



# 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.



Lasts longer



Cuts faster



Cuts cooler

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



# Our portable grinding and cutting wheels have evolved.



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 This range has now been replaced by our latest and best offering.



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.



### Our latest 3M Precision-Shaped Grain

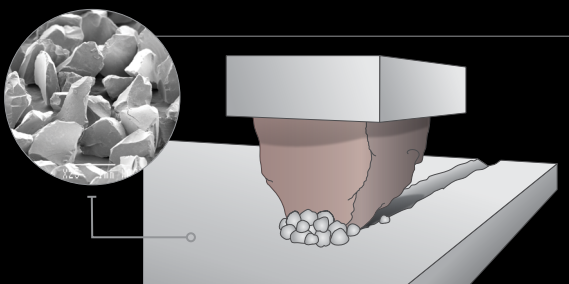
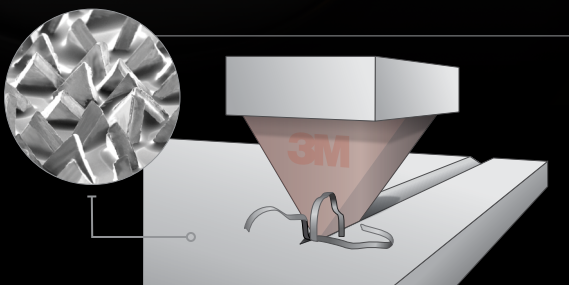
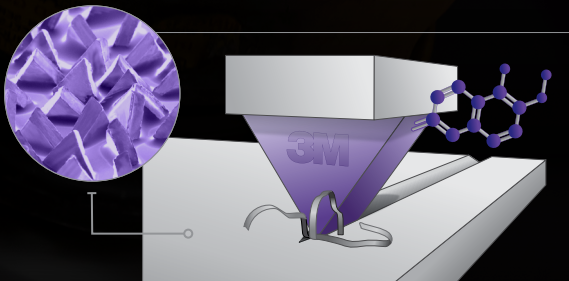
We've re-engineered precision-shaped ceramic triangular grain using proprietary breakthroughs in **molecular bonding technology**.

### 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.

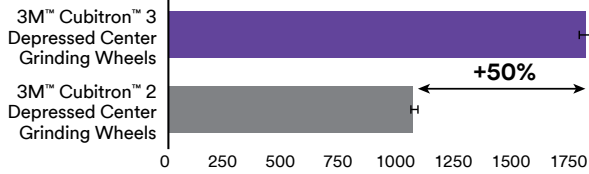


# 3M™ Cubitron™ 3 Depressed Center Grinding Wheels

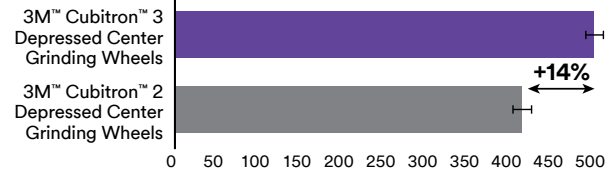


**Fast cutting, long lasting wheels that require less pressure for heavy grinding and weld removal.**

**50% Longer life<sup>1</sup>**



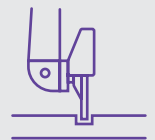
**14% Faster cut<sup>1</sup>**



1. 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.

## 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.



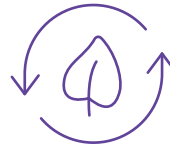
## 3M™ Cubitron™ 3 Depressed Center Grinding Wheels

Part Number	3M ID	Type	Diameter (mm)	Thickness (mm)	Center Hole (mm)
99396	XC991967495	T27	100	6.0	16.00
98647	XC991967545	T27	125	7.0	22.23
98418	XC991967628	T27	180	7.0	22.23

# 3M™ Cubitron™ 3 Cut-Off Wheels



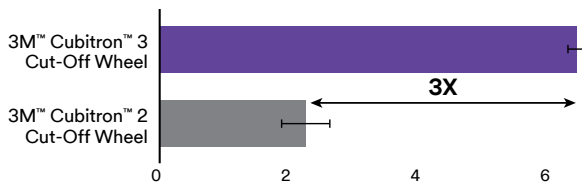
Designed to provide high cut rates and long life to help reduce cost.



