

for Metalworking.



Field Guide

Featuring the Lucky 7 Portfolio

# **GENERAL GUIDELINES**

## Which portfolio is best for your customer?

Choose 3M™ Cubitron™ II Abrasives for their legendary speed and long life, or Advanced Series discs and wheels for value-priced performance. Scotch-Brite™ Abrasives deliver consistent, reproducible results, making it easy to ensure quality finishes.

What's most important?	Choose this family of 3M Abrasives
Speed and long life – to improve productivity and lower <u>overall</u> production costs	Premium Series – 3M™ Cubitron™ II Abrasives
Consistency and ease of use – to improve surfaces without significantly changing the workpiece	Premium Series – Scotch-Brite <sup>™</sup> Abrasives
Value-priced performance – to minimise abrasive spend while getting the job done efficiently	Advanced Series – 3M™ Abrasives

# Which right angle product is best for your customer?

These general guidelines are a good starting point. Refer to the rest of the field guide for recommended products in specific applications.

What's most important?	Choose this type of abrasive product
Speed	Fibre Discs
Life	Depressed Centre Grinding Wheels
Ease of Use	Flap Discs

Meet the

# **PREMIUM SERIES**

of right angle abrasives for unparalleled power and performance!



Featuring 3M<sup>™</sup> Cubitron<sup>™</sup> II Abrasives for an unbeatable combination of speed and long life, and Scotch-Brite<sup>™</sup> Abrasives for ease of use and consistent quality finishes.

Introducing the

# **ADVANCED SERIES**

of right angle abrasives designed for value-priced performance!





The next-best thing to our Premium Series of 3M<sup>™</sup> Cubitron<sup>™</sup> II Abrasives, our new Advanced Series harnesses the power of 3M Precision-Shaped Grain and helps minimise your abrasive spend.

# Key Application: Weld Grinding

Lead with:

#### **Fibre Discs**

Use when speed is key due to 3M Precision Shaped Grain mineral – also provides reduced dust and noise than in traditional depressed centre grinding discs.

### Flap Discs

Not as fast as fibre discs, but more user-friendly. Delivers a finer finish, with less chance of gouging.

# Depressed Centre Grinding Wheels

For heavy-duty weld grinding and other heavy grinding operations. Very long lasting.

## **PREMIUM SERIES**

#### **TOP PERFORMANCE**



3M<sup>™</sup> Cubitron<sup>™</sup> II Fibre Discs 982C/987C



3M<sup>™</sup> Cubitron<sup>™</sup> II Flap Discs



3M<sup>™</sup> Cubitron<sup>™</sup> II Depressed Centre Grinding Wheels

## **ADVANCED SERIES**

#### **VALUE-PRICED PERFORMANCE**



3M<sup>™</sup> Fibre Discs 782C/787C



3M<sup>™</sup> Flap Discs 769F



3M<sup>™</sup> Silver Depressed Centre Grinding Wheels

# Key Application: Blending



Lead with:

#### Flap Discs

Produce a fine finish, for blending and refining. User friendly. For an even finer finish, try Scotch-Brite™ Light Grinding & Blending Discs.

# **Light Grinding & Blending Discs**

Ideal for refining grind marks and removing imperfections. Leaves a smooth, paintable finish.

#### **Fibre Discs**

Faster cutting, but may be trickier for inexperienced operators to control. Use grades 80+ and 120+ for blending.

## **PREMIUM SERIES**

#### **TOP PERFORMANCE**



3M™ Cubitron™ II Flap Discs



Scotch-Brite<sup>™</sup> Light Grinding & Blending Discs



3M<sup>™</sup> Cubitron<sup>™</sup> II Fibre Discs 982C/987C

## **ADVANCED SERIES**

#### **VALUE-PRICED PERFORMANCE**



3M<sup>™</sup> Flap Discs 769F



3M<sup>™</sup> Fibre Discs 782C/787C

# Key Application: Finishing/Surface Prep

Lead with:

# Light Grinding & Blending Discs

Ideal for refining grind marks and removing imperfections. Leaves a smooth, paintable finish.

### Flap Discs

For finish/scratch refinement, deburring and paint prep applications that require a more aggressive cut.

#### **Clean & Strip Discs**

For cleaning and polishing stainless steel welds, removing weld burn discoloration, and cleaning/prepping mild steel prior to paint.

### **PREMIUM SERIES**

**TOP PERFORMANCE** 



Scotch-Brite<sup>™</sup> Light Grinding & Blending Discs



3M<sup>™</sup> Cubitron<sup>™</sup> II Flap Discs



Scotch-Brite<sup>™</sup> Clean & Strip XT Pro Discs

## **ADVANCED SERIES**

**VALUE-PRICED PERFORMANCE** 

#### **TIP 4:**

For highest productivity, choose 3M™ Cubitron™ II Flap Discs 967A for medium-duty or 969F for heavy-duty work.

3M<sup>™</sup> Flap Discs 769F offer a value-priced alternative for great performance across a variety of mediumto heavy-duty applications.



3M<sup>™</sup> Flap Discs 769F

# Key Application: Cutting

Lead with:

#### **Cut-Off Wheels**

Fast, smooth cutting with exceptional life. Slices through all metals, including stainless, mild steel and aerospace alloys.



