



















Advanced
Metalworking
with 3M support

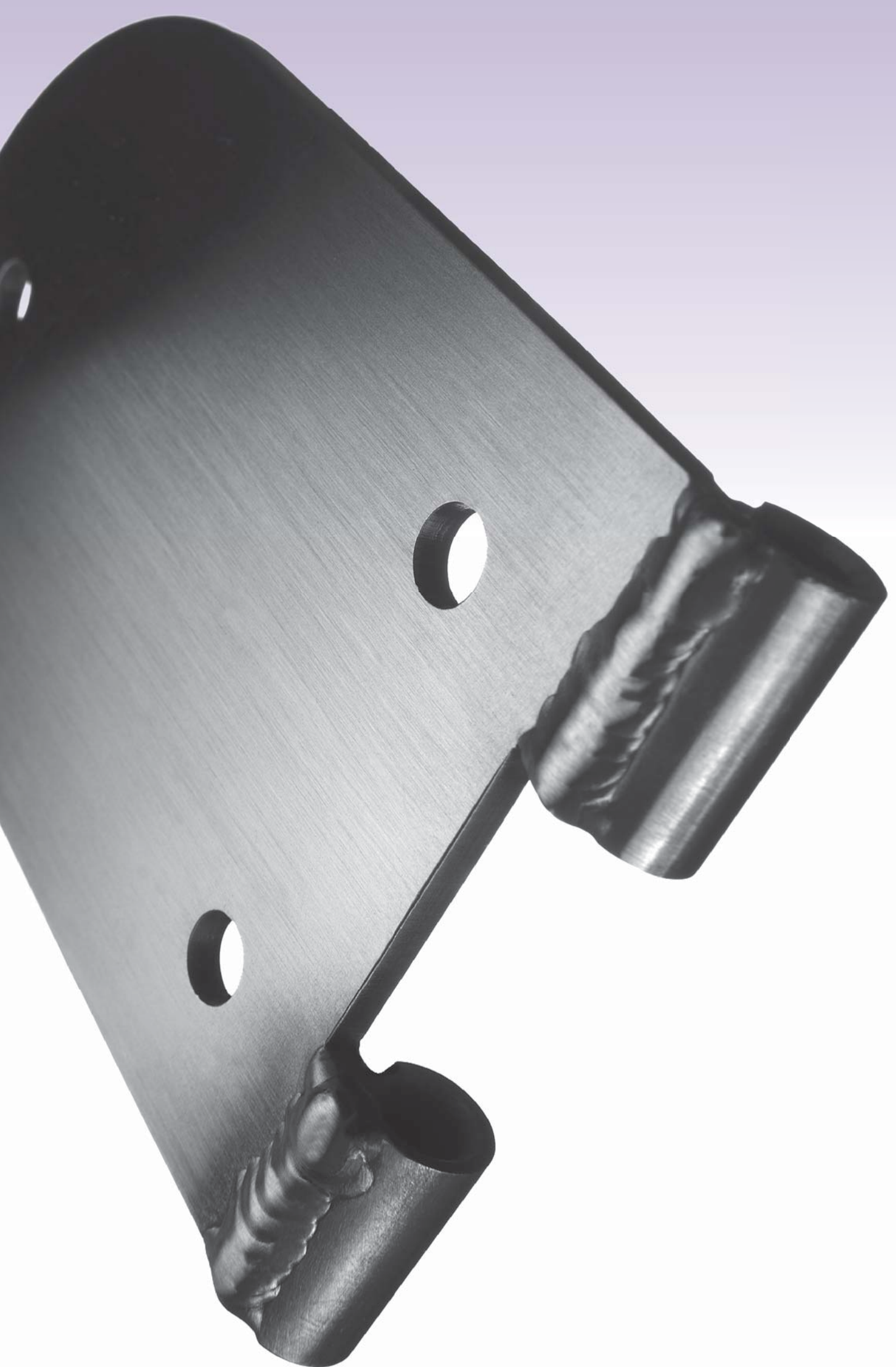
Product symbols

 SS	Stainless Steel	 GA	Grinding Aid
 MS	Mild Steel	 H	High Pressure
 AL	Aluminium	 M	Medium Pressure
 AZ	Alumina Zirconia	 L	Low Pressure
 AO	Aluminium Oxide	 TIG	TIG Weld
 CU	3M™ Cubitron™ Mineral	 MIG	MIG Weld
 SiC	Silicon Carbide	 H&S	Health and Safety Solution
 3M Best Performer ✓	3M's recommendation for best performance under optimum conditions where value can be measured		

