

**3M** Science.  
Applied to Life.™



# Winning Abrasive Combinations

## Stainless Steel

The combination of 3M's trusted abrasive brands delivers a powerful solution for stainless steel, reducing steps and optimizing your finishing process for better outcomes.



**Cubitron™**  
Performance Abrasives



**Trizact™**

**Scotch-Brite™**

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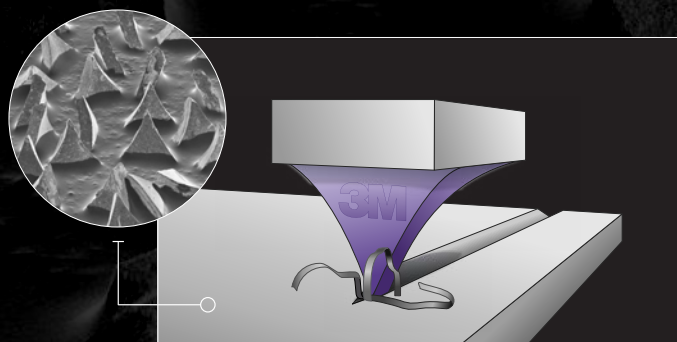
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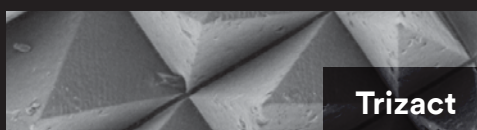
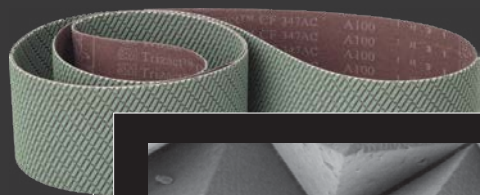
# Technology that transforms how work gets done



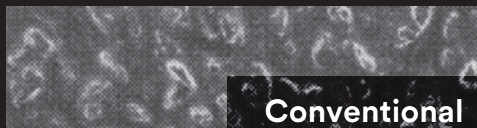
**3M**

**Cubitron™ 3**  
Performance Abrasives

Re-engineered precision-shaped ceramic grain using a proprietary breakthrough in grain shape with curved sides.



**Trizact**



**Conventional**

**3M**

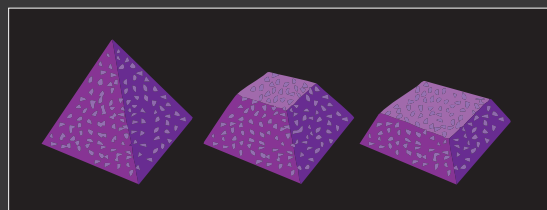
**Trizact™**

## The Difference is in the Construction

Trizact abrasives allow you to say “goodbye” to erratic, inconsistent finishes generated by conventional coated abrasives. Here’s why:

Three-dimensional structures uniformly distributed over the entire surface of 3M™ Trizact™ Abrasives (top) ensure consistent performance and eliminate belt-to-belt variation. Conventional abrasives (bottom), which feature randomly arranged minerals, wear and finish unevenly.

Conventional abrasives start out sharp, but they dull quickly.



## 3M™ Trizact™ Abrasives have three-dimensional structures

containing multiple layers of abrasive mineral. As these pyramid-like structures wear, fresh, sharp mineral is exposed.



## See how our proprietary technology breakthroughs can lead to exceptional performance gains

– helping to make stainless steel processing more productive and designed to create a safer working environment for operators.

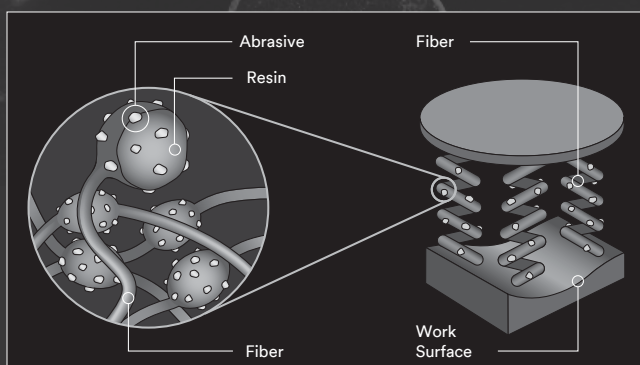
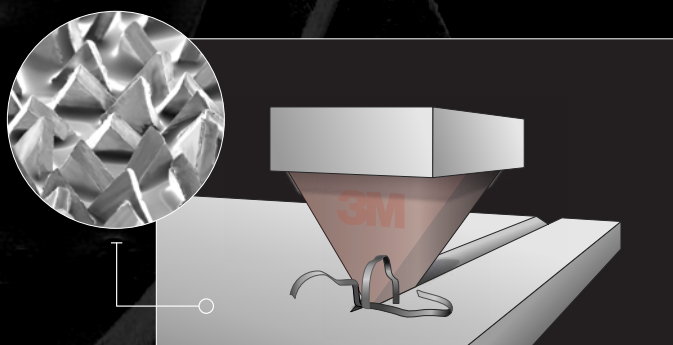
In this guide we show how combining these technologies into sequential process steps can take process transformation to another level!



