



Cubitron™ 3
Performance Abrasives

Portable Grinding and Cut-Off Wheels



Produce more. With less.

3M™ Cubitron™ 3 Portable Grinding and Cutting Wheels feature 3M Precision-Shaped Ceramic Grain, which cuts faster and lasts longer than conventional grain. Designed for everyday high performance, helping you to reduce your manufacturing costs without compromising on performance.

A new era of heavy
grinding and cutting:
3M™ Cubitron™ 3
Performance Abrasives.



Lasts longer



Cuts faster



Cuts cooler

Our portable grinding and cutting wheels have evolved.



CUBITRON™ II
Industrial Abrasives

Launched in 2012, this was the first range of cutting and grinding products using 3M's precision-shaped triangular grain abrasives. This range has now been replaced by our latest and best offering.



Cubitron™ 3
Performance Abrasives

Significantly raising the benchmark for cut rate and product life in heavy grinding and cutting applications.

Up to

3X
Longer
lasting

Responding to industry requirements for better product productivity, worker safety and sustainability, 3M has developed abrasive wheel technologies that make portable grinding and cutting wheels work even faster and last even longer than our current best performing range. Performance is so good compared to existing 3M™ Cubitron™ 2 Performance Abrasives that we've established a new generation of products called 3M™ Cubitron™ 3 Performance Abrasives.

**Elevated
experience**

To maximise simplicity and value to our customers, the current 3M™ Cubitron™ 2 Portable Grinding and Cutting Wheel range will be discontinued and replaced by 3M™ Cubitron™ 3 Performance Abrasives. Customers will benefit from a wider product choice, better performance and optimised sustainability with no change in list price.

Re-shaping the way work gets done.



Cubitron™ 3
Performance Abrasives

Our latest 3M Precision-Shaped Grain

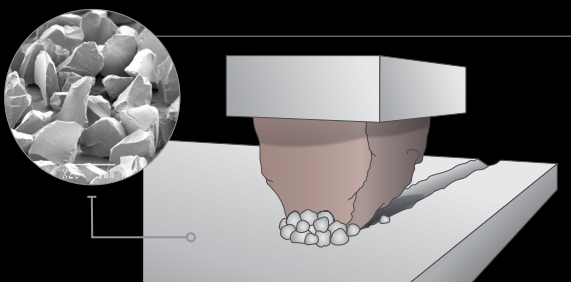
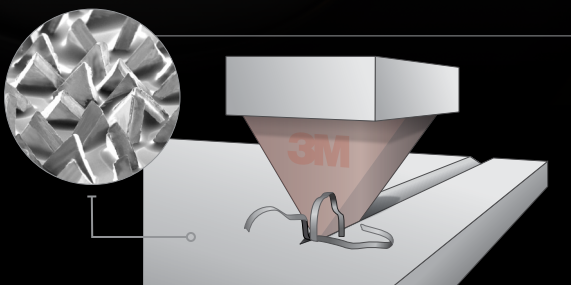
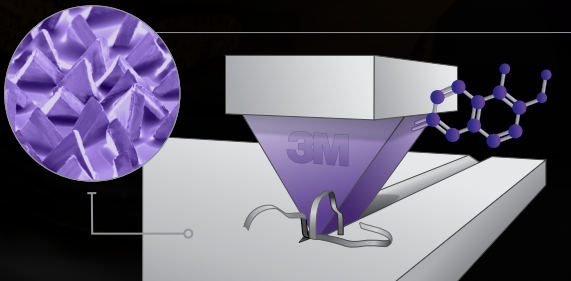
We've re-engineered precision-shaped ceramic triangular grain using proprietary breakthroughs in **molecular bonding technology**.

3M Precision-Shaped Grain

3M pioneered the first precision-shaped grain using 3M microreplication technology to form consistent sharp peaks that easily "slice" through metal—cutting cooler, faster, and lasting longer than conventional abrasive grain.

Conventional ceramic abrasive

Conventional ceramic abrasive grain tends to "plow" through metal, causing heat to build up in the workpiece and abrasive, resulting in a slower cut and shorter abrasive life compared to our latest precision-shaped grain.