Safety Icons

-  Respiratory protection suggested
-  Eye protection suggested
-  Ear protection suggested
-  Protective clothing suggested
-  Extra level of eye protection suggested





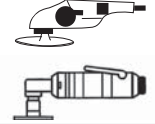
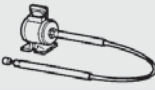


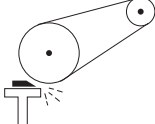
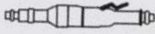


Weld Grinding and Stock Removal



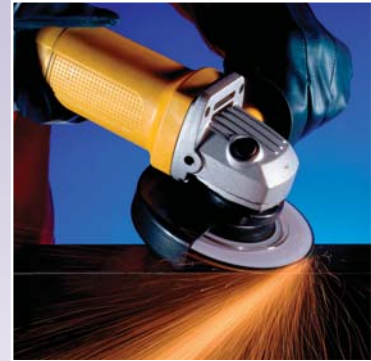
Solutions for stock removal applications such as:

- Weld preparation/bevelling
- Weld removal
- Deflashing
- Edge grinding of flame cut parts
- Dimensioning

Page No.	Abrasive System	Products
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33	 Fibre disc angle grinder	3M Fibre Disc 985C 3M Fibre Discs 501C/581C Scotch-Brite™ Surface Conditioning Disc SC-DB (Super Duty) Accessories
34	 Right angled die grinder / mini Roloc grinder	3M Roloc™ Discs 785C/777F Roloc Surface Conditioning Disc SC-DR (Super Duty) Accessories
35	 Portable flexible shaft machine with belt head	3M Cubitron™ Belt 977F 3M Cubitron Belt 947D
36	 File belt tool	3M Cubitron Belt 777F 3M Cubitron Belt 947D
37	 Stroke sanders / overhead belt machine	3M Cubitron Belt 777F 3M Cubitron Belt 947D 3M Trizact™ CF Belt 337DC
38	 Backstand / linisher	3M Cubitron Belt 977F 3M Cloth Belt 577F Orange
39	 Straight grinder with pneumatic wheel	3M Cubitron Belt 947D

Depressed centre disc angle grinder

- Portable and versatile tool ideal for fabrication shops
- No back-up pads required: abrasive discs are secured directly onto the tool
- Ideal for high stock removal



3M™ Green Corps™ Flexible Grinding Disc



- 3M Cubitron™ Mineral works harder than regular minerals, giving a higher cut rate when compared to standard grinding discs and thereby increasing the efficiency of the application
- Flexible construction of the product used in conjunction with the backing plate means less vibration and noise than a conventional grinding disc
- The ease of use, lower vibration levels and reduced chatter resulting from the flexibility of the disc means it produces a better finish which is more easily blended



3M GCFGD	P36
100mm x 3mm x 16mm	60105
115mm x 3mm x 22mm	60630
125mm x 3mm x 22mm	60634
180mm x 3mm x 22mm	A60638

3M Best Performer ✓

3M Flap Disc 574F



- High performance Alumina Zirconia flap disc
- Good cut rate for medium duty applications



3M 574F	P40	P60
100mm x 16mm flat	61547	61548
115mm x 22mm flat	61550	61551
180mm x 22mm flat	61559	61560
100mm x 16mm conical	61562	61563
115mm x 22mm conical	61565	61566
180mm x 22mm conical	61574	61575

Fibre disc angle grinder

- Portable and versatile tool ideal for fabrication shops
- Back-up pad required to support the disc
- Ideal for all weld grinding applications. Produces a better blended finish than a rigid disc system



Top tip

To obtain maximum cut rate and life from the 3M™ 985C Cubitron™ Mineral based disc, use the 3M High Performance Ribbed Back-Up Pad. The benefits of this system can be proven by using the 3M Cost Calculator Tool. See your local 3M representative for further details.