**Cubitron™ 2**

Performance Abrasives

3M pioneered the first precision-shaped grain using micro-replication technology to form consistent sharp peaks that “slice” – cooler cut, longer life and fast!



**Scotch-Brite™**



With  
Precision-Shaped Grain

3M™ Precision-Shaped Grain and nonwoven abrasives combine the benefits of two 3M technologies. A transformation in speed and life without sacrificing the smooth finish expected from Scotch-Brite™ products.



**Scotch-Brite™ Precision  
Surface Conditioning Disc**

# Key Performance Essentials

Processing stainless steel is usually demanding and needs to meet the high finish requirements demanded by industry. It requires more precision and more processing steps to get to the right finish compared to mild steel. Working with high-quality abrasives can deliver results quicker and easier, minimizing failures and costs to the business.

Processing stainless steel is usually demanding and needs to meet the high requirements of the customers

Compared to mild steel it is a more expensive substrate and requires more precision and more processing steps to get to the right finish.

Also, each failure is more expensive, so working with high-quality abrasives can deliver results quicker and easier, minimizing failures and costs to the business.



## Quality finish

- + Consistent, predictable and high-quality finish
- + Minimized risk of heat damage – can lead to cracks and pitting that can cause corrosion



## Productivity

- + Repeatable manufacturing process
- + Fewer consumables used



## Time

- + Less time spent on each step
- + Less time to get the desired result

## Dealing with heat related risks

### Clean weld discoloration

If weld is not removed, the radial bristle brush cleans away the weld discoloration for a brighter and cleaner finish

- + Outstanding cleaning speed
- + No risk of damaging the part
- + Safe to use, no flying wires or chemical vapors

Scotch-Brite™ Precision Radial Bristle Brush



### Reduce heat impact when grinding

Avoid excessive heat imparted to the substrate by minimizing processing time

- + 166% faster sustained cut rate<sup>1</sup>
- + Grinding aid for cooler cutting

Cubitron™ 3 Fibre Disc 1187 80+



<sup>1</sup>Sustained Cut Rate: 80+ Stainless Steel: The 'sustained cut rate' claim is determined from averaging the cut/cycle from cycles 5-24 (20 cycles total, which is approximately 4 minutes of grinding) Units for stainless steel will be (Grams/cycle)



# 3 Steps to Stainless Steel Finishing

Processing may involve weld removal and finishing steps to achieve final finish required or match surface finish to the original pattern. With our dedicated solutions you can build your Winning Combination that help you get to required finish in just 3 steps!

## Finish it Faster.

with winning combinations from 3M.

Whenever weld removal is involved, our solutions will help you get excellent finish base in just 2 steps. Save time by reducing weld grinding time and steps to refine, always with best finish results!

<b>STEP 1</b> Weld Leveling	<ul style="list-style-type: none"><li>+ Fastest solutions for weld grinding</li><li>+ Leave fine grind lines, quick to refine</li></ul>	<i>Just two steps to get to fine finish base. Dedicated solutions combining best speed with fine finish results. Both in disc and belt forms.</i>
<b>STEP 2</b> Refine/Set Grain	<ul style="list-style-type: none"><li>+ Smooth finish helping reduce steps</li><li>+ Consistency and quality results in less steps</li></ul>	

## Superior Finish.

With no compromise.