3M™ Cubitron™ 3 Cut-Off Wheels



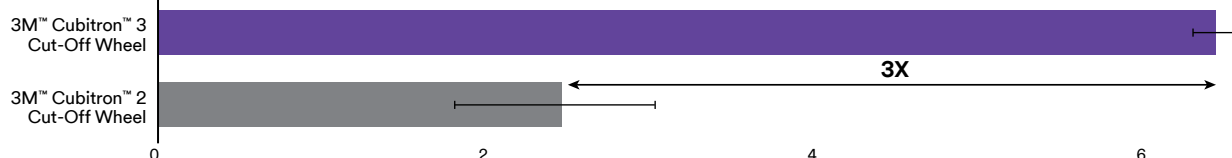
**Designed to provide high cut rates
and long life to help reduce cost.**



Performance enhancing packaging

When cut-off wheels are properly protected from atmospheric moisture, **product life can be extended by up to 66%.**² All 3M™ Cubitron™ 3 Cut-Off Wheels will come in re-sealable bags made of recycled (>30% PCR content) and/or chemically recyclable material.

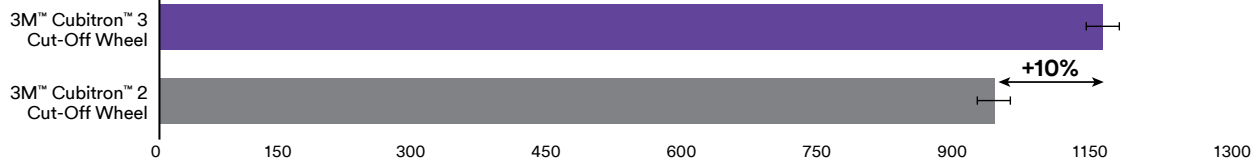
3X Longer life¹



33% Less hand-arm vibration¹



10% Faster cut¹



1. Results are based on an automated cutting of a 3mm thick 304 stainless steel sheet.

Cut-off wheel geometry is 125mm x 1.6mm x 22mm mounted on a 1.5 hp angle grinder with an applied force of 9 lbs. Cut speed is defined by time needed to cut 1 meter of stainless steel.

The number of cuts is estimated by the amount of wheel that was used after cutting a distance of 1 meter. End of life is assumed to be 50% of initial wheel mass.

2. 3M Internal Data.

3M™ Cubitron™ 3 Cut-Off Wheels

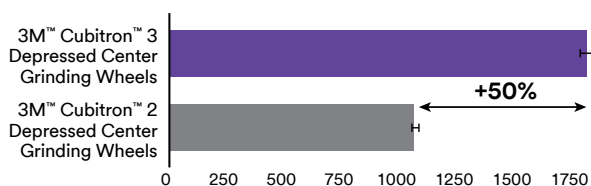
Part Number	3M ID	Type	Diameter (mm)	Thickness (mm)	Center Hole (mm)
86647	UU012137913	T41	125	1.0	22.23
86457	UU012138986	T41	125	1.3	22.23
86412	XC991968626	T41	125	1.6	22.23
88768	XC991968345	T41	180	2.0	22.23
88732	XC991968352	T41	230	2.0	22.23

3M™ Cubitron™ 3 Depressed Center Grinding Wheels

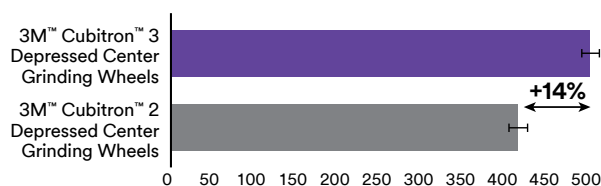


Fast cutting, long lasting wheels that require less pressure for heavy grinding and weld removal.

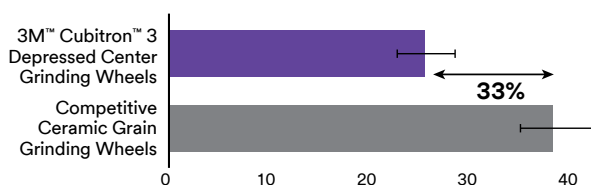
50% Longer life³



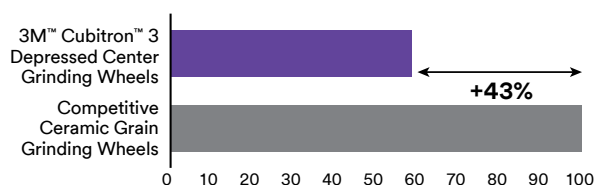
14% Faster cut³



33% Less hand-arm vibration³



43% Less noise^{3,4}

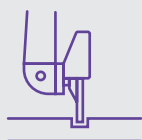


3. Results are based on an automated beveling of 1018 carbon steel bars. Grinding wheel geometry is 115mm outer diameter mounted on a servo motor with an applied force of 12 lbs. Cut speed is defined by metal removed after 10 minutes of testing. The total material removal is estimated based on the amount of wheel used for 10 minutes of testing life. End of life is assumed to be 50% of the initial wheel mass.

