# **3M<sup>™</sup> Cubitron<sup>™</sup> II Abrasive Discs**

For grinding, weld removal, deburring & more







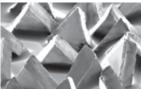
# Now you have

# **Engineered to help you do more**

For grinding, weld blending, deburring and other tough metal finishing jobs, 3M<sup>™</sup> Cubitron<sup>™</sup> II Abrasive Discs deliver outstanding performance – thanks to a breakthrough 3M technology that re-writes the rules for speed, consistency and disc life.

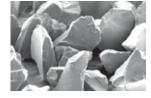


3M precision-shaped grains are electronically oriented to form sharp peaks that easily "slice" through metal. They stay cooler, cut faster and last longer.





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, shorter disc life and undesirable effects, such as burnishing.



### A new era in abrasive performance

The first time you try Cubitron II discs, you'll quickly see that they cut faster, run cooler and last longer than other abrasive discs in your shop.

The secret lies in the revolutionary precision-shaped ceramic grain technology pioneered by 3M. As the triangular shaped grain wears, it continuously fractures to form sharp points and edges that slice through metal, wear evenly and provide super-long life and consistency at any grinding pressure.

### Optimized for applications including:

- Grinding
- Weld & mill scale removal
- · Removing pits and surface imperfections
- Deburring
- Beveling
- · Edge chamfering



- Industrial
- Food processing
- Oil & gas

- Ship and boat building
- Automotive
- Aerospace

- Structural steel
- Sheet metal
- Machining

# 3M™ Cubitron™ II Fibre Discs

Cubitron II fibre discs are engineered to cut faster, cooler and with less grinding pressure than conventional abrasives. Plus they last up to 5 times longer, for increased productivity!

### 3M<sup>™</sup> Cubitron<sup>™</sup> II Fibre Disc 987C

### The coolest way to increase productivity

If you work with heat-sensitive materials like stainless steel, you'll appreciate the way the 987C disc digs in and cuts faster, lasts longer and requires less grinding pressure than conventional abrasives. Some customers have seen up to 5 times the life. Try 987C for yourself and you'll see improvement over your existing fibre disc. Saves time on applications including edge chamfering, beveling, weld removal and more!

### **Optimized for:**

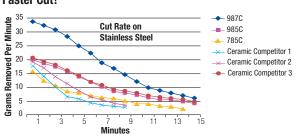
- Stainless steel
- High nickel alloys
- Superalloys
- Carbon steel

### 3M™ Cubitron™ II Fibre Disc 987C

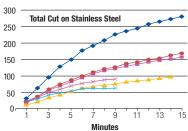
\*Quick Change Attachments. Other sizes available upon request.

Diameter	Grade	UPC (051141-)	Max RPM	Min./Case	
	36+	27447-8			
4 <sup>1</sup> /2" x <sup>7</sup> /8"	60+	27653-3	13,300	25/100	
	80+	27657-1			
	36+	27469-0			
4 <sup>1</sup> /2" x TN*	60+	27653-3	13,300	25/100	
	80+	27664-9			
	36+	27448-5			
5" x <sup>7</sup> /8"	60+	27654-0	12,000	25/100	
	80+	27658-8			
	36+	27467-6			
5" x TN*	60+	27662-5	12,000	25/100	
	80+	27665-6			
	36+	27449-2			
7" x <sup>7</sup> /8"	60+	27655-7	8,600	25/100	
	80+	27659-5			
	36+	27468-3			
7" x TN*	60+	27663-2	8,600	25/100	
	80+	27666-3			
	36+	27450-8			
9 <sup>1</sup> /8" x <sup>7</sup> /8"	60+	27656-4	6,600	25/100	
	80+	27660-1	1		

### Faster Cut!



### Longer Life!





**Tech Tip** 

and 80+.

Use 3M<sup>™</sup> Disc Pad Face Plates – Red Ribbed to optimize product life of Cubitron II Fibre Discs – grades 36+, 60+



With the 982C, you get a disc that cuts faster, lasts longer and requires less grinding pressure than conventional abrasives. Without increasing the grinding force you currently use, you'll get longer life and more parts with a Cubitron II fibre disc. Ideal for applications including weld grinding, beveling, flame-cut edge cleanup and deburring.

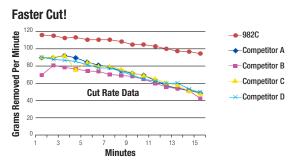
### **Optimized for:**

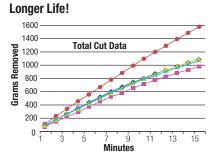
· Carbon steel

3M™ Cubitron™ II Fibre Disc 982C

\*Quick Change Attachments. Other sizes available upon request.

