



**MIRKA**

Automotive refinish

# Automotive refinish

■ **KWH Mirka Ltd** manufactures and sells coated abrasives for demanding conditions. Mirka is a specialist in flexible abrasives and abrasives that allow for dust-free surface finishing processes. The company has become a forerunner in this specialist area by placing a strong emphasis on product development. This development has been backed up by an effective production system and many decades of experience.

Mirka is the first company in its sector to obtain the three most important quality standards. We strive to guarantee reliable quality by following the ISO 9001 quality assurance system. The OHSAS 18001 occupational health and safety management system ensures a high level of work safety. The ISO 14001 environmental management system proves that we consider the environment in all our activities.

Mirka is a globally expanding company with eleven subsidiaries located in Europe, North and South America and Asia. Headquarters and production are situated in Finland. More than 90% of our products are exported and sold in more than 80 countries.

KWH Mirka Ltd is a part of the KWH Group, which also includes KWH Pipe, a manufacturer of plastic pipes; KWH Plast, a manufacturer of plastic foil; KWH Logistics, a specialist in cold storage and transports; and KWH Invest, a manufacturer of products to the heating, plumbing and packaging sector (Prevex).

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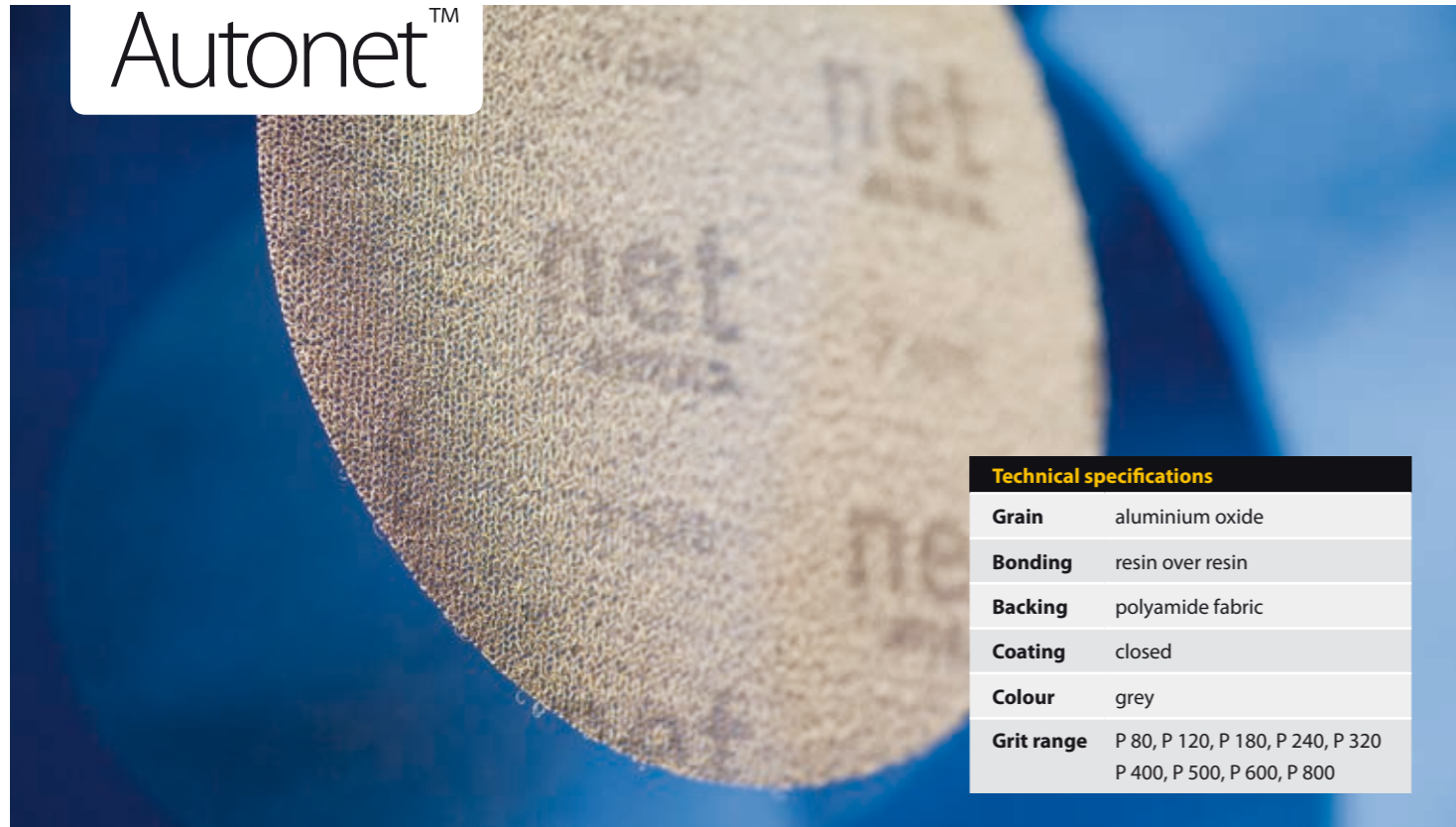
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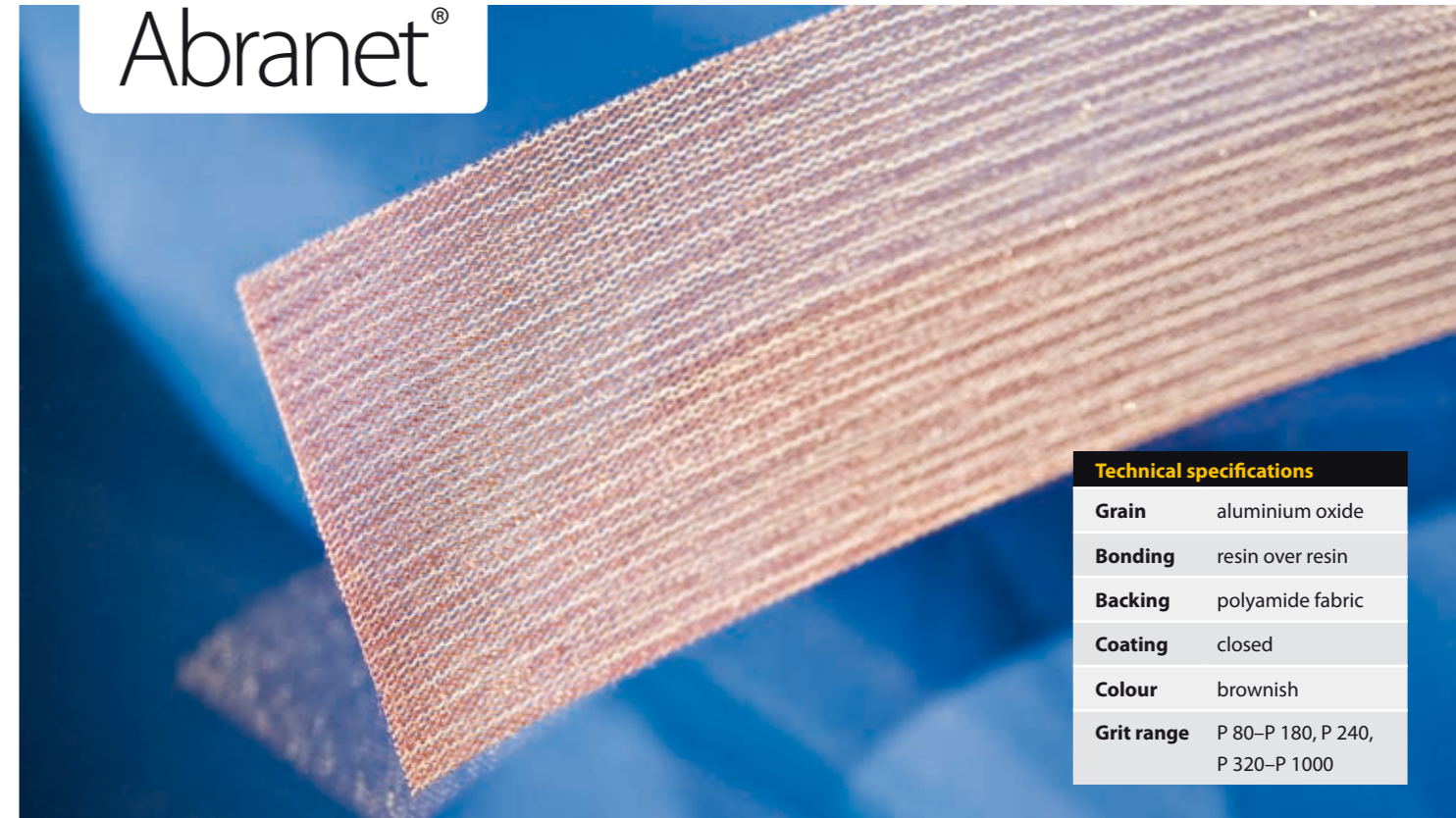
### SYMBOLS

|   |   |   |   |   |   |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
|   | Disc  | Sheet   | Roll  | Net disc  | Net strip   |

**BENEFITS.** Perfect for the automotive refinish industry, cost effective, excellent efficiency and longer lifespan compared with paper products, virtually dust-free sanding, cleaner and healthier working environment.