For especially heavy cutting. Designed to be used as both a DCGW and a cut-off wheel for outstanding versatility.

## **PREMIUM SERIES**

**TOP PERFORMANCE** 



3M<sup>™</sup> Cubitron<sup>™</sup> II Cut-Off Wheels



3M<sup>™</sup> Cubitron<sup>™</sup> II Cut & Grind Wheels

## **ADVANCED SERIES**

**VALUE-PRICED PERFORMANCE** 



3M<sup>™</sup> Type 41 Wheel

#### **TIP 5:**

Cut-off wheels perform better the faster they run, so having a tool able to maintain speed is crucial.

**WARNING:** Do not exceed the specified maximum RPM.



3M<sup>™</sup> Silver Cut & Grind Wheels

Available Q1 2020

# Key Application: **Beveling**

Lead with:

# Depressed Centre Grinding Wheels

For heavy grinding and aggressive applications when abrasive life is critical.

### **Flap Discs**

Not as fast as fibre discs, but more user-friendly. Delivers a finer finish, with less chance of gouging.

#### **Fibre Discs**

The fastest way to achieve a bevel. Use 982C or 782C for carbon steel, 987C or 787C for stainless steel and other heat sensitive metals.

### **PREMIUM SERIES**

#### **TOP PERFORMANCE**



3M<sup>™</sup> Cubitron<sup>™</sup> II Depressed Centre Grinding Wheels



3M<sup>™</sup> Cubitron<sup>™</sup> II Flap Discs



3M<sup>™</sup> Cubitron<sup>™</sup> II Fibre Discs 982C/987C

## **ADVANCED SERIES**

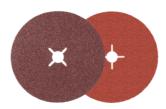
#### **VALUE-PRICED PERFORMANCE**



3M<sup>™</sup> Silver Depressed Centre Grinding Wheels



3M<sup>™</sup> Flap Discs 769F



3M<sup>™</sup> Fibre Discs 782C/787C **Key Application:** 

# Heavy Deburring, Weld Spatter Removal

Lead with:

# Depressed Centre Grinding Wheels

For heavy-duty jobs and large burrs that will shred most coated abrasive products.

### **Flap Discs**

When removing an occasional large burr, flap discs will handle the job, without the necessity of changing discs.

#### **Fibre Discs**

Fastest cutting on smoother surfaces.

### **PREMIUM SERIES**

#### **TOP PERFORMANCE**



3M<sup>™</sup> Cubitron<sup>™</sup> II Depressed Centre Grinding Wheels



3M<sup>™</sup> Cubitron<sup>™</sup> II Flap Discs



3M<sup>™</sup> Cubitron<sup>™</sup> II Fibre Discs 982C/987C

## **ADVANCED SERIES**

#### **VALUE-PRICED PERFORMANCE**



3M<sup>™</sup> Silver Depressed Centre Grinding Wheels



3M<sup>™</sup> Flap Discs 769F



3M<sup>™</sup> Fibre Discs 782C/787C

# Key Application: Weld Prep



Lead with:

#### **Clean & Strip Discs**

Remove epoxy, protective paint, mill scale, oils, rust, oxide coatings and primers/paints to clean and prepare the surface for welding.

#### Flap Discs

For more aggressive rust, paint and scale removal, or when material removal/dimensioning is necessary.

# Light Grinding & Blending Discs

For light-duty scale removal and surface prep where a finer finish is desired.

### **PREMIUM SERIES**

**TOP PERFORMANCE** 



Scotch-Brite<sup>™</sup> Clean & Strip XT Pro Extra Cut Discs



3M™ Cubitron™ II Flap Discs



Scotch-Brite<sup>™</sup> Light Grinding & Blending Discs

### **ADVANCED SERIES**

**VALUE-PRICED PERFORMANCE** 

#### **TIP 1:**

Scotch-Brite™ Light Grinding and Blending Discs achieve a high cut-rate in mild-steel applications, to effectively blend and refine a grade 36 scratch or finer.



3M<sup>™</sup> Flap Discs 769F

#### **TIP 2:**

Flap Discs will often produce a finish equivalent to the next-finer grade of a fibre disc (i.e., a 60-grit flap disc will usually leave a finish similar to an 80-grit fibre disc) – saving you time and finishing steps!

### **Key Application:**

# **General Grinding**

Lead with:

#### **Belts**

For durable, fast and more consistent cut.

- Minimise operator fatigue as 3M Precision Shaped Grain requires less grinding pressure
- Cool running temperature reduces risk of discolouration and heat related stress crack
- 3M Precision Shaped Grain fractures into self-sharpening points, cutting exceptionally fast and increasing productivity
- Belt life is increased, meaning more parts per belt for less belt changes

### **PREMIUM SERIES**

**TOP PERFORMANCE** 



3M<sup>™</sup> Cubitron<sup>™</sup> II Belts 984F

# **ADVANCED SERIES**

**VALUE-PRICED PERFORMANCE** 



3M<sup>™</sup> Belts 784F

#### **TIP 3:**

When working on heat sensitive alloys like stainless steel, nickel alloys and cobalt alloys, choose a product with a grinding aid. Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 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, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 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.

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