3M Application Profile

Market: Solid Surface/Cabinet Shop

Application Description: Solid Surface Finishing

3M™ Trizact™ Film System

Key Application Requirements

Random Orbital Sander: 5"

Products Replaced

Competitive coated abrasives, nonwovens, and compounds.

Advantages/Benefits for customer

– Fast, consistent finishing process.

– Reduced number of abrasive steps using the Trizact system.

– Higher gloss level possible – crisper reflection, richer appearance.

– This damp system minimizes dust generation, but little water is required so it can be used on site.

– Long abrasive life – up to 10 times longer than conventional abrasives.

PRODUCTS

3M™ Microfinishing Film 366L (100µ, 60µ)

3M Trizact Disc 268XA (A35, A10, A5)

3M Trizact Disc 568XA (CeO)

Options

Scotch-Brite™ Production Clean and Finish Discs A VFN & S ULF

3M™ Finesse-it™ Finishing Material Easy Clean-up

3M™ Wetordry™ Polishing Paper 286Q (9µ)

3M Polishing Film 968M

Process

This application targets manufacturers and cabinet shops that produce solid surface countertops. Many smaller manufacturers are producing their own acrylic and/or polyester solid surface materials. The Microfinishing Film provides longer life and a more consistent finish versus conventional coated abrasives. 3M™ Trizact™ Film's microreplicated construction has the longest life and most consistent finish of any solid surface finishing abrasive. Scotch-Brite™ Products provide a uniform finish that provides the end-user with a gloss level that can be easily matched when repairing scratches that tend to naturally occur with everyday use. Matte, semi-gloss, gloss, and high-gloss finishes can be achieved with these systems. Once the required gloss level is met, the process can be stopped. Differences in solid surface substrates may require different final steps to achieve the desired gloss level.

Recommended Sequence for Acrylic-Filled and Polyester-Filled Solid Surfaces

	Matte Finish	Semi-Gloss Finish	High Gloss Finish	
			Standard Sequence	Alternate Sequence[4]
Step 1	366L 100micron[1] dry	366L 100micron[1] dry	366L 100micron[1] dry	366L 100micron[1] dry
Step 2	268XA A35 damp	268XA A35 damp	268XA A35 damp	268XA A35 damp
Step 3	Scotch-Brite™ A VFN[2]	268XA A10 damp	268XA A10 damp	268XA A10 damp
Step 4	Gloss = 12–15	Scotch-Brite™ S ULF [3]	268XA A5 damp	268XA A5 damp
Step 5		Gloss = 45	**acrylic:** 568XA CeO damp / **polyester:** Finesse-It™ Finishing Material Easy Clean-up with 968M	286Q 9micron damp
Step 6			Gloss = 80	Finesse-It™ Finishing Material Easy Clean-up
				Gloss = 80+

1. Many scratches can be removed with 366L 60micron, which can save time in Step 2.
2. For acrylic, 268XA A10 damp can be used instead of Scotch-Brite A VFN if desired.
3. For acrylic, 268XA A5 damp can be used instead of Scotch-Brite S ULF if desired.
4. Use this method if you encounter swirl marks using the standard sequence or if you desire a very high gloss (over 80).

NOTE:
Rinse debris from Trizact discs after each use, and wipe the surface clean following each step to minimize contamination scratches.

Related Applications

Acrylic and gel coat repair.

Tools

Random Orbital Sander

Operating Parameters

10,000 to 12,000 RPM; 3/16" or 3/32" orbit pattern.
12,000 RPM and 3/32" orbit pattern tend to provide an improved finish.

Accessories

3M™ Hookit™ II Disc Pad # 05245
Hookit to Hookit II Conversion Face # 02327
Stikit™ to Hookit II Conversion Face # 02331

Tech Tips

1. Keep the sander flat. Start the sander on the surface and stop the sander off the surface.
2. It is recommended to use a North-South-East-West abrasive finishing pattern and to employ at least two to four patterns per abrasive step. Each random orbital sander pass should overlap about 25% of the previous pass.
3. To help avoid wild scratches from loose mineral, clean the work surface after each abrasive step using a squeegee and then wiping clean with a paper towel.
4. Rinse debris from the Trizact discs after each use by spraying the discs with water from a plant-misting bottle.
5. For damp sanding, use a plant-misting bottle as a water supply source and add a few drops of dish soap to the water.
6. Emphasize that the damp sanding is damp, not wet, as in Center Water Feed (CWF) applications.

Safety Information

Always read and follow all safety information included with the product. Do not exceed maximum operating RPM's. Use guards provided with machine. Follow safety operation procedures posted in work areas.

For Additional Information

To request additional product information or to arrange for sales assistance, call 1-800-362-3550. Address correspondence to: 3M Industrial Business Customer Response Center, Building 21-1W-10, 900 Bush Avenue, St. Paul, MN 55106. Our fax number is 651-733-9175. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

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