Diameter	Grade	UPC (051141-)	Max RPM	Min./Case	
	36+	27400-3			
4 <sup>1</sup> /2" × <sup>7</sup> /8"	60+	27631-1	13,300	25/100	
	80+	27635-9			
	36+	27425-6			
4 <sup>1</sup> /2" x TN*	60+	27639-7	13,300	25/100	
	80+	27642-7			
	36+	27401-0			
5" x <sup>7</sup> /8"	60+	27632-8	12,000	25/100	
	80+	27636-6			
	36+	27404-1		25/100	
5" x TN*	60+	27640-3	12,000		
	80+	27643-4			
5" x GL*	36+	27406-5	12,000	25/100	
	36+	27402-7		25/100	
7" x <sup>7</sup> /8"	60+	27633-5	8,600		
	80+	27637-3			
	36+	27405-8			
7" x TN*	60+	27641-0	8,600	25/100	
	80+	27644-1			
7" x GL*	36+	27407-2	8,600	25/100	
	36+	27403-4			
9 <sup>1</sup> /8" x <sup>7</sup> /8"	60+	27634-2	6,600	25/100	
	80+	27638-0			





# **3M<sup>™</sup> Cubitron<sup>™</sup> II Roloc<sup>™</sup> Fibre Discs**

Now you can enjoy the power and performance of Cubitron II abrasives — with the convenience and time savings of the 3M™ Roloc™ Quick Change Attachment System. Discs screw securely into the threaded mandrel without tools. Ideal for applications requiring frequent grade or disc size changes.



### **3M<sup>™</sup> Cubitron<sup>™</sup> II Roloc<sup>™</sup> Fibre Discs 982C**

Cubitron II technology requires less grinding pressure than conventional abrasives — so you can remove more material with less "push." Rigid fibre backing is tough and durable, enabling faster, more aggressive cuts.

### **Optimized for:**

· Carbon steel

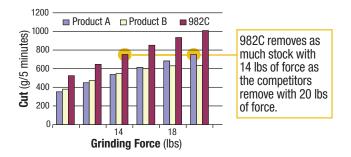
### 3M™ Cubitron™ II Roloc™ Fibre Discs 982C

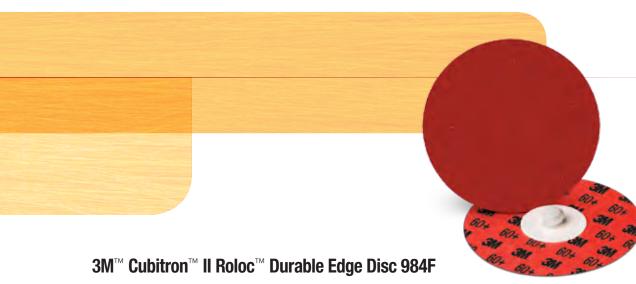
Diameter	Grade	Attachment Type  TR-Plastic Button TSM-Metal Button	UPC (051115-)	Max. RPM	Min/Case
	36+	TR	66778-7		
	30+	TSM	66781-7		
2"	60+	TR	66783-1	25,000	50/500
2	00+	TSM	66786-2	25,000	30/300
	80+	TR	66788-6		
	00+	TSM	66791-6		
	26.	TR	66779-4	00.000	
	36+	TSM	66782-4		
3"		TR	66784-8		F0/000
3	60+	TSM	66787-9	20,000	50/200
	80+	TR	66789-3		
	00+	TSM	66792-3		
	36+	TR	66780-0		
4"	4" 60+ 80+	TR	66785-5	12,000	25/100
		TR	66790-9		

### Did you know...?

While edges on the workpiece may cause premature edge wear on other discs, they can actually help precision-shaped grains fracture and extend the life of a Cubitron II Roloc Fibre Disc.

### **Grinding Force**





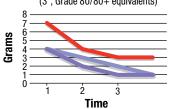
Featuring durable edge backing – for longer edge retention. With the 984F disc, these edges actually help the precision-shaped grains fracture, extending disc life. Features a flexible, durable cloth backing that stands up to aggressive grinding applications.

### 3M™ Cubitron™ II Roloc™ Durable Edge Disc 984F

. • • • • • • • • • • • • • • • • • • •		2414510 24g0 2100 00 11			
Size	Grade	Attachment Type  TR-Plastic Button  TSM-Metal Button	UPC (051141-)	Max. RPM	Discs/Box
	36+	TR	27700-4		
	30+	TSM	27704-2		
1 <sup>1</sup> /2"	00	TR	27708-0	00.000	50/200
1 1/2	60+	TSM	27712-7	30,000	50/200
	80+	TR	27716-5		
	00+	TSM	27720-2		
	36+	TR	27701-1		
	30+	TSM	27705-9	25,000	50/200
2"	60+	TR	27709-7		
2	00+	TSM	27713-4		
	80+	TR	27717-2		
	00+	TSM	27721-9		
	36+	TR	27702-8		
	30+	TSM	27706-6		
3"	60+	TR	27710-3	20,000	50/200
3	00+	TSM	27714-1	20,000	30/200
	80+	TR	27718-9		
	00+	TSM	27722-6		
	26.	TR	27703-5		
	36+	TSM	27707-3	12,000	
411	60.	TR	27711-0		05/100
4"	60+	TSM	27715-8		25/100
	00.	TR	27719-6		
	+08	TSM	27723-3		