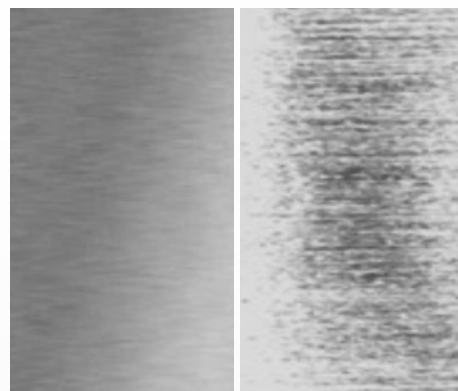
The final stage demands a flawless finish with minimal steps and part-to-part consistency. Our unique solutions ensure a superior, fast finish, every time. Built for best and predictable results.

<b>STEP 3</b> Fine Finish	<b>#4 Finish</b>	<b>#3 Finish</b>	<b>Measured</b>	<b>Random Orbital Finish</b>
Range of grits to help achieve final finish profile for different finish requirement without excessive grinding, reducing steps.				

# #3 or #4 Finish

**Brushed:** matte, coarser finish with fine parallel lines.  
Less reflective, modern aesthetics.

**Satin:** smooth linear pattern and soft surface reflection.



## Industries



Interior,  
Exterior Design



Metal Furniture



Professional  
Kitchens, Filtration



Elevators, Escalators



## Tools

3M™ Right  
Angle Grinder



3M™ Match and  
Finish Sander



3M™ File Belt  
Inline Sander



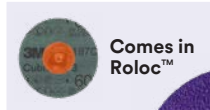


# #3 or #4 Finish – Combination Builder

**STEP 1**

Weld Leveling

## Starting Point



Comes in Roloc™



**Cubitron™ 3**  
Performance Abrasives

3M™ Cubitron™ 3 Fibre Disc  
1187C - 60+/80+



**Cubitron™ 3**  
Performance Abrasives

3M™ Cubitron™ 3 Cloth Belt  
1184F

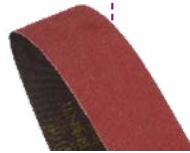


**Cubitron™ 3**  
Performance Abrasives

3M™ Cubitron™ 3 Roloc™  
Durable Edge Disc 1184F

**STEP 2**

Refine



**Cubitron™ 2**  
Performance Abrasives

3M™ Cubitron™ 2  
Cloth Belt 947A - 120+

**STEP 3**

Finish

Belt

Brush



OR



**Scotch-Brite™**

#3 finish: Scotch-Brite™  
Surface Conditioning  
Belt SC - A CRS

**Scotch-Brite™**

#4 finish: Scotch-Brite™  
Surface Conditioning  
Belt SC - A MED



OR



**Scotch-Brite™**

#3 finish: Scotch-Brite™  
Match and Finish High  
Strength Flap Brush  
7A CRS

**Scotch-Brite™**

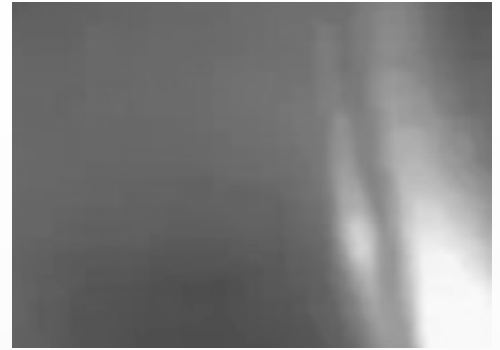
#4 finish: Scotch-Brite™  
Match and Finish High  
Strength Flap Brush  
7A MED

# Measured Finish

Measured standard required in food/liquid contact.

Slightly reflective, 'cloudy' mirror appearance.

Step wise Trizact sequence achieving required finish.



