




Science.
Applied to Life.™

3M™ Abrasives Metalworking Belts

The basics of belt selection.

Your guide to help find the right 3M™
Metalworking Belts for your application.





Need a belt you can believe in? We can help.

Every job is different. What works for one grinding or finishing job may not work for another. Issues like belt loading, mineral shelling, worker fatigue and slow cut rate can all impact the productivity of your operation. Choosing the right belt for your application is critical for success.

Use this guide to help find the perfect 3M™ Metalworking Belts to fit your metalworking application.

Let's get started.

step

1

Identify your application.

The questions at the top of each page will help to guide you through selecting the right belt for your application.

step

2

Check the 3M™ Belt Availability Guides.

Once you've selected the right belt for your application, take a look at our belt availability guide in each section to confirm grade.

step

3

Confirm your stock number.

Finally, once you have determined which 3M product is right for you, turn to pages 8-10 to locate the configurable 3M stock number for your specific belt.

step

1

Are you grinding?

3M™ Cubitron™ II Abrasive Belts

From robots to backstands to cylindrical grinders, 3M™ Cubitron™ II belts allow heat-sensitive metals to stay cool for less rework. Belt grinding and sanding equipment run efficiently for fewer changeovers, taking productivity to a whole new level.

High Pressure | Heavy Stock Removal

For higher pressure, coarse grade grinding applications, a hard and serrated contact wheel will improve your cut speed and help your abrasive belt last longer.

Use For	Substrates	3M Product
Best bet/Robotics	All Metals	3M™ Cubitron™ II Cloth Belt 984F
Extreme pressure grinding	Stainless Steel/High Nickel Alloys	3M™ Cubitron™ II Cloth Belt 997F
Extreme pressure grinding	Carbon Steel/Cast Iron	3M™ Cubitron™ II Cloth Belt 994F
Wet application for flat finishing & centerless grinding	Heat Sensitive Metals	3M™ Cubitron™ II Cloth Belt 966F
General purpose/Wet or dry grinding	All Metals	3M™ Cubitron™ II Cloth Belt 967F

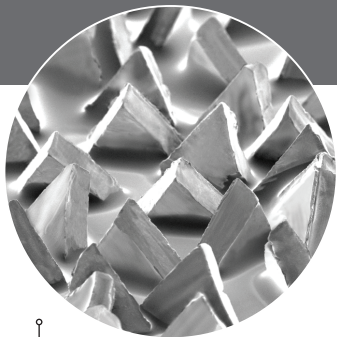
Medium Pressure | Stock Removal & Blending

Use For	Substrates	3M Product
Best bet	All Metals	3M™ Cubitron™ II Cloth Belt 784F
Reduced loading on soft substrates	Aluminum/Brass/Bronze/Copper	3M™ Cubitron™ II Cloth Belt 981F
General purpose	All Metals	3M™ Cloth Belt 384F

Low Pressure | Blending & Setting a Grain

For lower pressure or finishing applications, a smoother / softer contact wheel will allow for more conformability to your workpiece.

Use For	Substrates	3M Product
Best bet	All Metals	3M™ Cubitron™ II Cloth Belt 947A
Flexibility	Aluminum/Stainless Steel	3M™ Cubitron™ II Cloth Belt 723D



CUBITRON™ II

The precision-shaped grain found in 3M™ Cubitron™ II belts continuously fractures to form sharp points and edges.



Tech Tip

Product & Pressure
Matching the right product to your application's pressure is a key component of optimal abrasive performance. This can help ensure maximized cutting speed and product life.

Tech Tip

Signs of the Wrong Belt

When you apply too much pressure to an abrasive, you may notice “shelling.” When you apply too little, it rubs the substrate rather than cutting it, resulting in “glazing” or “capping.”



step

2

3M™ Coated Belt Availability Guide

3M ID	Mineral	Backing	Grinding Aid	Use Dry/Wet	20	24	36	40	50	60	80	100	120	150	180	220	240	320	400	600
984F	3M Precision-Shaped Grain	YF	Yes	Dry/Wet			+		+	+	+		+							
997F		ZF	Yes	Dry/Wet			+													
994F		ZF	No	Dry/Wet			+													
966F		ZF/YF	No	Wet	+	+	+	+	+	+	+									
967F		ZF/YF	Yes	Dry/Wet		+	+		+	+	+									
784F		YF/XF	Yes	Dry/Wet			+		+	+	+		+	+	+					
981F	A/O Ceramic Blend	YF	No	Dry/Wet			+	+		+										
384F		XF	No	Dry/Wet			+		+	+	+		+	+	+	+	+	P	P	
947A		X	Yes	Dry				+		+	+		+							
723D		J	No	Dry								+	+	+	+	+				

Backing Types

More ← Flexibility → Less

J Weight | X Weight | Y Weight | Z Weight

Low ← Pressure → High

step 1

Are you deburring & finishing?

