# Science. Applied to Life.™

NEW! 3M<sup>™</sup> Silver Depressed Center Grinding Wheel

# Grind without compromise.

Premium performance in a value-packed wheel – made possible by 3M Precision-Shaped Grain technology.

Ideal for industries such as:

- Agricultural, industrial and construction machinery
- General metal fabrication
- Oil and gas infrastructure
- Rail
- Shipbuilding
- Stainless steel fabrication
- Structural steel
- Tank and vessel

An unbeatable combination of performance and value

Now you can experience the long life and speed of 3M's Precision-Shaped Grain technology – in an innovative bonded wheel construction designed for everyday high performance.

#### New 3M<sup>™</sup> Silver Depressed Center Grinding Wheels

3M Silver Depressed Center Grinding Wheels (DCGW) represent a new class of right angle abrasives – powered by the legendary speed and long life of 3M Precision-Shaped Grain. They are an ideal choice for applications like weld removal, beveling, edge chamfering and more – offering a faster cut and longer life than aluminum oxide and alumina zirconia wheels.

Got a need for speed? For an even faster cut rate, try 3M<sup>™</sup> Cubitron<sup>™</sup> II Abrasives.



The "silver bullet" for a wide range of tough metalworking jobs, including:

- ✓ Weld Removal
- ✓ Beveling
- ✓ Edge chamfering
- ✓ Gate & flash removal
- ✓ Gouging
- ✓ Deburring

Optimized for use on carbon steel and stainless steel.

# Bonded wheel product comparisons

Speed and Durability rated on a scale of 1 to 5, with 5 stars being the best.

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Attributes	Aluminum oxide	Alumina zirconia	Silver
Durability / life	**	***	****
Speed of cut	*	**	***
Contaminant-free* (for stainless/inox)	varies	varies	yes
Mineral	aluminum oxide	alumina zirconia	ceramic blend precision-shaped grain
Total abrasive spend per job	\$\$\$	\$\$	\$

\* Contains less than 0.1% Fe, S and Cl

# Get the best of both worlds

With most competitive wheels, you have to choose between a softer construction that tends to cut fast, or a hard construction that tends to last longer. Now, with the 3M<sup>™</sup> Silver Depressed Center Grinding Wheel, you get an optimal balance of fast cutting and long life – all in a single, smooth-running wheel. Now that's great value!

#### $\textbf{3M}^{\scriptscriptstyle m} \textbf{ Silver Depressed Center Grinding Wheel} - \textbf{T27}$

Diameter × Thickness × Arbor Hole (inches)	UPC	Max. RPM	<b>Quantity</b> (Inner/Case)
$4 \times \frac{1}{4} \times \frac{3}{8}$	051125-87455-7	15,300	10/20
$4 \times \frac{1}{4} \times \frac{5}{8}$	051125-87456-4	15,300	10/20
$4\frac{1}{2}\times\frac{1}{4}\times\frac{7}{8}$	051125-87453-3	13,300	10/20
$5 \times \frac{1}{4} \times \frac{7}{8}$	051125-87454-0	12,250	10/20
6 × ¼ × ¾	051125-87450-2	10,200	10/20
$7 \times \frac{1}{4} \times \frac{7}{8}$	051125-87451-9	8,500	10/20
9 ×1⁄4 × 7⁄8	051125-87452-6	6,650	10/20

#### $3M^{\scriptscriptstyle \rm M}$ Silver Depressed Center Grinding Wheel – T27 Quick Change

Diameter × Thickness × Arbor Hole (inches)	UPC	Max. RPM	<b>Quantity</b> (Inner/Case)
4 ½ × ¼ × 5/8-11	051125-87397-0	13,300	10/20
5×¼×⁵⁄8-11	051125-87446-5	12,250	10/20
6×¼×5%₀-11	051125-87447-2	10,200	10/20
7 × ¼ × 5%-11	051125-87448-9	8,500	10/20
9×¼×5%-11	051125-87449-6	6,650	10/20



#### Success story: Fabricated metals

For weld grinding on carbon steel one customer reports that 3M Silver DCGW delivered 95% less wear and a 28% faster cut than their current aluminum oxide wheel.

#### Success story: Steel manufacturing

When removing laser slag from Hardox 960 stainless steel, 3M Silver DCGW lasted twice as long and required less operator pressure than conventional aluminum oxide wheel.

## The science of precision-shaped grain



3M precision-shaped grain uses 3M microreplication technology to form sharp peaks that easily "slice" through metal – cutting cooler, faster and lasting longer than conventional abrasive grain.



Conventional ceramic abrasive grain tends to "plow" through the metal, causing heat to build up in the workpiece and the abrasive — resulting in a slower cut and shorter wheel life.

# Complete your lineup with 3M metalworking products.

#### Optimize your performance – with genuine 3M<sup>™</sup> Power Tools!

Lightweight but rugged, these power tools are designed with a high power-to-weight ratio to help operators get more work done in less time.







Model #	28403	28405	28824	
Description	3M™ Grinder 28403, 4" 1HP	3M <sup>™</sup> Grinder 28405, 4-1/2" 1 HP	3M <sup>™</sup> Grinder 28824, 4-1/2" – 5" 1.5 HP	
Maximum RPM	12,000	12,000	12,000	
UPC	051141-28403-3	051141-28405-7	051141-28824-6	

### Tech Tip

#### Powering up for performance

- Depressed Center Grinding Wheels perform better the faster they run, so having a tool able to maintain speed is crucial.
- The higher the tool power, the easier it can maintain speed, resulting in faster cut time and longer wheel life.
- When the tool speed decreases, wheel wear typically increases.
- **Do NOT** exceed the maximum operating speed listed on the whee!!

#### Stay safe on the job with 3M™ Personal Protective Equipment



Lighter weight, more comfortable welding helmet with advanced auto-darkening optics that adjust to your working conditions. **3M<sup>™</sup> Speedglas<sup>™</sup> Welding Helmet 9002NC** (PN 04-0100-20NC)



Protect your head and face against sparks, chips and debris. **3M<sup>™</sup> Ratchet Headgear and Face Protection** (PN 82783-00000)



Comfortable eye protection with anti-fog lenses for a clear view of your workplace. **3M<sup>™</sup> SecureFit<sup>™</sup> Protective Eyewear** (PN SF401AF)



Quick, comfortable hearing protection that stays clean even when your hands are dirty. **3M<sup>™</sup> E-A-R<sup>™</sup> UltraFit Corded Earplugs** (PN 340-4004)

Product Selection and Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

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