4. Noise level operator exposure testing in a typical weld preparation process; 3M™ Cubitron™ 3 Depressed Center Grinding Wheels average compared to the average result of the high-quality ceramic bonded wheels tested, according to independent testing by Fraunhofer Institute, August 2023. Noise is measured in dB(A) and is a logarithmic number, a reduction of 3dB(A) is a halving of the noise intensity. Above 80dB(A) hearing protection should be provided. 105 decibels for high-quality grinding wheels, 102 decibels for 3M™ Cubitron™ 3 Depressed Center Grinding Wheels.

Range Expansion

Specific product lines have been introduced where wheel construction and grain type are optimised for applications such as gouging and back grinding where the wheel is used on its edge.



3M™ Cubitron™ 3 Depressed Center Grinding Wheels

Part Number	3M ID	Type	Diameter (mm)	Thickness (mm)	Center Hole (mm)
88989	XC991967495	T27	100	6.0	16.00
99306	XC991967537	T27	115	7.0	22.23
98647	XC991967545	T27	125	7.0	22.23
98418	XC991967628	T27	180	7.0	22.23
98291	XC991967669	T27	230	7.0	22.23

3M™ Cubitron™ 3 Cut & Grind Wheels



Versatile wheels are designed to be used as both a depressed center grinding wheel and as a cut-off wheel — making them ideal for cutting, grinding, gouging and more!

We've reformulated our Cut & Grind Wheel composition to offer:



Smooth action
vs. 3M™ Cubitron™ 2

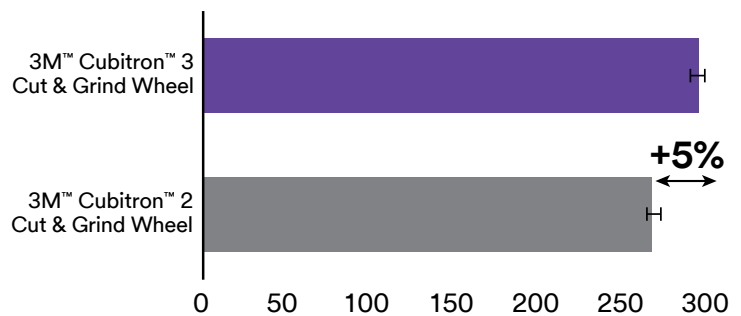


Best in class performance



Better balance
vs. 3M™ Cubitron™ 2

5% Faster cut⁵



5. Results are based on an automated beveling of 1018 carbon steel bars. Cutting & grinding wheel geometry was 115mm outer diameter mounted on a servo motor with an applied force of 12 lbs. Cut speed is defined by metal removed after 10 minutes of testing. The total material removal is estimated based on the amount of wheel used for 10 minutes of testing life. End of life is assumed to be 50% of the initial wheel mass.

3M™ Cubitron™ 3 Cut & Grind Wheels

Part Number	3M ID	Type	Diameter (mm)	Thickness (mm)	Center Hole (mm)
93498	XC991968162	T27	125	3.2	22.23
95508	XC991967909	T27	100	4.2	15.88
90018	XC991967974	T27	125	4.2	22.23
94542	XC991968030	T27	180	4.2	22.23
94343	XC991968063	T27	230	4.2	22.23

New!



Industries: Metal fabrication ▶ Machinery manufacturing ▶ Shipyards



Ideal for applications: Beveling ▶ Cutting ▶ Weld grinding



Sustainability matters to 3M Abrasives.

When you buy from the SEAM value chain, you are helping to build a sustainable future for our industry, for people and for the planet.

3M is a founding member of the SEAM abrasives manufacturers program and aligns to the world's highest standards of quality, safety and performance in a sustainable environment.

We commit to transparency, accountability, innovation and progress. When buying from the SEAM value chain, customers are helping to build themselves a sustainable future.



Sustainable European Abrasive Manufacturers

Find out more at
www.seam.earth





Learn more at go.3M.com/Cubitron3WheelsNZ



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