**BENEFITS.** Virtually dust-free sanding, cleaner and healthier working environment, greater efficiency, longer working lifespan, increased profitability.



77 mm  
125 mm  
150 mm

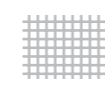


Autonet™ uses Mirka's advanced technology 'net' sanding concept and was developed with performance characteristics specifically tuned to the unique demands of the automotive refinish industry. This new-age surface finishing solution offers speed, excellent efficiency and an amazing dust extraction ability that has to be seen to be believed!

Its patented, open weave, net construction is based on the revolutionary Abranet® range and features thicker, heavier fibres coated with extra abrasive grit. This gives Autonet™ excellent initial aggressivity and reduces edge wear in finer grits.

By effectively removing dust from the sanding surface, the work environment is cleaner and healthier and clogging and pilling are virtually eliminated. That means jobs get done quicker and with a better surface quality, while also giving Autonet™ a longer working lifespan so fewer abrasives are needed per job compared with conventional paper products. Autonet™ is fully compatible with all new paint technology.

For smart operators in the automotive refinish sector Autonet™ is the ultimate high performance, dust-free solution for around the cost of traditional paper products.



70 x 125 mm  
70 x 198 mm  
70 x 420 mm  
75 x 100 mm  
81 x 133 mm  
93 x 180 mm  
115 x 230 mm



75 mm x 10 m  
93 mm x 10 m  
115 mm x 10 m  
115 mm x 25 m

Abranet® was the first product to use Mirka's innovative 'net' construction and it has revolutionised dustless sanding! Its patented structure ensures that no dust particle is more than 0.5mm from a dust extraction outlet. The result is phenomenal dust removal across the entire abrasive surface, as well as many other advantages.

Potentially dangerous sanding dust contamination in the workplace is minimised, dust clogging and pills which cause defects in the surface are eliminated and there is greater control since it's always possible to see exactly what is happening at the sanding surface.

Abranet® delivers exceptional performance with an even sanding pattern and a perfectly smooth surface, while also having a longer lifespan than traditional sanding materials. It's perfect for maximising efficiency and minimising costs when working with all kinds of materials.

No large investment is required to switch to Abranet®, if conventional vacuum systems and sanding machines are already in place. A range of Abranet® accessory tools are also available.

Today Mirka's net sanding product family is continuously being expanded with new products and accessories that meet changing market needs.



**BENEFITS.** Even preparation of contoured surfaces, cleaner and healthier working environment, greater efficiency, longer working lifespan, increased profitability.

## Abranet Soft

| Technical specifications |   |
|--------------------------|---|
| <b>Grain</b>             | aluminium oxide   |
| <b>Bonding</b>           | resin over resin  |
| <b>Backing</b>           | polyamide-net / foam  |
| <b>Coating</b>           | closed  |
| <b>Colour</b>            | maroon  |
| <b>Grit range</b>        | Disc: P 320, P 500, P 800, P 1000, P 1500, 2500<br>Pad: P 320, P 500, P 800, P 1000 |

34 mm  
77 mm  
125 mm  
150 mm

115x140 mm

■ Abranet Soft is a new type of abrasive that was created by combining Abranet® with a thin layer of foam. It was primarily developed for the efficient levelling and structuring of primers, topcoats and clearcoats, as well as paint rectification and pre-polishing, and is ideal for use on a wide range of surfaces, including gel coats.

The outstanding performance characteristics are similar to Abranet®, however the foam layer gives Abranet Soft extra flexibility that allows the abrasive to easily follow the contours of the surface. During sanding operations dust is drawn away to collect in the foam layer, helping Abranet Soft achieve a super-smooth surface finish in double quick time.

There is also the added bonus of a cleaner and healthier work environment, as well as a high resistance to clogging which means it retains its original sanding performance for much longer.

Abranet Soft is recommended to be used damp for machine sanding or it can be used wet or dry when hand sanding.



