 20	45,000
B52	10 x 20	45,000
B61	20 x 10	38,000
B62	13 x 10	41,000
B91	13 x 16	34,000
B104	8 x 10	68,000
B111	11 x 18	33,000
B112	10 x 13	45,000
B121	∅13	45,000
B122	∅10	61,000



The above shapes are all available on 3mm or 1/8" shanks.
Please contact us for further shapes.

The maximum safe operating speed RPM is stated at 13mm overhang, however if unsure please contact us.



Straight sided Wheels Type 1

Wheel Size mm	Maximum Safe RPM		Wheel Size mm	Maximum Safe RPM		Wheel Size mm	Maximum Safe RPM			
	TX Bond	FX Bond		TX Bond	FX Bond		TX Bond	FX Bond		
25 x 0.8 x 1.59	54,000	-	76 x 3.0 x 6.35	18,000	12,000	150 x 13 x 15.88	9,000	6,000		
25 x 0.8 x 3.18		-	76 x 6.0 x 6.35			150 x 20 x 15.88	6,000			
25 x 1.6 x 3.18		36,000	36,000			76 x 6.0 x 9.53	150 x 25 x 15.88		7,000	5,000
25 x 3.0 x 3.18						76 x 10 x 9.53	180 x 3.0 x 12.7			
25 x 6.0 x 6.35						76 x 13 x 9.53	180 x 3.0 x 15.88			
25 x 10 x 6.35	100 x 1.6 x 6.35			180 x 6.0 x 15.88						
38 x 1.6 x 3.18	100 x 1.6 x 9.53			180 x 10 x 15.88						
38 x 3.0 x 3.18	36,000	24,000	100 x 3.0 x 6.35	13,000	9,000	180 x 13 x 15.88	5,000			
38 x 6.0 x 6.35			100 x 3.0 x 9.53			180 x 20 x 19.05				
38 x 10 x 6.35			100 x 6.0 x 6.35			180 x 25 x 15.4				
50 x 0.8 x 6.35			100 x 6.0 x 9.53			200 x 6.0 x 19.05		6,000	4,000	
50 x 1.6 x 6.35			100 x 10 x 9.53			200 x 6.0 x 25.4				
50 x 3.0 x 6.35	100 x 13 x 12.7	200 x 10 x 25.4								
50 x 3.0 x 9.53	100 x 20 x 12.7	200 x 13 x 25.4								
50 x 6.0 x 6.35	100 x 25 x 12.7	200 x 20 x 25.4								
50 x 36 x 9.53	27,000	18,000	125 x 3.0 x 12.7	9,000	7,000	200 x 25 x 25.4	4,000			
50 x 10 x 6.35			125 x 6.0 x 12.7			230 x 6.0 x 19.05				
50 x 10 x 9.53			125 x 10 x 12.7			230 x 10 x 19.05				
50 x 13 x 9.53			125 x 13 x 12.7			230 x 13 x 25.4				
63 x 0.8 x 6.35			125 x 20 x 12.7			230 x 20 x 25.4				
63 x 1.6 x 6.35	21,000	14,000	125 x 25 x 15.88	7,000	4,000	230 x 25 x 25.4	4,000			
63 x 3.0 x 6.35			150 x 3.0 x 12.7			250 x 6.0 x 19.05				
63 x 6.0 x 6.35			150 x 3.0 x 15.88			250 x 10 x 25.4				
76 x 1.6 x 6.35			150 x 6.0 x 12.7			250 x 13 x 25.4				
76 x 1.6 x 9.53			150 x 10 x 12.7			250 x 20 x 25.4				
76 x 3.0 x 3.18	18,000	12,000	150 x 13 x 12.7	9,000	6,000	250 x 20 x 25.4	3,000	3,000		
						250 x 25 x 25.4				

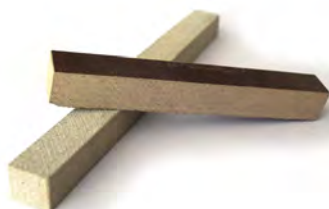
Other sizes available upon request. Available in grit sizes 24, 36, 54, 80, 120, 180, 220 and 320.

Depressed Centre Discs Type 27

Wheel Size mm	Maximum Safe RPM	Grit Size	
		G-FX Bond	M-TX Bond
100 x 4.5 x 15.88	15,000	A24	A36
100 x 6.0 x 15.88		A36	A80
115 x 4.5 x 22.23	13,000	A24	A36
115 x 6.0 x 22.23		A36	A80
180 x 4.5 x 22.23	8,000	A24	A36
180 x 6.0 x 22.23		A36	A80



Square Finishing Sticks



Size
6 x 6 x 100
10 x 10 x 100
13 x 13 x 100
13 x 13 x 150

Other sizes available upon request.

Available in grit sizes 80, 120, 180 and 320.

Information

Operator

- The maximum operating speed for mounted points is 45 meters per second (m/s). This speed may be reduced by the following factors:
 - Shape and size of the mounted wheel
 - Size of shank
 - Overhang of shank
 - Wheel specifications
- Taking the first three factors above into consideration, look up the maximum operating speed in this catalogue for mounted points. Type 1 and Type 27 wheels should not be run faster than the Maximum Safe RPM's indicated in the tables of this brochure.
- Pressure
 - Pressure between wheel and work should at no time be so heavy that any considerable springing of the shank results.
 - Ensure when mounting the wheel that the chuck or bearings of the tool are not worn.
 - Store, handle and use with care.

Safety

- Always wear ear, eye and face protection as well as protective safety gloves
- Follow the maximum operation speed stated
- Select the correct shape, size and grade for the job
- Use the appropriate tool and ensure that it is regularly maintained





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For further information on Master products and services or technical applications support, please contact us

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