

3M™ Stainless Steel Finishing System

Discover how fast and effective 3M abrasives can be for the often difficult task of stainless steel weld removal and finishing. This 3-step system features our Scotch-Brite™, Cubitron™ II and Trizact™ abrasives.

In three easy steps, using the 3M Finishing System, you can grind and blend welds to match your finish.

Leveling the Weld



Premium

3M™ Cubitron™ II Fibre Disc 987C

Advanced

3M[™] Fibre Disc 787C

Setting the Grain

2



Premium

3M[™] Cubitron[™] II Belt 947A

Advanced

3M[™] Belt 777F

Final Finishing: Choose Your Finish

3



Premium

#3 Finish: Scotch-Brite™ Surface Conditioning Belt A CRS
#4 Finish: Scotch-Brite™ Surface Conditioning Belt A MED
#5–8 Finish: 3M™ Trizact™ Abrasive Belt 237AA / 217EA



CUBITR NII

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



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



TrizactTM

Trizact grain featuring microreplicated threedimensional abrasive structures for the finest finishes.

Setting the Grain

Use these products to generate a directional scratch to prepare stainless steel for final finishing.

Recommended Starting Point



3M[™] Cubitron[™] II Cloth Belt 947A

120+

- 3M Precision-Shaped Grain slices through metals like a knife rather than gouging or plowing
- ► Removes material faster, with less pressure
- Grinding aid for less grinding friction and cooler cutting
- Optimized for low-medium pressure applications on stainless, mild steel and aluminum



Tech Tip: Attempt to stay as close as possible to the weld area to minimize final blending.

Alternative Selections



3M[™] Cloth Belt 777F P120

- Powered by a durable ceramic aluminum oxide blend that surpasses aluminum oxide abrasives in cut-rate
- Grinding aid reduces heat and increases performance, when used stainless steel



3M[™] Flap Wheel 747D

80 3" x 1" x 1/4"

- ► Contains 3M[™] Ceramic Aluminum Oxide blend abrasive grain
- ► Constructed on a resin-bonded X-wt., durable cloth backing
- ► Provides a uniform finish
- ► Features a grinding aid for cooler grinding of stainless steel

Troubleshooting Guide for Stainless Steel Repair

Problem	Solution
Heat or Warpage	 ► Use coarser grade abrasive ► Reduce speed ► Use new abrasive ► Use harder disc pad
Edge Cutting	► Use softer disc pad► Reduce angle of grinder
Disc Scratches Show Through	➤ Use finer grade leveling disc ➤ Increase speed
Chatter	► Reduce speed and/or pressure
Flap Wheel Bounce	➤ Reduce speed and/or pressure ➤ Use smaller wheel
Multi-finishing Wheel Bounce	➤ Reduce speed ➤ Dress wheel to round
Smearing	➤ Reduce speed ➤ Clean or replace contaminated product
Tool Stalling	 ► Check for proper air supply at tool ► Increase torque and/or HP of tool
Streaking on Final Finish	► Use 3M™ Twist-Lok™ Pad Holder 961