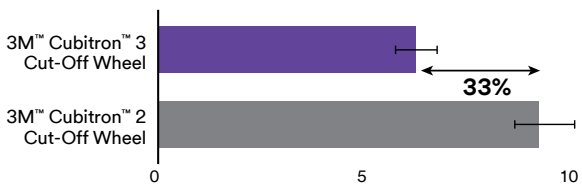
### Performance enhancing packaging

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

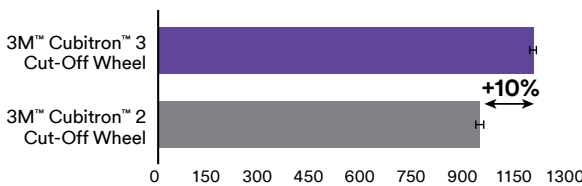
## 3X Longer life<sup>2</sup>



## 33% Less hand-arm vibration<sup>2</sup>



## 10% Faster cut<sup>2</sup>



2. 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.  
3. 3M Internal Data.

## 3M™ Cubitron™ 3 Cut-Off Wheels

Part Number	3M ID	Type	Diameter (mm)	Thickness (mm)	Center Hole (mm)
90030	UU012106454	T41	75	0.9	6.35
91711	UU012782825	T41	100	1.0	15.88
86647	UU012137913	T41	125	1.0	22.23
<b>New!</b> 86457	UU012138986	T41	125	1.3	22.23
88768	XC991968345	T41	180	2.0	22.23

### Range Expansion

A 1.3mm thickness option is a compromise between the speed of a 1.0mm and the life of a 1.6mm thick wheel.




# 3M™ Cubitron™ 3 Cut & Grind Wheels



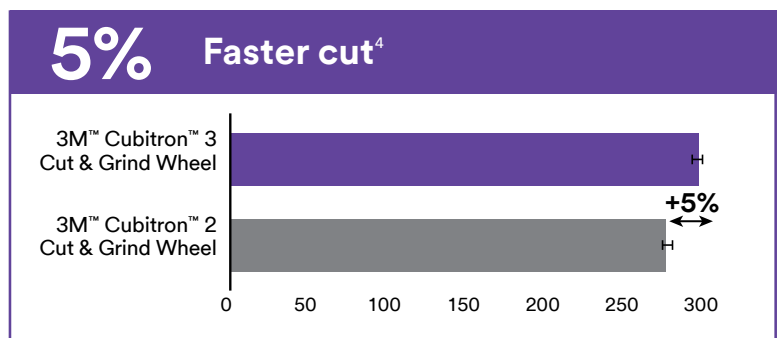
Versatile wheels are designed to be used as both a depressed center grinding wheel and as a cut-off wheel — making them ideal for cutting, grinding, gouging and more!

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

 **Smooth action**  
vs. 3M™ Cubitron™ 2

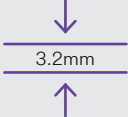
 **Best in class performance**

 **Better balance**  
vs. 3M™ Cubitron™ 2



4. 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.

**Range Expansion**  
We've added a 3.2mm option for applications requiring a thinner cutting profile. A thinner wheel makes it cut faster too!



## 3M™ Cubitron™ 3 Cut & Grind Wheels

	Part Number	3M ID	Type	Diameter (mm)	Thickness (mm)	Center Hole (mm)
New!	93498	XC991968162	T27	125	3.2	22.23
New!	93473	XC991968220	T27	180	3.2	22.23
	94946	XC991967966	T27	125	4.2	22.23
	94542	XC991968030	T27	180	4.2	22.23


# Tools that take it to the next level.

The upgraded 3M™ Pneumatic Angle Grinder is designed for effective performance and operator comfort. Powered by a high-output 1.5HP pneumatic motor, this tool helps you get the job done quicker and more efficiently — whether you're grinding large welds, beveling or doing heavy deburring.


- ▶ 1.5 HP (1,100 W power)
- ▶ Wheel autobalancer
- ▶ Adjustable guard
- ▶ Vibration-reducing side handle with added padding; interchangeable for right or left hand usage
- ▶ Available accessories provide maximum functionality and flexibility
- ▶ Rear exhaust directs exhaust and swarf away from the workpiece



## 3M™ Fibre Disc Back-up Pad

Product	Product ID	Diameter (mm)	Max RPM	Box/Case
	WX300923892	4 in	13,300	10
	WX300925012	5 in	12,000	10
	WX300923744	7 in	8,600	10

## 3M™ Pneumatic Angle Grinder, 88566

Product	Product ID	Diameter (mm)	Max RPM	Box/Case
	60440406472	115-125 (4.5-5.0)	12,000	1/1

## TECH TIPS



### Powering up for performance

- ▶ Portable bonded products 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!
- ▶ Always use a tool guard

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](http://www.seam.earth)





Learn more at [go.3M.com/Cubitron3WheelsIN](https://go.3M.com/Cubitron3WheelsIN)



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