

3M™ Precision Grinding & Finishing – Complete System Solution

Specialized applications like gear, surface, cylindrical, cut-off and tool grinding demand precision and process stability. Achieving the highest precision requires the highest-quality abrasives. As a complete solution supplier, 3M offers conventional and superabrasive wheels, microfinishing films, dressing equipment and tools you need for any precision grinding or microfinishing application. Plus, we have the best technical and sales expertise to develop custom solutions for you.

A partner you can trust.

For more than 100 years, 3M has been a world leader in developing advanced abrasives. Our technologies have helped customers in virtually every industrial sector to improve productivity, cut costs and achieve the consistent high-quality finishes they need to compete in the global marketplace.

Conventional Abrasives

Durability and precision are crucial in the gear, turbine and powertrain industries. For many of these industries, conventional 3M™ Cubitron™ II bonded abrasives with ceramic 3M Precision-Shaped Grain can serve as a cost-effective and value-added solution.



Superabrasives

If you're grinding and finishing exceptionally hard substrates like tungsten carbide, ceramics or superalloys, it's time to drive into a superabrasive solution. Our CBN and diamond superabrasives are customizable in a range of forms and grades to meet your specific application needs.



Dressing Tools and Spindles

As a total solution supplier, 3M offers diamond dressing rollers and dressing spindles designed for both conventional and superabrasives – core elements for building a complete high-performance grinding system.



3M™ PG&F Application Segments



Gear Grinding



Surface Grinding



Cylindrical Grinding



Tool Grinding



Metal & Rail

3M™ Precision Bonded Portfolio

Key

- Extensive Product Offering
- ◐ Focused Product Offering
- Specialized Product Offering

Application		Technologies																								
Application	Sub-Application	Superabrasive Wheels					Conventional Wheels					Flexibles & Compounds					Superabrasive Dressing					Conventional Dressing				
		Resin, Poly and Hybrid	Vitrified CBN	Vitrified Diamond	Electroplated CBN and Diamond	Metal Bond	Brazed CBN and Diamond	Vitrified Bond	Resin Bond (Hot Pressed)	Resin Bond (Cold Pressed)	Large Diameter Cut-Off Wheels (650–2000 mm)	Mid-size Diameter Cut-off Wheels (200–600 mm)	Flex Diamond	Compounds & Slurries	Microfinishing Film	Diamond Dressing Rollers	Stationary Dressers	Dressing Equipment	Sharpening Rings	Sharpening Cup Wheels	Sharpening Sticks					
Gear	Bevel Gear							●								◐	○	●								
	Threaded Grinding							●								◐										
	Profile Grinding							●								○	○									
Cylindrical	OD-Grinding		●					●		●					●	●										
	ID-Grinding		●					●								●										
	Centerless Grinding		●					●		●						●										
Surface	Face / Fine Grinding	●	●	●				●						●						●						
	Reciprocating Grinding		◐					●								●		●								
	Creep-Feed Grinding				◐			●								●		●								
Metal & Rail	Roll Grinding (HRM, CRM)		○					●		●			◐	○	◐											
	Steel – Surface conditioning								●																	
	Steel products – Cutting-off										●	●														
Tool	Indexable Insert Grinding	●	●																	◐						
	Round Tools	●	◐	◐						◐						◐	○	◐				◐				
Oil & Gas	PCD Cutters and Drilling Bits	●		●									◐	●								◐				

Take advantage of performance and productivity that will set your shop up for success.
3M.com/us/precisiongrinding



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PGF-091-EN