**BENEFITS.** Quickly produces a smooth consistent surface finish on both contoured and flat surfaces, fast-tracks the polish process.

## Abralon®

| Technical specifications |  |
|--------------------------|--|
| <b>Grain</b>             | silicon carbide                        |
| <b>Bonding</b>           | special resin                          |
| <b>Backing</b>           | knitted fabric on foam                 |
| <b>Coating</b>           | Abralon® method                        |
| <b>Colour</b>            | grey                                   |
| <b>Grit range</b>        | 180, 360, 500, 600<br>1000, 2000, 4000 |

77 mm  
125 mm  
150 mm

115x140 mm

■ Yet another of Mirka's patented products, Abralon® looks, feels and works like no other damp sanding abrasive. Its unique three-layer construction gives it multifunctional capabilities that actually make it suitable for both dry and damp sanding, either by machine or by hand.

The foam centre layer gives Abralon® a big advantage – flexibility. It not only allows the abrasive to easily conform to surface contours, it also means that awkward shapes and sharp edges can now be sanded without the danger of sanding through. Therefore a larger proportion of the job can be done by machine which saves considerable labour time.

With its fine abrasive quality, Abralon® was specifically developed for surface preparation and finishing prior to polishing. Used in this mode Abralon® produces an ultra-fine, consistent surface finish that is perfect for speeding up the polishing process.



**BENEFITS.** Highly versatile, fine surface finish, clog resistant, long lasting performance.

## Polarstar



| Technical specifications |                               |
|--------------------------|-------------------------------|
| <b>Grain</b>             | silicon carbide               |
| <b>Bonding</b>           | resin over resin              |
| <b>Backing</b>           | polyester film                |
| <b>Coating</b>           | semi-open                     |
| <b>Colour</b>            | green / white                 |
| <b>Grit range</b>        | P 800, P 1000, P 1200, P 1500 |



77 mm  
125 mm  
150 mm

Specifically developed to efficiently tackle the latest demanding coatings applications, Polarstar uses a special polyester film backing to create a more flexible and much smoother abrasive surface. As a result, it produces a finer, more consistent surface finish far more quickly and is the perfect tool for challenging jobs, such as the latest scratch resistant automotive clearcoats.

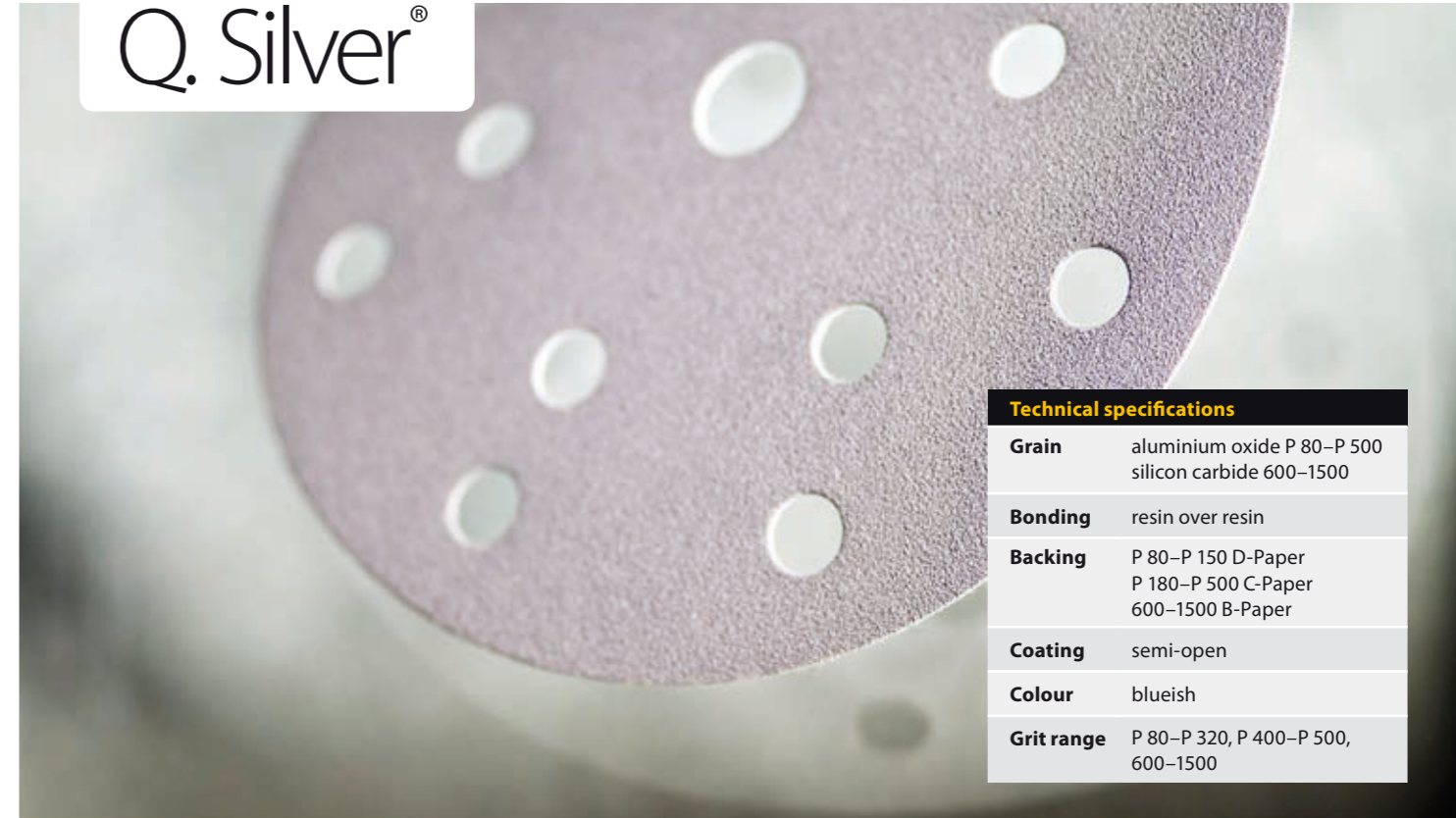
The large range of abrasive grades offers unmatched versatility. Polarstar provides outstanding performance on a wide variety of tasks, from the surface conditioning of primer fillers through to pre-polish sanding which creates a surface finish that is quicker and easier to polish. It is also just as effective in both wet and dry sanding modes.