3M™ Fibre Disc 985C



- Premium blended 3M Cubitron Mineral fibre disc for superior cut rate (reduces trigger time) and life in high pressure applications where value can be measured
- The combination of 3M's grinding aid and toughest Cubitron Mineral gives a cool cut, minimising the risk of heat discolouration

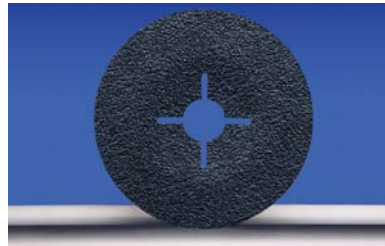


3M 985C	P24	P36	P50	P60
100mm x 16mm	N/A	61334	61335	61336
115mm x 22mm	61340	61341	61342	61343
125mm x 22mm	61347	61348	61349	61350
180mm x 22mm	61354	61355	61356	61357

3M Best Performer ✓

3M High Performance Ribbed Back-Up Pad	
115mm x M14 - 2.0	09583
127mm x M14 - 2.0	09584
178mm x 5/8" Whit / M14 - 2.0	09921

3M Fibre Discs 501C/581C



- For use with softer back-up pads in medium pressure applications where blending is required
- 3M 501C is suited to most medium pressure applications where value can be measured
- 3M 581C is suited to general purpose applications where it is difficult to assess value and an economical disc is required



3M 501C	P24	P36	P50	P60
100mm x 16mm	A60496	A60497	A60498	A60499
115mm x 22mm	A60503	A60504	A60505	A60506
125mm x 22mm	A60510	A60511	A60512	A60513
178mm x 22mm	A60517	A60518	A60519	A60520

3M 581C	P24	P36	P50	P60
100mm x 16mm	61740	61741	61742	61743
115mm x 22mm	61747	61748	61749	61750
125mm x 22mm	61754	61755	61756	61757
178mm x 22mm	61761	61762	61763	61764

Scotch-Brite™ Surface Conditioning Disc (fibre backed)



- The addition of Super Duty grade with a tougher web construction and higher mineral content means an increased level of stock removal and longer life than standard surface conditioning products
- Removes TIG weld and refines at the same time to reduce processing steps (trigger time)
- Reduced risk of gouging or undercutting, meaning less re-work and a quality finish first time



Scotch-Brite Surface Conditioning Discs - fibre backed	SC-DB Super Duty
100mm x 16mm	61948
115mm x 22mm	61947
180mm x 22mm	61945

Mini grinder system Right-angled die grinder

- Versatile system for all applications, particularly detail work
- Use of the 3M™ Roloc™ Back-Up Pad provides positive fixing with rapid grade or product change, allowing you to tackle any grinding application
- 3M Roloc system allows greater access to workpiece compared to conventional disc attachments

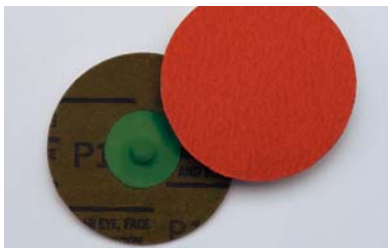


Top tip

Use the Extra Hard (Rubber Roloc) Back-Up Pad for more aggressive grinding and the Hard Back-Up Pad where flexibility and blending are more important.



3M Roloc Abrasive Discs – 785C/777F



- These 3M Cubitron™ Mineral discs, incorporating the Roloc quick change system, give excellent cut and grinding results on all metals
- Use a 3M 785C fibre-backed disc for heavier duty grinding applications and a 3M 777F cloth backed disc for lighter duty work where flexibility is required
- Small sized discs confine the area of grinding to a minimum to reduce the amount of blending required in subsequent process steps



3M 785C	P36 (brown)	P50 (green)	P60 (orange)
75mm dia	85883	85884	85885



3M 777F	P36 (brown)	P50 (green)	P60 (orange)
75mm dia	76631	76632	76633
50mm dia	76629	76630	76433