**Faster Cut!** 

# Weld Removal Cubitron II Roloc 984F vs. Conventional Ceramic (3", Grade 80/80+ equivalents)



- 3M<sup>™</sup> Cubitron II<sup>™</sup> Roloc<sup>™</sup> Durable Edge Disc 984F
- Competitor A Ceramic Quick Change Discs, 80 Grade 3"
- Competitor B Ceramic Quick Change Discs, 80 Grade 3"

### **Optimized for:**

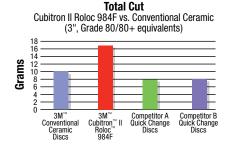
- Stainless steel
- · High nickel alloys
- Superalloys
- · Carbon steel

### **Tips for Best Results**

For best results use Roloc™ Discs with 3M™ Power Tools. You'll maximize the benefits of 3M precision-shaped grains by using 3M Tools with the ideal horsepower and operating speeds.

3M Disc Sanders HP	Recommended Operating Speed	Material Type
1.5"/.5HP	20,000	Stainless Steel
2.0"/.5HP	20,000	Carbon Steel/ Aluminum
2.0"/1.0HP	15,000	Stainless Steel
3.0"/1.0HP	15,000	Carbon Steel/ Aluminum

### Longer Life!



## **Tools and Accessories**

Everything you'll need for your toughest grinding applications on carbon or stainless steel in grades 36+, 60+ and 80+. Join the 3M™ Cubitron™ II abrasive revolution and take your productivity to the next level!

### **Recommended Tools**

### 3M™ Disc Sanders

		Model No.	Tool Dia. inch (mm)	Motor HP (W)	Max RPM	Length inch (mm)	Height inch (mm)	Air Inlet Thread	UPC (051141-)
_	X	28328	0 (E1)	.3	12,000	5.91	2.5		20238-9
A		28341	2 (51)	(224)	20,000	(150.2)	(63.5)	1/4 NPT	28341-8
-	X	28329	2 (51)	5 (272)	12,000	6.75	2.75	1/4 NPT	20239-6
		20231	2 (51)	.5 (372)	20,000	(171.5)	(69.9)		20231-0
-		20232	3(76)	1 (744)	15,000	8.25 (209.6)	3.25 (82.6)	1⁄4 NPT	20232-7
d		28408	4-5 (100-127)	1 (744)	12,000	8.25 (209.6)	4.23 (107.4)	<sup>3</sup> ∕8 NPT*	28408-8
		28622	4-5 (100-127)	1 (744)	12,000	11.5 (292)	4.70 (119)	<sup>3</sup> ∕8 NPT*	28622-8

\*Includes 3/8" to 1/4" reducer.

# **Accessories for Fibre Discs**

### 3M™ Disc Pad Face Plates

	<b>Diameter</b> inch	Face Type	Hardness	UPC (051115-)	Max RPM	Min/Case
	4 1/2	Smooth	Hard-Black	14270-5	13,300	1/10
	4 72	Ribbed	Extra Hard-Red	28443-9	13,300	
	5 7	5 Ribbed	Hard-Black	81733-7	12,000 - 8,600	
R of the			Extra Hard-Red	81732-0		
		Ribbed	Hard-Black	80515-0		
			Extra Hard-Red	80514-3		
	0	Dikkad	Hard-Black	81729-0	0.000	
	9	Ribbed	Extra Hard-Red	81728-3	6,600	

### 3M<sup>™</sup> Disc Retainer Nuts

ACTION.	<b>Depth</b> inch	Description	UPC (051115-)	Min/Case
10000	3/8	Long tool shaft lengths	05622-4	
600	1/2	Medium tool shaft lengths	05621-7	1/10
	5/8	Short tool shaft lengths	05620-0	

### 3M™ Disc Pad Hub

	<b>Diameter</b> inch	Description	UPC (051115-)	Min/Case	
LOB.	2 1/2	Use with all size face plates	45205-7		
0	4 1/2	Use with 7" and 9" face plates only	45190-6	1/10	
	2 1/2	Use with all size face plates, tool shaft length 1/2" or less	88743-9		

### **3M<sup>™</sup> Roloc<sup>™</sup> Disc Pads**

	Disc Pad Size inch	Hardness	TR UPC (051144-)	TSM UPC (051144-)	Max RPM	
0	1 1/2	Hard	45100-5	77728-0	30,000	
	2	Hard	45096-1	14212-5	25,000	
	3	Hard	45091-6	14216-3	18,000	
	4	Hard	83489-1	28578-8	12,000	

### 3M™ Disc Pad Hub For Short Shaft Tool

<b>Diameter</b> inch	Description	Thread	UPC (051115-)	Min/Case	
2 ½	Can be used with all face plates (4 1/2-9"). External thread compatible with 3M retainer nuts or TN Fibre Discs	3/8"-24 internal 5/8"-11 external	28442-2	1/10	

Warranty, Limited Remedy, and Disclaimer: 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. User is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