## Industries



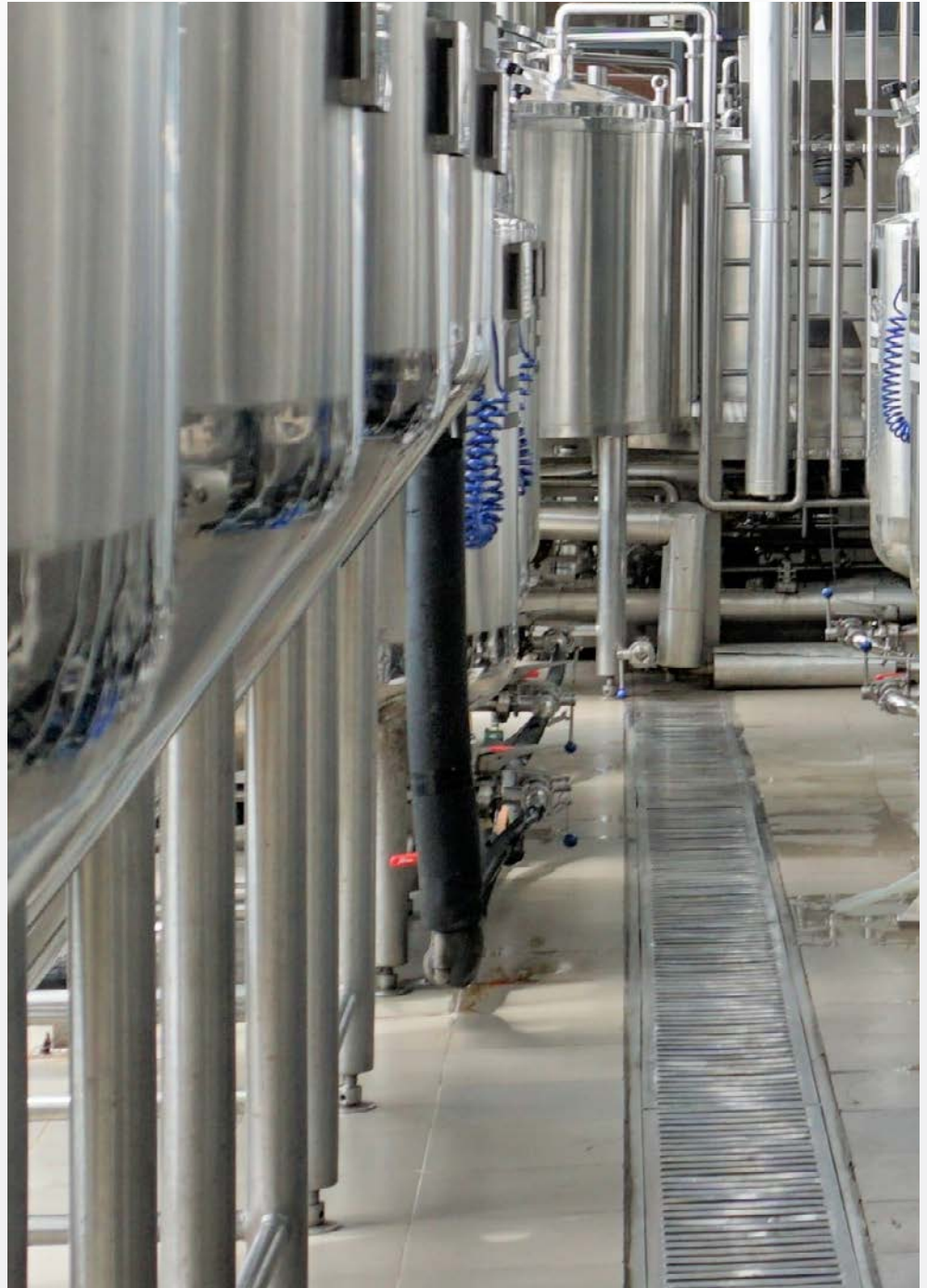
Tanks and Vessels



Food Processing  
Machinery



Pharma and  
Chemical Machinery



## Tools

3M™ Right  
Angle Grinder



3M™ Match and  
Finish Sander



3M™ File Belt  
Inline Sander



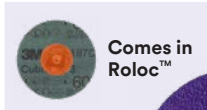


# Measured Finish – Combination Builder

STEP 1

Weld Leveling

## Starting Point



**Cubitron™ 3**  
Performance Abrasives

3M™ Cubitron™ 3 Fibre Disc  
1187C - 60+/80+



**Cubitron™ 3**  
Performance Abrasives

3M™ Cubitron™ 3  
Cloth Belt 1184F

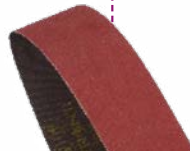


**Cubitron™ 3**  
Performance Abrasives

3M™ Cubitron™ 3 Roloc™  
Durable Edge Disc 1184F

STEP 2

Refine



**Cubitron™ 2**  
Performance Abrasives

3M™ Cubitron™ 2  
Cloth Belt 947A - 120+

STEP 3

Finish

## Finer finish



**Scotch-Brite™**

#3 finish: Scotch-Brite™  
Surface Conditioning  
Belt SC - A CRS

OR



**Scotch-Brite™**

#4 finish: Scotch-Brite™  
Surface Conditioning  
Belt SC - A MED



**Trizact™**

3M™ Trizact™  
Cloth Belt  
237AA

Sequence these grades according to  
required Ra (micro inch) finish

40 Ra	30 Ra	15 Ra	10 Ra
A65	A45	A30	A16

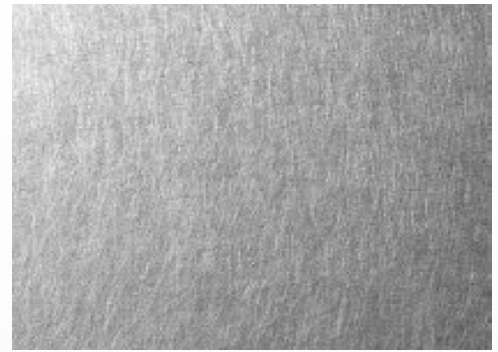
Most common industry finish:  
Food processing - 16Ra = to 48  
Pharma Ra - = 10 to 32

# Random Orbital Finish

Consistent non-directional pattern across the surface.

Practical for commercial use. Help conceal scratches across high-contact areas.

Used on carbon steel in prep for paint coatings ([LINK](#))



## Industries



Interior,  
Exterior Design



Metal Furniture

## Tools

3M Xtract™  
Random  
Orbital Sander



3M™ Right  
Angle Grinder



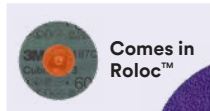


# Random Orbital Finish Combination Builder

**STEP 1**

Weld Leveling

Larger Weld ← Starting Point → Smaller Weld

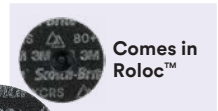


Comes in Roloc™