3M Best Performer ✓

Roloc Surface Conditioning Disc



- The addition of Super Duty grade with a tougher web construction and higher mineral content means an increased level of stock removal and longer life than standard surface conditioning products
- Removes TIG weld and refines at the same time to reduce processing steps (trigger time)
- Confines the grinding area to a minimum and reduces the risk of gouging or undercutting, meaning less re-work and a quality finish first time



SC-DR	Super Duty
75mm dia	33796
50mm dia	33797

3M Roloc Back-Up Pads



- Rubber back-up pads offer greater flexibility, and are available with 6mm shaft and female thread options
- Plastic back-up pads are for use where flexibility is not required, available with 6mm shaft only

Roloc Rubber Back-Up Pad	Extra hard density	Hard density
75mm x M14 - 2.0	84993	84998
75mm x M10 - 1.5	N/A	85000
75mm x 1/4" thread*	45093	45091
50mm x 1/4" thread*	45097	A45096
6mm shaft, (*use with)	82455	82455

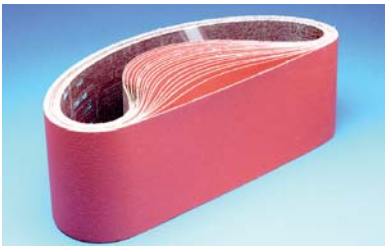
Roloc Plastic Back-Up Pad	Plastic
No. 4. 75mm dia, 6mm shaft	09988
No. 3. 50mm dia, 6mm shaft	09987

Portable flexible shaft machine

- Ideal tool for grinding metal fabricated parts with large accessible areas
- Brings the power of a large motor to the job in the form of a lightweight detachable belt head
- A choice of different contact wheels and belt speeds means the level of aggression can be adapted to suit any grinding application whilst maintaining a linear scratch



3M Cubitron™ Belt 977F



- 3M Cubitron Mineral gives this belt the aggression needed for performance in heavy grinding applications
- Stiffer Y-weight backing gives extra support in tougher grinding applications



3M 977F	P36	P40	P60
50mm x 450mm	238250	239609	-

3M Best Performer ✓

3M Cubitron™ Belt 947D



- Cubitron Mineral gives this belt the aggression needed for performance in medium grinding applications
- Tough X-weight cloth backing for good conformability and strength



3M 947D	P60	P80
50mm x 450mm	430563	430561

Where no part number is shown, please call the Customer Services Team for availability on 0161 237 6390.

File belt tool

- Lightweight, hand-held tool with ergonomic offset design
- Increases the capability to access hard-to-reach areas through a comprehensive range of contact arms
- Quick belt change feature

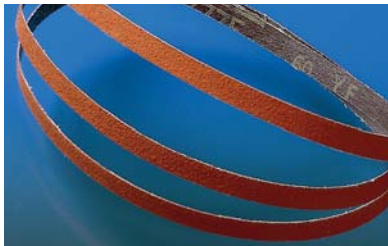


Top tip

This is the ideal tool for fillet weld removal.



3M™ Cubitron Belt 777F



- 3M Cubitron Mineral gives the belt the aggression required for performance in grinding applications
- Stiff Y-weight backing gives extra support in tougher grinding applications



3M 777F	P40	P60
13mm x 305mm	A65109	65111
13mm x 457mm	65141	65143
20mm x 457mm	65149	65151
13mm x 533mm	350344	65191
13mm x 610mm	65213	65215

3M Best Performer ✓

3M Cubitron Belts 947D



- 3M Cubitron Mineral gives this belt the aggression needed for performance in grinding applications
- Tough X-weight cloth backing for good conformability and strength



3M 947D	P60	P80
13mm x 305mm	438484	438483
13mm x 457mm	111511	418218
20mm x 457mm	101604	365547
13mm x 533mm	431438	423522
13mm x 610mm	434002	392931

Stroke sander Overhead belt machine

- For weld removal on most flat and box section parts
- Ideal for semi-automation of medium size production parts
- Removes the weld to leave a linear scratch, making subsequent refinement easier, especially on stainless steel



3M™ Cubitron™ Belts 977F



- Premium product with high Cubitron Mineral content for maximum efficiency, making it suitable for all heavy duty grinding applications
- Stiff Y-weight backing for extra support in tougher grinding applications



