

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™ Coated 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. 3M™ Advanced series belts provide long lasting performance at a value price.

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/coarse grinding	All metals	**3M™ Cubitron™ 3 Cloth Belt 1184F**
Best bet/robotics/grinding	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 to high pressure grinding	All metals	**3M™ Cloth Belt 767F**

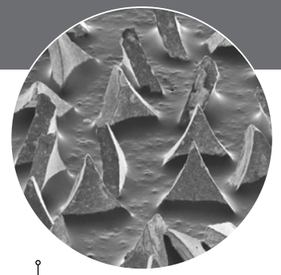
Medium Pressure | Stock Removal & Blending

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**
Best bet for flexibility	All metals	**3M™ Cubitron™ II Cloth Belt 726A**
Flexibility	Aluminum/ stainless steel	**3M™ Cubitron™ II Cloth Belt 723D**



3M Cubitron™ 3 Performance Abrasives

Re-engineered 3M Precision-Shaped Grain uses a proprietary breakthrough in triangular grain shape.



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
1184F	3M Precision-Shaped Grain	YF	Yes	Dry/Wet			+			+	+		+							
984F		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		+	+		+	+	+									
767F		YF	Yes	Dry/Wet			+			+	+		+							
784F		YF/XF	Yes	Dry/Wet			+		+	+	+		+	+	+					
981F		YF	No	Dry/Wet			+	+		+										
384F	A/O Ceramic Blend	XF	No	Dry/Wet			+		+	+	+		+	+	+	+	+	P	P	
947A	3M Precision-Shaped Grain	X	Yes	Dry				+		+	+		+							
726A		J	Yes	Dry							+		+	+	+	+	+	+	+	
723D		J	No	Dry								+	+	+	+	+				

Backing Types

More ⟵ Flexibility ⟶ Less

J Weight | X Weight | Y Weight | Z Weight

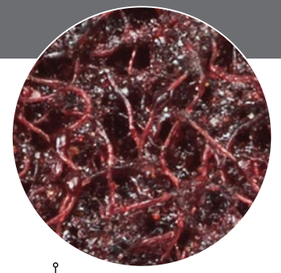
Low ⟵ Pressure ⟶ High

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™ nonwoven 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™ Precision Durable Flex Belt** ⧋ ⊂⊃ **Scotch-Brite™ Durable Flex Belt**
General purpose	All Metals	**Scotch-Brite™ SC Surface Conditioning Belt**
Toughness	All Metals	**Scotch-Brite™ SE Surface Conditioning Belt**

⧋ **Precision-Shaped Grain** ⊂⊃ **Scotch-Brite™ Splice Lock Technology**



step 2

Scotch-Brite™ Belt Availability Guide

3M Product	Mineral	Backing	XCRS	CRS	A CRS	A MED	A FIN	A VFN	SFN
Scotch-Brite™ Precision Durable Flex Belt ⧋	Precision-Shaped Grain	Low Stretch	•	•					
Scotch-Brite™ Durable Flex Belt	A/O	Low Stretch				•	•		
Scotch-Brite™ SC Surface Conditioning Belt	A/O or Silicon Carbide	Plating/Buffing Prep			•	•		•	•
Scotch-Brite™ SE Surface Conditioning Belt	A/O	Scrim/Low Stretch			•	•	•		

⧋ **Precision-Shaped Grain**

Backing Types

Film | Scrim | Low Stretch

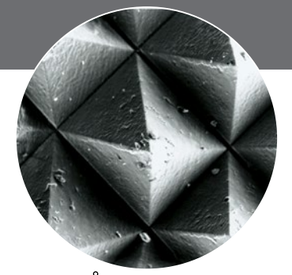
Low ⟵ Pressure ⟶ High

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	5	3
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.

3M | Cubitron™ Performance Abrasives

High Pressure Belts | Heavy Stock Removal Belts	
Configurable 3M Stock Numbers	**Grade**
3M™ Cubitron™ 3 Cloth Belt 1184F	
7100247565	**36+**
7100330154	**60+**
7100330153	**80+**
7100417863	**120+**
3M™ Cubitron™ II Cloth Belt 984F	
7100007990	**36+**
7100097257	**50+**
7100007991	**60+**
7100007992	**80+**
7100082475	**120+**
3M™ Cubitron™ II Cloth Belt 997F	
7100047372	**36+**
3M™ Cubitron™ II Cloth Belt 994F	
7100047077	**36+**
3M™ Cubitron™ II Cloth Belt 966F	
7100091845	**20+**
7100091847	**24+**
7100091849	**36+**
7100183933	**40+**
7100091851	**50+**
7100091853	**60+**
7100091855	**80+**
3M™ Cubitron™ II Cloth Belt 967F	
7100091857	**24+**
7100091859	**36+**
7100091861	**50+**
7100091863	**60+**
7100091865	**80+**
3M™ Cloth Belt 767F	
7100266289	**36+**
7100266290	**60+**
7100266291	**80+**
7100266292	**120+**

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

Low Pressure Belts | Blending & Setting a Grain	
Configurable 3M Stock Numbers	**Grade**
3M™ Cubitron™ II Cloth Belt 947A	
7100171627	**40+**
7100023234	**60+**
7100023179	**80+**
7100023178	**120+**
3M™ Cubitron™ II Cloth Belt 726A	
7100406422	**80+**
7100406421	**120+**
7100406420	**150+**
7100406419	**180+**
7100406418	**220+**
7100406417	**240+**
7100406416	**320+**
7100406415	**400+**
3M™ Cubitron™ II Cloth Belt 723D	
7100093046	**100+**
7100091835	**120+**
7100091837	**150+**
7100091839	**180+**
7100091841	**220+**

step 3

3M™ Belts – Configurable stock numbers
(Continued)

Surface Conditioning		
Configurable 3M Stock Numbers	**Grade**	**Backing**
Scotch-Brite™ DF Surface Conditioning Belt		
7100012444	A FIN	Low Stretch
7100013155	A MED	Low Stretch
Scotch-Brite™ Precision DF Surface Conditioning Belt		
7100413693	CRS	Low Stretch
7100413694	XCRS	Low Stretch
Scotch-Brite™ SC Surface Conditioning Belt		
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	S SFN	Scrim Backed
7100012347	A VFN	Scrim Backed
7100012358	A MED	Scrim Backed
7100013534	A CRS	Scrim Backed
Scotch-Brite™ SE Surface Conditioning Belt		
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	
Configurable 3M Stock Numbers	**Grade**
3M™ Trizact Cloth Belt 307EA	
7100052733	A6
7100052732	A16
7100052731	A30
7100052730	A45
7100052729	A65
7100052728	A80
7100112315	A100
3M™ Trizact™ Cloth Belt 217EA	
7100052788	A6
7100052787	A16
7100052786	A30
7100052768	A45
7100052769	A65
7100052770	A80
7100052771	A100
3M™ Trizact™ Cloth Belt 237AA	
7100007882	A6
7100007878	A16
7100007880	A30
7100007881	A45
7100007883	A65
7100007884	A80
7100007877	A100
7100007879	A160

Precision-Shaped Grain
Scotch-Brite™ Splice Lock Technology

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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