**3M** | **Cubitron™ 3**  
Performance Abrasives

3M™ Cubitron™ 3 Fibre Disc  
1187C - 60+/80+

Save time by removing this step from your process by utilizing the power of Scotch-Brite™ containing Precision-shaped grain to grind and refine on just one step.



Comes in Roloc™

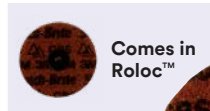
**Scotch-Brite™**

With Precision-Shaped Grain

Scotch-Brite™ Precision Heavy  
Duty Surface Conditioning Disc  
Extra Coarse 80+

**STEP 2**

Refine



Comes in Roloc™

**Scotch-Brite™**

With Precision-Shaped Grain

Scotch-Brite™ Precision Surface  
Conditioning Disc CRS

**STEP 3**

Finish

Flat Surfaces ← → Edges and Corners



**3M** | **Xtract™**  
Clean Sanding Solutions

3M Xtract™ Cubitron™ 2  
Film Disc 775L - 80+ or 120+



**3M** | **Xtract™**  
Clean Sanding Solutions

3M Xtract™ Cubitron™ 2  
Cloth Disc 900DZ 80+ or 120+

# Weld Cleaning

Optimal surface contact without gouging, changing the base material or removing the weld.

Conforms to contoured parts and can reach narrow and hard to reach areas.



## Industries



Tanks and Vessels



Food Processing Machinery



Fabricated Metal



Pharma and Chemical Machinery

## Tools

3M™ Right Angle Grinder



3M™ Die Grinder



**Scotch-Brite™**  
With Precision-Shaped Grain



**Precision Radial  
Bristle 50+ neon green**



**Precision Radial  
Bristle 80+ orange**



**Precision Radial  
Bristle 120+ gray**



Larger Weld/  
More Aggressive

Starting Point

Smaller Weld/  
Less Aggressive





## **Clean and prepare surfaces before and after welding.**

Cleaning of welds, discoloration and burn removal on metals such as cold rolled steel and stainless steel.

Bristle brushes are adaptable, flexible and cleans with minimal pressure to deliver consistent results

# Product Order Details

Available in additional sizes, grades, and attachment types. Scan the code for full product details.

