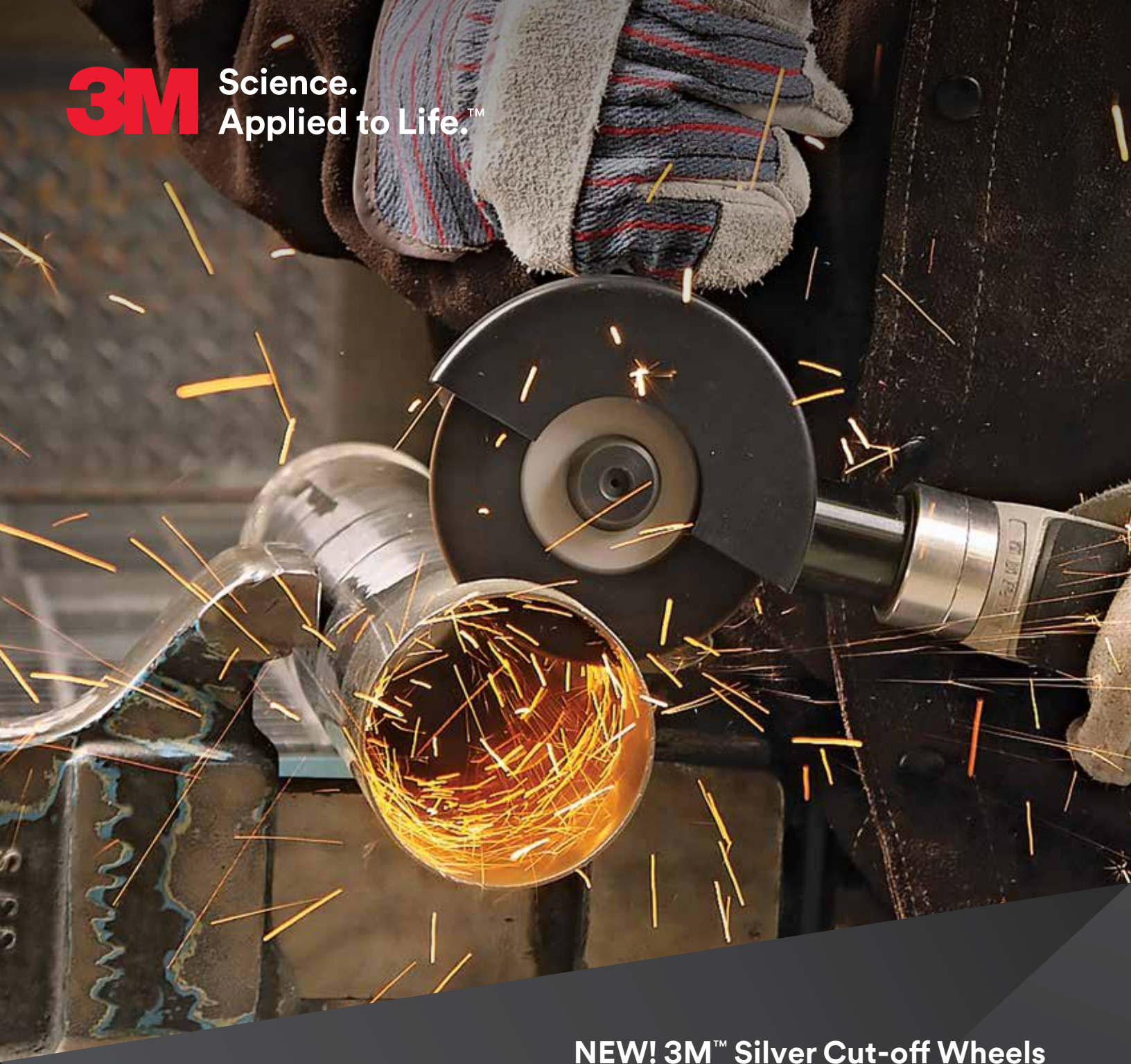


3M Science. Applied to Life.™

NEW! 3M™ Silver Cut-off Wheels

Cut to the chase.

Get the long-life and fast cutting action of 3M Precision-Shaped Grain – now in a cut-off wheel designed to give you great performance and a great value!

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**

A cut above the rest

Does your cut-off wheel give up before the job is done? Does it heat up and slow to a crawl after a few cuts? Does it give you a rough, ragged kerf? Well, if your cut-off wheel just can't cut it, here's great news:

New 3M™ Silver Cut-off Wheels are a new kind of premium performance wheel designed to be affordable for everyday use. Featuring 3M Precision-Shaped Grain technology, these innovative wheels cut cool, to deliver fast, smooth cutting action on all types of ferrous metals, stainless steels and alloy steels. And customers report that they last longer than competitive aluminum oxide and alumina zirconia wheels. That means fewer wheel changes and more finished parts per wheel, to help improve shop productivity and control your costs.