Scotch-Brite™ Abrasive Belts

Tackle your deburring, finishing, cleaning and surface prep with confidence using Scotch-Brite™ abrasive belts. Powered by 3M™ non-woven technology, Scotch-Brite™ belts deliver repeatable results you can count on for every job.



Scotch-Brite™ non-woven synthetic fiber and abrasive mineral forms a web that is open, tough, conformable and long-lasting.



Surface Conditioning

Use For	Substrates	3M Product
Best bet/Flexibility	All Metals	Scotch-Brite™ Durable Flex Belt
General purpose	All Metals	Scotch-Brite™ Surface Conditioning Belt
Toughness	All Metals	Scotch-Brite™ SE Surface Conditioning Belt

step 2

Scotch-Brite™ Belt Availability Guide

3M ID	Mineral	Backing	A CRS	A MED	A FIN	A VFN	SFN
Scotch-Brite™ Durable Flex Belt	A/O	Low Stretch	•	•	•		
Scotch-Brite™ Surface Conditioning Belt	A/O or Silicon Carbide	Plating/Buffering Prep	•	•		•	•
Scotch-Brite™ SE Surface Conditioning Belt	A/O	Scrim/Low Stretch	•	•	•		

Backing Types

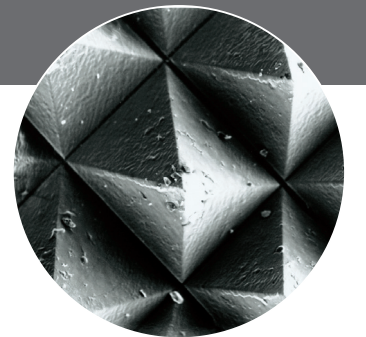
Film	Scrim	Low Stretch
Low	Pressure	High

step 1

Are you finishing & polishing?

3M™ Trizact™ Abrasive Belts

3M™ Trizact™ Abrasives are ideal for work where consistent, refined finishes are essential. Cool-running Trizact delivers refined performance even on hard metals such as carbon or stainless steel, and helps reduce warping and discoloration. And the mineral abrasive stays sharp as it wears.



Trizact™

Trizact grain featuring microreplicated three-dimensional abrasive structures for the finest finishes.

Consistent Finishes

Use For	Substrates	3M Product
Scrim/Low Stretch/Film Backed	All Metals	3M™ Trizact™ Cloth Belt 307EA
Reduced loading on soft substrates	Aluminum/Brass/Bronze/Copper	3M™ Trizact™ Cloth Belt 217EA
Polishing	All Metals	3M™ Trizact™ Cloth Belt 237AA



step 2

3M™ Trizact™ Belt Availability Guide

3M ID	Mineral	Backing	Description	Use Dry/Wet	A Grade														
					300	160	110	100	90	80	65	60	45	35	30	20	16	10	6
307EA	Aluminum Oxide	Flex J	Low-Med Pressure	Dry				•		•	•		•		•		•		•
217EA		Flex J	Low Pressure	Dry				•		•	•		•		•		•		•
237AA		Semi Flex X	Low-Med Pressure	Dry		•		•		•	•		•		•		•		•

Backing Types

More

Flexibility

Less

J Weight

X Weight

Y Weight

Z Weight

Low

Pressure

High

step

3

3M™ Belts – Configurable stock numbers

The last step in the belt selection process is selecting the stock number for your belt. When selecting the 3M stock number, use the configurable 3M stock number below to order the unique sized belt you need. Additional part numbers can be found on 3M.com.