## Cubitron Discs

### 3M Xtract™ Cubitron™ 2 Film Disc 775L



3M ID/Product ID	Grade	Size	RPM
7100045070	80+	5 in	12,000
7100045071	120+	5 in	12,000
7100045072	80+	6 in	12,000
7100045073	120+	6 in	12,000

### 3M™ Cubitron™ 3 Roloc™ Fibre Disc 1187C



3M ID/Product ID	Grade	Size	RPM
7100331745	60+	2 in	25,000
7100331753	80+	2 in	25,000
7100332087	60+	3 in	20,000
7100332088	80+	3 in	20,000
7100332089	80+	4 in	12,000

### 3M Xtract™ Cubitron™ 2 Cloth Disc 900DZ



3M ID/Product ID	Grade	Size	RPM
7100284531	80+	5 in	12,000
7100284520	120+	5 in	12,000
7100284530	80+	5 in	12,000
7100284508	120+	5 in	12,000

### 3M™ Cubitron™ 3 Fibre Disc 1187C



3M ID/Product ID	Grade	Size	RPM
7100349499	60+	5 in	12,000
7100349604	80+	5 in	12,000
7100349589	60+	4.5 in	13,300
7100349681	80+	4.5 in	13,300

### 3M™ Cubitron™ 3 Roloc™ Durable Edge Disc 1184F



3M ID/Product ID	Grade	Size	RPM
7100331410	60+	2 in	25,000
7100332404	80+	2 in	25,000
7100331725	60+	3 in	20,000
7100332405	80+	3 in	20,000

## Scotch-Brite Discs

### Scotch-Brite™ Roloc™ Precision Surface Conditioning Disc



3M ID/Product ID	Grade	Size	RPM
7100264091	XCRS	2 in	25,000
7100264090	CRS	2 in	25,000
7100264198	XCRS	3 in	20,000
7100264197	CRS	3 in	20,000

### Scotch-Brite™ Roloc™ Precision Heavy Duty Surface Conditioning Disc



3M ID/Product ID	Grade	Size	RPM
7100359489	CRS	2 in	25,000
7100359486	CRS	2 in	25,000
7100359479	XCRS	2 in	25,000
7100359477	XCRS	2 in	25,000
7100359490	XXCRS	2 in	25,000
7100359904	XXCRS	2 in	25,000
7100359491	CRS	3 in	20,000
7100359481	XCRS	3 in	20,000
7100359753	XXCRS	3 in	20,000



## Scotch-Brite Discs

### Scotch-Brite™ Precision Surface Conditioning Disc



3M ID/Product ID	Grade	Size	RPM
7100263910	CRS	4.5 in	13,300
7100263903	XCRS	4.5 in	13,300
7100263886	CRS	4.5 in	13,300
7100263887	XCRS	4.5 in	13,300
7100263892	XCRS	5 in	12,000
7100263891	CRS	5 in	12,000
7100263918	XCRS	5 in	12,000
7100263915	CRS	5 in	12,000

### Scotch-Brite™ Precision Heavy Duty Surface Conditioning Disc



3M ID/Product ID	Grade	Size	RPM
7100358903	CRS	4.5 in	13,300
7100358856	CRS	4.5 in	13,300
7100358872	XCRS	4.5 in	13,300
7100359465	XCRS	4.5 in	13,300
7100358902	XXCRS	4.5 in	13,300
7100359467	XXCRS	4.5 in	13,300
7100358904	CRS	5 in	12,000
7100359468	CRS	5 in	12,000
7100358924	XCRS	5 in	12,000
7100359474	XCRS	5 in	12,000
7100358905	XXCRS	5 in	12,000
7100359469	XXCRS	5 in	12,000

## Belts

### Scotch-Brite™ Surface Conditioning Belt



3M ID/Product ID	Grade	Size - in (w x l)
7000120716	A CRS	1/2 in x 24 in
7000045943	A MED	1/2 in x 24 in
7000045944	A VFN	1/2 in x 24 in
7000028433	A CRS	3.5 in x 15.5 in
7000028435	A MED	3.5 in x 15.5 in
7000028436	A VFN	3.5 in x 15.5 in

### 3M™ Trizact™ Cloth Belt 237AA



3M ID/Product ID	Grade	Size - in (w x l)
7000028337	A65	3.5 in x 15.5 in
7000120271	A45	3.5 in x 15.5 in
7000028338	A30	3.5 in x 15.5 in
7000028335	A16	3.5 in x 15.5 in
7100179924	A65	1/2 in x 24 in
7000120322	A30	1/2 in x 24 in
7000120270	A45	1/2 in x 24 in
7100179903	A16	1/2 in x 24 in

### 3M™ Cubitron™ 3 Cloth Belt 1184F



3M ID/Product ID	Grade	Size - in (w x l)
7100358075	60+	3.5 in x 15.5 in
7100354016	80+	3.5 in x 15.5 in
7100354019	60+	1/2 in x 24 in
7100354018	80+	1/2 in x 24 in