3M 977F	P36	P50	P60
100mm x 4000mm	-	-	-
150mm x 6000mm	462692	429559	-
100mm x 9000mm	440128	-	449547

3M Best Performer ✓

3M Cubitron™ Belt 947D

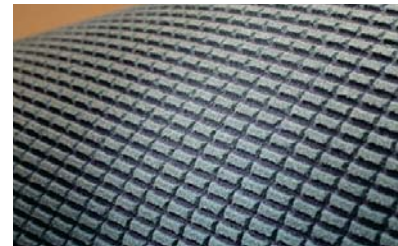


- Contains Cubitron Mineral for maximum efficiency, making this product suitable for medium grinding applications
- Tough X-weight cloth backing for better conformability compared to Y-weight for flexing over edge welds



3M 947D	P60	P80
100mm x 4000mm	462981	462979
150mm x 6000mm	-	459293
100mm x 9000mm	436778	428044

3M™ Trizact™ CF Cloth Belts 337DC



- Macro-replicated structured abrasive provides a consistent finish with exceptional life when compared to conventional abrasives
- Soft edge structure and flexible backing provides good cut rate with blending capabilities
- Capable of removing small welds and providing a finish in one complete step, thereby increasing productivity

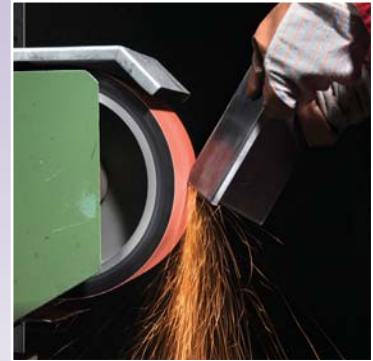


3M 337DC	A300	A160
100mm x 4000mm	429149	429147
150mm x 6000mm	-	-
100mm x 9000mm	431144	434689

Where no part number is shown, please call the Customer Services Team for availability on 0161 237 6390.

Backstand/Linisher machine

- For rapid stock removal on most small fabricated parts, leaving a linear scratch
- Ideal for high volume, complex parts where greater control is required part to belt.
- Increasing the hardness of the contact wheel improves rate of cut and maximises belt life, especially with Cubitron products



3M™ Cubitron™ Belt 977F



- Premium product with high 3M Cubitron Mineral content for maximum efficiency, suitable for all heavy duty grinding applications
- Stiff Y-weight backing for extra support in tougher grinding applications



3M 977F	P36	P50	P60
50mm x 1525mm	262360	-	219259
75mm x 2000mm	163293	238052	263134
150mm x 2000mm	207717	-	182213
100mm x 2500mm	338698	-	162500
100mm x 3450mm	300888	456725	250671

3M Best Performer ✓

3M Cloth Belt 577F Orange



- Alumina Zirconia mineral for optimum performance in general purpose grinding applications on this type of machinery
- Stiff Y-weight backing for extra support in tougher grinding applications



3M 577F Orange	P36	P60
50mm x 1525mm	447296	447297
75mm x 2000mm	444704	448724
150mm x 2000mm	346800	454634
100mm x 2500mm	449461	449594
100mm x 3450mm	444701	453110

Where no part number is shown, please call the Customer Services Team for availability on 0161 237 6390.

Straight grinder with inflatable wheel

- Typically used for grinding small TIG weld on larger parts with easily accessible areas
- Leaves a linear scratch to make subsequent refinement easier, especially on stainless steel
- Use a ribbed pneumatic wheel for more aggression or a plain wheel where a smoother finish is important



Top tip

The high cut rate of 3M™ Cubitron™ Mineral means a grade as fine as P60 can be used to remove weld, reducing the total number of process steps required.



3M Cubitron Belt 947D



- Contains Cubitron Mineral for maximum efficiency and suitability to medium duty grinding applications
- Tough X-weight cloth backing for good conformability and strength



3M 947D	P60	P80
40mm x 395mm	448515	451285
25mm x 480mm	431496	431501
50mm x 480mm	431497	431505

3M Best Performer ✓



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