Get more control and more productivity at each grinding, deburring and finishing step.
Extreme temperature ranges and intense mechanical stresses.

Not exactly the kind of applications that can afford even the slightest defect. You need speed, durability and efficiency from the products you work with. You need hard-working abrasive belts that know their purpose – getting the job done right so you can focus on the job ahead.

That’s where we can help, and it all starts with better science.

The science of speed

3M™ Cubitron™ II Abrasives are comprised of precisely-shaped, uniformly-sized and vertically-oriented triangles of ceramic aluminum oxide. These self-sharpening triangles are designed to fracture as they wear, continuously forming new, super-sharp points and edges that slice cleanly through the metal like a knife, instead of gouging or plowing. This prevents heat from building up in the workpiece – reducing heat-related stress cracks and discoloration. And, because the abrasive itself stays cooler and sharper, it lasts up to four times as long as conventional ceramic grain belts!

In contrast, conventional ceramic abrasive grain is irregular and blocky in shape. Instead of a clean, machining action, the grain tends to “plow” through the metal, causing heat to build up in the workpiece and the abrasive – resulting in a slower cut, shorter belt life and undesirable effects, such as burnishing.

The science of smooth

Scotch-Brite™ Abrasive Products

The Scotch-Brite line of surface conditioning products includes a variety of non-woven synthetic fiber webs and molded wheels impregnated with abrasive minerals. These products are well-suited for cleaning, blending, deburring, finishing and polishing, and improve surfaces without significantly changing the shape or dimension of the workpiece.

Scotch-Brite abrasives run cool, and resist loading due to their open web construction. This reduces the risk of part discoloration and warping, while extending the life of the wheel.

Flexible, non-woven construction with high concentration of active mineral sites for fast, consistent cutting without compromising final finish. Specially coated to minimize loading. Produces controlled, uniform scratch throughout life of the abrasive.

The fast yet forgiving cut and consistent performance of Scotch-Brite™ Abrasives allows you to improve surfaces without significantly changing the shape or dimension of the workpiece—and helps prevent undercutting and gouging.

The science of consistent finishes.

3M™ Trizact™ Abrasives

Derived from patented 3M microreplication technology, Trizact abrasives consist of very small, precisely-shaped three-dimensional structures distributed uniformly over the substrate. Unlike conventional abrasives, which are constructed from randomly spaced and irregular-shaped minerals, the uniform configuration of Trizact abrasives helps deliver more consistent finishes with higher cut rates, and cooler grinding and finishing temperatures.

The fast, fine, consistent finishes made possible with Trizact abrasives help reduce reject rates and improve worker productivity. In addition, Trizact abrasive belts can last up to five times longer than conventional belts.
Heavy Stock Removal and Rough Dimensioning

3M Abrasives are ideal for both robotic and off-hand removal of mill scale, rough dimensioning, parting lines, gates and flashing. The consistent high-performance and cutting efficiency of 3M abrasives makes it easier for you to meet customer cost and delivery targets – even on exotic, difficult-to-process alloys and ceramic coatings. Designed to be “user friendly,” these advanced, long-lasting abrasives help ensure predictable, quality results with less reliance on operator skill.

Surface Refinement

3M offers a variety of solutions designed to reduce abrasive process steps and increase the number of parts produced per belt. The products featured here are used for removing scale, gate witness blending and removing surface imperfections, including light and heavy burs. Their high efficiency and long life not only can help reduce the cost of labor and consumables, but can also speed delivery time.

Lower is finer

The unique construction of Trizact abrasives requires a different grading system. Grade is defined by the average particle size in microns and begins with an “A.” Trizact abrasive belts are available in grades A5 through A160 in widths up to 26 inches. The Table below shows the Trizact abrasive grade comparison to conventional abrasive grades. As you can see, the lower the A-grade, the finer the grade.
Deburring, Finishing and Polishing

3M Offers a variety of advanced abrasive technologies for deburring, finishing and polishing. Designed to save time and steps, 3M abrasives are suited to today’s difficult-to-process alloys and other advanced materials, making it easier for you to deliver the surface finishes and tolerances your customers demand – on-time and on-budget.

**Convolute Wheels**
Choose convolute wheels when you can pick the part up and present it to the wheel. Used on bench motors and pedestal grinders.

- Excellent choice for deburring and polishing.
- A unique resin system helps minimize smearing
- Ideal for heavier deburring of edges
- Durable wheel
- Fast cutting
- Made with Silicon Carbide mineral

**Scotch-Brite™ EXL Pro Deburring Wheel**

**Scotch-Brite™ EXL Deburring Wheel**

**Unitized Wheels**
Choose unitized wheels for hand tools and wheels narrower than ½ inch.

- Contains 3M Precision Shaped Grain for fast burr removal
- Minimal dust and debris – less dust equals less cleanup
- Comfortable operator “feel”
- Available in grades 4C and 6C MED, and 8C CRS

**Scotch-Brite™ Deburr and Finish Pro Unitized Wheel**

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