High Pressure Belts Heavy Stock Removal Belts	
3M™ Cubitron™ II Cloth Belt 984F	
Configurable 3M Stock Numbers	Grade
7100007990	36+
7100097257	50+
7100007991	60+
7100007992	80+
7100082475	120+
3M™ Cubitron™ II Cloth Belt 997F	
Configurable 3M Stock Numbers	Grade
7100047372	36+
3M™ Cubitron™ II Cloth Belt 994F	
Configurable 3M Stock Numbers	Grade
7100047077	36+
3M™ Cubitron™ II Cloth Belt 966F	
Configurable 3M Stock Numbers	Grade
7100091845	20+
7100091847	24+
7100091849	36+
7100183933	40+
7100091851	50+
7100091853	60+
7100091855	80+
3M™ Cubitron™ II Cloth Belt 967F	
Configurable 3M Stock Numbers	Grade
7100091857	24+
7100091859	36+
7100091861	50+
7100091863	60+
7100091865	80+

Low Pressure Belts Stock Removal & Blending			
3M™ Cubitron II Cloth Belt 947A		3M™ Cubitron™ II Cloth Belt 723D	
Configurable 3M Stock Numbers	Grade	Configurable 3M Stock Numbers	Grade
7100171627	40+	710009304	100+
7100023234	60+	7100091835	120+
7100023179	80+	7100091837	150+
7100023178	120+	7100091839	180+
		7100091841	220+

Medium Pressure Belts Stock Removal & Blending	
3M™ Cubitron™ II Cloth Belt 784F	
Configurable 3M Stock Numbers	Grade
7100171629	36+
7100091823	50+
7100091825	60+
7100091827	80+
7100091829	120+
7100091831	150+
7100091833	180+
3M™ Cubitron™ II Cloth Belt 981F	
Configurable 3M Stock Numbers	Grade
7100138642	36+
7100138643	40+
7100138645	60+
3M™ Cloth Belt 384F	
Configurable 3M Stock Numbers	Grade
7100091777	36+
7100091779	50+
7100091799	60+
7100091802	80+
7100091804	120+
7100091806	150+
7100091808	180+
7100091813	220+
7100091815	240+
7100091817	P320
7100091819	P400



Surface Conditioning		
Scotch-Brite™ DF Surface Conditioning Belt		
Configurable 3M Stock Numbers	Grade	Backing
7100012444	A FIN	Low Stretch
7100013155	A MED	Low Stretch
7100013687	A CRS	Low Stretch
Scotch-Brite™ SC Surface Conditioning Belt		
Configurable 3M Stock Numbers	Grade	Backing
7100012618	S SFN	Low Stretch
7100012150	S VFN	Low Stretch
7100000134	A VFN	Low Stretch
7100051141	S MED	Low Stretch
7100171628	A MED	Low Stretch
7100013507	A CRS	Low Stretch
7100013611	A VFN	Film Backed
7100012858	A MED	Film Backed
7100012561	A CRS	Film Backed
7100012085	A SFN	Scrim Backed
7100012347	A VFN	Scrim Backed
7100012358	A MED	Scrim Backed
7100013534	A CRS	Scrim Backed
Scotch-Brite™ SE Surface Conditioning Belt		
Configurable 3M Stock Numbers	Grade	Backing
7100013404	A FIN	Low Stretch
7100013547	A MED	Low Stretch
7100051144	A CRS	Low Stretch
7100051147	A FIN	Scrim Backed
7100051143	A MED	Scrim Backed
7100013747	A CRS	Scrim Backed

Trizact™

Consistent Finishes	
3M™ Trizact Cloth Belt 307EA	
Configurable 3M Stock Numbers	Grade
7100052733	A6
7100052732	A16
7100052731	A30
7100052730	A45
7100052729	A65
7100052728	A80
7100112315	A100
3M™ Trizact™ Cloth Belt 217EA	
Configurable 3M Stock Numbers	Grade
7100052788	A6
7100052787	A16
7100052786	A30
7100052768	A45
7100052769	A65
7100052770	A80
7100052771	A100
3M™ Trizact™ Cloth Belt 237AA	
Configurable 3M Stock Numbers	Grade
7100007882	A6
7100007878	A16
7100007880	A30
7100007881	A45
7100007883	A65
7100007884	A80
7100007877	A100
7100007879	A160

Not finding
what you’re
looking for?

These are some of our premium, most popular belts for the metalworking industry, and we have hundreds more to choose from to meet the exact specifications of your application. For additional belt sizes, contact your local rep for ordering information.

Visit 3M.com/abrasivebelts to learn more.

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[3M.com/abrasives](https://www.3m.com/abrasives)

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