Polarstar is highly resistant to clogging, allowing it to retain its excellent sanding properties for far longer (especially on harder applications), making it a cost effective choice. With environmental impact being of particular concern today, Polarstar has been manufactured using Mirka's unique, environmentally-friendly, solvent-free coating system.



**BENEFITS.** Fast and efficient stock removal, anti-clogging, long lasting.

## Q. Silver®



| Technical specifications |   |
|--------------------------|---|
| <b>Grain</b>             | aluminium oxide P 80–P 500<br>silicon carbide 600–1500        |
| <b>Bonding</b>           | resin over resin  |
| <b>Backing</b>           | P 80–P 150 D-Paper<br>P 180–P 500 C-Paper<br>600–1500 B-Paper |
| <b>Coating</b>           | semi-open   |
| <b>Colour</b>            | blueish   |
| <b>Grit range</b>        | P 80–P 320, P 400–P 500,<br>600–1500                          |



77 mm  
125 mm  
150 mm

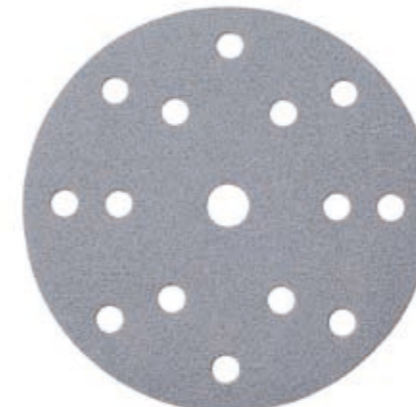


70 x 125 mm  
70 x 198 mm  
70 x 420 mm  
81 x 133 mm  
93 x 180 mm  
115 x 230 mm

Designed with optimal aggressive characteristics, Q. Silver® is the ideal abrasive for achieving fast and efficient stock removal, ensuring that it offers excellent performance on sanding tasks such as hard paint films, fillers and composites.

Q. Silver® is a fully resin bonded product consisting of a backing of flexible, strong impregnated latex paper coated with a semi-open grain coating. It also receives a special anti-clogging treatment which gives it a longer working lifespan and makes it more economical to use.

The Q. Silver® range consists of specially treated aluminium oxide grains in grits P 80–P 500 and silicon carbide grains in grits 600–1500.

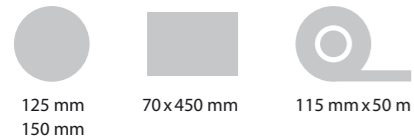


**BENEFITS.** Standard paper based abrasive, great all-rounder, increased profitability thanks to excellent price/quality equation.