### 3M™ Cubitron™ 2 Cloth Belt 947A



3M ID/Product ID	Grade	Size - in (w x l)
7100050305	120+	3.5 in x 15.5 in
7100099868	120+	1/2 in x 24 in

## Brushes

### Scotch-Brite™ Match and Finish High Strength Flap Brush



3M ID/Product ID	Grade	Size - in (w x l)
7000121170	7A CRS	4-1/2 in x 4 in x 5/8 in-11
7000121171	7A MED	4-1/2 in x 4 in x 5/8 in-11

### Scotch-Brite™ Precision Radial Bristle Brush



3M ID/Product ID	Grade	Size	RPM
7100374712	50+	6 in	6,000
7100374909	80+	6 in	6,000
7100374847	120+	6 in	6,000
7100375404	80+	6 in	6,000
7100374846	120+	6 in	6,000

## Tools

### 3M Xtract™ Electric Random Orbital Sander



3M ID/Product ID	Part Number	Dimension	RPM
7100254310	88762	5 in	10,000
7100254306	88758	5 in	10,000
7100253819	88760	6 in	10,000
7100254313	88764	6 in	10,000

### 3M™ Inline Sander



3M ID/Product ID	Part Number	Dimension	RPM
7100106789	28339	5/8 in x 11 in	3,500
7000045254	28338	5/8 in x 11 in	3,500

### 3M™ Disc Sander



3M ID/Product ID	Part Number	Dimension	RPM
7100075504	20231	2 in	15,000
7100075503	28328	2 in	15,000
7100075502	28341	2 in	15,000
7100075505	28329	2 in	15,000
7100142325	20232	2 in	20,000
7100142459	25125	2 in	20,000

### 3M™ Electric Grinders 1900W, 220-240V, 11,500 Max RPM, M14



3M ID/Product ID	Part Number	Dimension	RPM
7100337004	11130	4.5-5 in	9,300
7100336788	11131	6 in	11,500
7100336685	11129	4.5 in x 5 in	11,500

### 3M™ File Belt Sander



3M ID/Product ID	Part Number	Dimension (length/width)	Motor HP (W)
7000000433	28366	16.57 in x 7.19 in	3,500

### 3M™ Match and Finish Sander



3M ID/Product ID	Part Number	Dimension	RPM
7100142461	28659	4 in x 5/8 in x 11 in	3,500





## Accessories

### For Inline Sander

#### 3M™ Rubber Slotted Expander Wheel



3M ID/ Product ID	For Use With	Size/Description	Max RPM	Qty/ Case
7000028221	For use with belts 3-1/2 in x 15-1/2 in or 3 in x 10-11/16 in	5 in x 3-1/2 in, 5/8 in Arbor Hole	3,500	1
7000028222		3-2/5 in x 3 in, 5/8 in Arbor Hole	3,500	1
7100073953		3 in x 3 in x 5/8-11 in IN	6,000	1
7100030184		5 in x 3-1/2 in x 1 in AH	3,500	1

#### 3M™ Wheel Adapter Kit 28419



3M ID/Product ID	Part Number	Dimension
7010362498	28419	1/2-20 EXT x 5/8-11 INT
7000028423	45038	5/8-11 EXT x 5/8-11 INT
7100050705	28719	1 x 5/8-11 INT

#### 3M™ Wheel Adapter Kit 45038



3M ID/ Product ID	For Use With	Size/Description	Max RPM	Qty/ Case
7000028423	To mount wheels with 5/8 – 1 in center holes on 3M Inline Sanders	5/8-11 in EXT ex 5/8-11 in INT	See MOS of wheel	1

#### 3M™ Spindle Extender Kit



3M ID/ Product ID	For Use With	Size/Description	Max RPM	Qty/ Case
7000121185	To mount wheels with 5/8-1 in center holes on 3M Inline Sanders	Part 300	See MOS of wheel	1

### For Match and Finish Sander

#### 3M™ Rubber Slotted Expander Wheel



3M ID/ Product ID	For Use With	Size/Description	Max RPM	Qty/ Case
7100030184	Rubber slotted expander wheel for use with 3-1/2 in x 15-1/2 belts	5 in x 3-1/2 in x 1 in AH	3,500	1

#### 3M™ Rubber Slotted Expander Kit



3M ID/ Product ID	For Use With	Size/Description	Max RPM	Qty/ Case
700050705	Inline sander, bench grinders, bench motors, bench top tools	1 in x 5/8-11 in INT	3,500	1





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