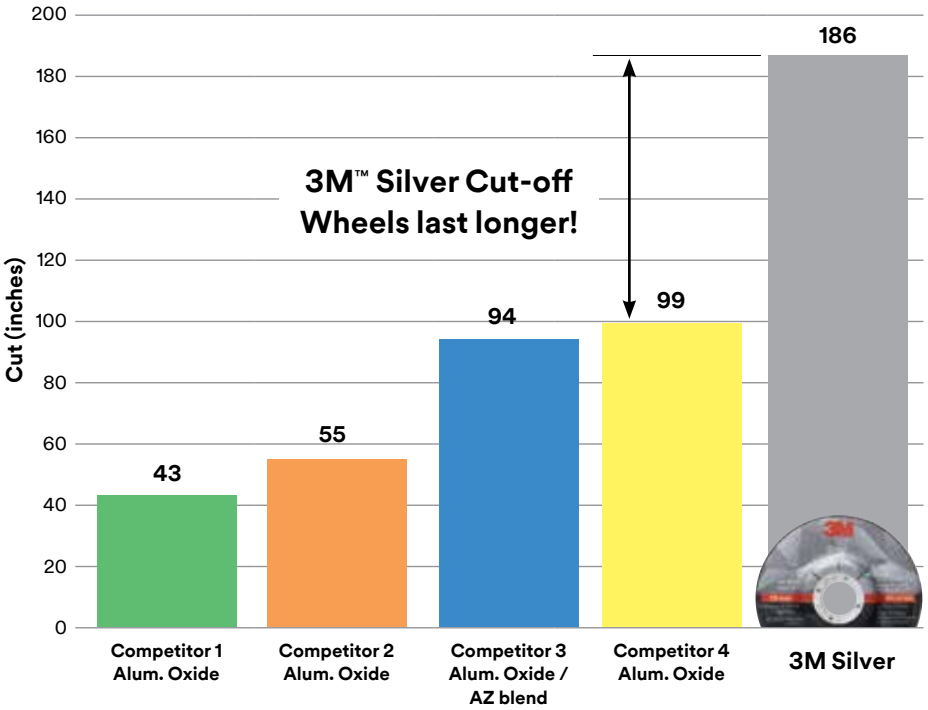
Make short work of cutting pipes, tubes, flat sheets and more.

Optimized for use on carbon steel and stainless steel.

Tech tip – Size matters

Wheel thickness affects wheel performance. The thicker the wheel, the longer the life and the slower the cut rate. When cutting thicker material, use a thicker and larger diameter wheel to maximize wheel life. Thinner wheels cut faster and wear faster. They also work better on thin gauge materials.

Wheel life



Internal 3M testing on 304L stainless steel sheet (11 gauge) using a 13 amp electric tool. Wheels are tested to end of life.

Success stories: Metal fabrication

When cutting steel and stainless steel tubing assemblies, this customer reports **50% less wear** with 3M Silver Cut-off Wheels vs. their standard aluminum oxide wheel.

For cutting structural metal sheet and plate, 3M Silver Cut-off Wheels demonstrated **40% less wear** than this customer's usual AZ wheel.

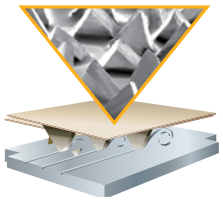
3M™ Silver Cut-off Wheels – Type 1

Diameter × Thickness × Arbor Hole (inches)	UPC	Max. RPM	Quantity (Inner/Case)
3 × .035 × ¼	051125-87457-1	25,465	25/50
3 × .035 × ⅜	051125-87458-8	25,465	25/50
3 × .060 × ⅜	051125-87459-5	25,465	25/50
4 × .035 × ¼	051125-87460-1	19,100	25/50
4 × .035 × ⅜	051125-87461-8	19,100	25/50
4 × .060 × ⅜	051125-87462-5	19,100	25/50
4 × .125 × ⅜	051125-87657-5	19,100	25/50
4.5 × .040 × ⅞	051125-87464-9	13,300	25/50
4.5 × .045 × ⅞	051125-87465-6	13,300	25/50
5 × .045 × ⅞	051125-87467-0	12,250	25/50
6 × .045 × ⅞	051125-87469-4	10,200	25/50
7 × .045 × ⅞	051125-87471-7	8,500	25/50

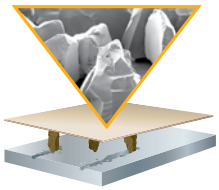
3M™ Silver Cut-off Wheels – Type 27

Diameter × Thickness × Arbor Hole (inches)	UPC	Max. RPM	Quantity (Inner/Case)
4.5 × .045 × ⅞	051125-87466-3	13,300	25/50
4.5 × .090 × ⅞	051125-87659-9	13,300	25/50
5 × .045 × ⅞	051125-87468-7	12,250	10/20
6 × .045 × ⅞	051125-87470-0	10,200	10/20

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.

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

Complete your lineup with 3M metalworking products.

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

- Easily cuts through everything from standard rebar to oversized bolts
- Model 28826 provides greater versatility and control, with right angle head and easily-repositionable guard

Optimize your performance – with genuine 3M™ Power Tools!

Model #	20233	28771	28826
Description	3M™ Cut-off Wheel Tool 20233, 3" 1 HP	3M™ Cut-off Wheel Tool 28771, 4" 1 HP	3M™ Cut-off Wheel Tool 28826, 4 ½" - 5" 1.5 HP
Maximum RPM	25,000	19,000	12,000
UPC	051141-20233-4	051141-28771-3	051141-28826-0

Model #	28403	28405	28824
Description	3M™ Grinder 28403, 4" 1 HP	3M™ Grinder 28405, 4½" 1 HP	3M™ Grinder 28824, 4 ½" - 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

- Cut-off 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 wheel!

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™ Speedglas™ Welding Helmet 9002NC
(PN 04-0100-20NC)

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

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

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

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Issued: 10/17 12790HB
61-5002-8445-2

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