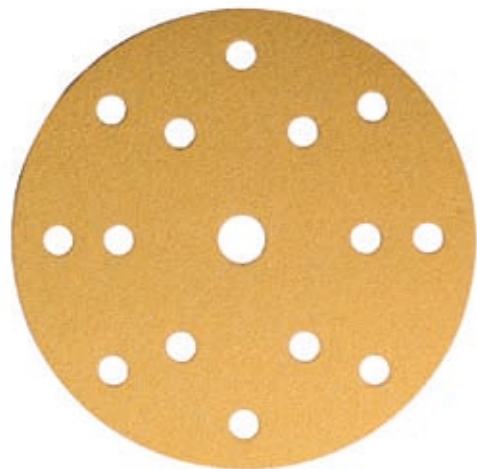
## Gold



| Technical specifications |   |
|--------------------------|---|
| <b>Grain</b>             | aluminium oxide   |
| <b>Bonding</b>           | resin over resin, Progressive Bond™                               |
| <b>Backing</b>           | P 80–P 150 D-weight latex paper, P 180–P 500 C-weight latex paper |
| <b>Coating</b>           | semi-open   |
| <b>Colour</b>            | gold  |
| <b>Grit range</b>        | P 80–P 500  |



■ As a great all-round abrasive range, Gold is an excellent choice for tackling all kinds of challenging applications within the automotive sector. It consists of a semi-open grain coating and a special top coat layer that are designed to achieve a first-class sanding result at an economical cost.

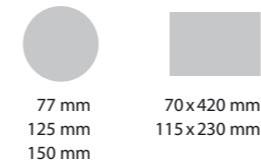


**BENEFITS.** Aggressive characteristics, flexibility, extreme edge wear resistance.

## Coarse Cut



| Technical specifications |                                     |
|--------------------------|-------------------------------------|
| <b>Grain</b>             | aluminium oxide                     |
| <b>Bonding</b>           | resin over resin, Progressive Bond™ |
| <b>Backing</b>           | special reinforced F-paper          |
| <b>Coating</b>           | semi-open                           |
| <b>Colour</b>            | maroon                              |
| <b>Grit range</b>        | P 36–P 40, P 60–P 150               |



■ Coarse Cut is an aggressive-style abrasive that is recommended for use on all kinds of coarse sanding operations, including paint removal and metal sanding. Thanks to its specially reinforced backing material and Mirka's Progressive Bond Technology™, Coarse Cut is a product which is renowned for its flexibility and high edge wear resistance.

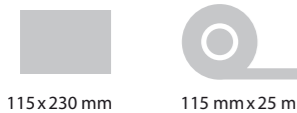


**BENEFITS.** Ideal, easy-to-use product for contoured and awkward areas.

## Goldflex-Soft



| Technical specifications |                           |
|--------------------------|---------------------------|
| <b>Grain</b>             | aluminium oxide           |
| <b>Bonding</b>           | resin over resin          |
| <b>Backing</b>           | A-paper with foam         |
| <b>Coating</b>           | semi open                 |
| <b>Colour</b>            | gold                      |
| <b>Grit range</b>        | P 150–P 320, P 400–P 1000 |



115x230 mm

115 mm x 25 m

■ Mirka developed Goldflex-Soft sheets specifically for the hand sanding of contours and irregular hard-to-reach body details. The special foam backing provides a good handgrip and an even levelling pressure which reduces the risk of sanding through the paint, while the stearate coating ensures that Goldflex-Soft is highly resistant to clogging.

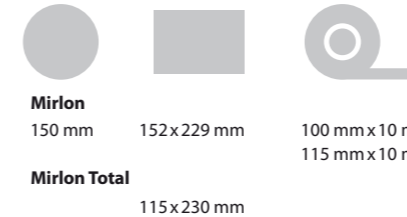


**BENEFITS.** Ideal for contoured surface conditioning, cleaning and finishing.

## Mirlon range



| Technical specifications |   |
|--------------------------|---|
| <b>Grain</b>             | aluminium oxide VF, silicon carbide UF and MF |
| <b>Bonding</b>           | resin over resin                              |
| <b>Colour</b>            | VF red, UF grey, MF beige                     |
| <b>Grit range</b>        | VF 360, UF 1500, MF 2500                      |



**Mirlon**

150 mm

152x229 mm

100 mm x 10 m

115 mm x 10 m

**Mirlon Total**

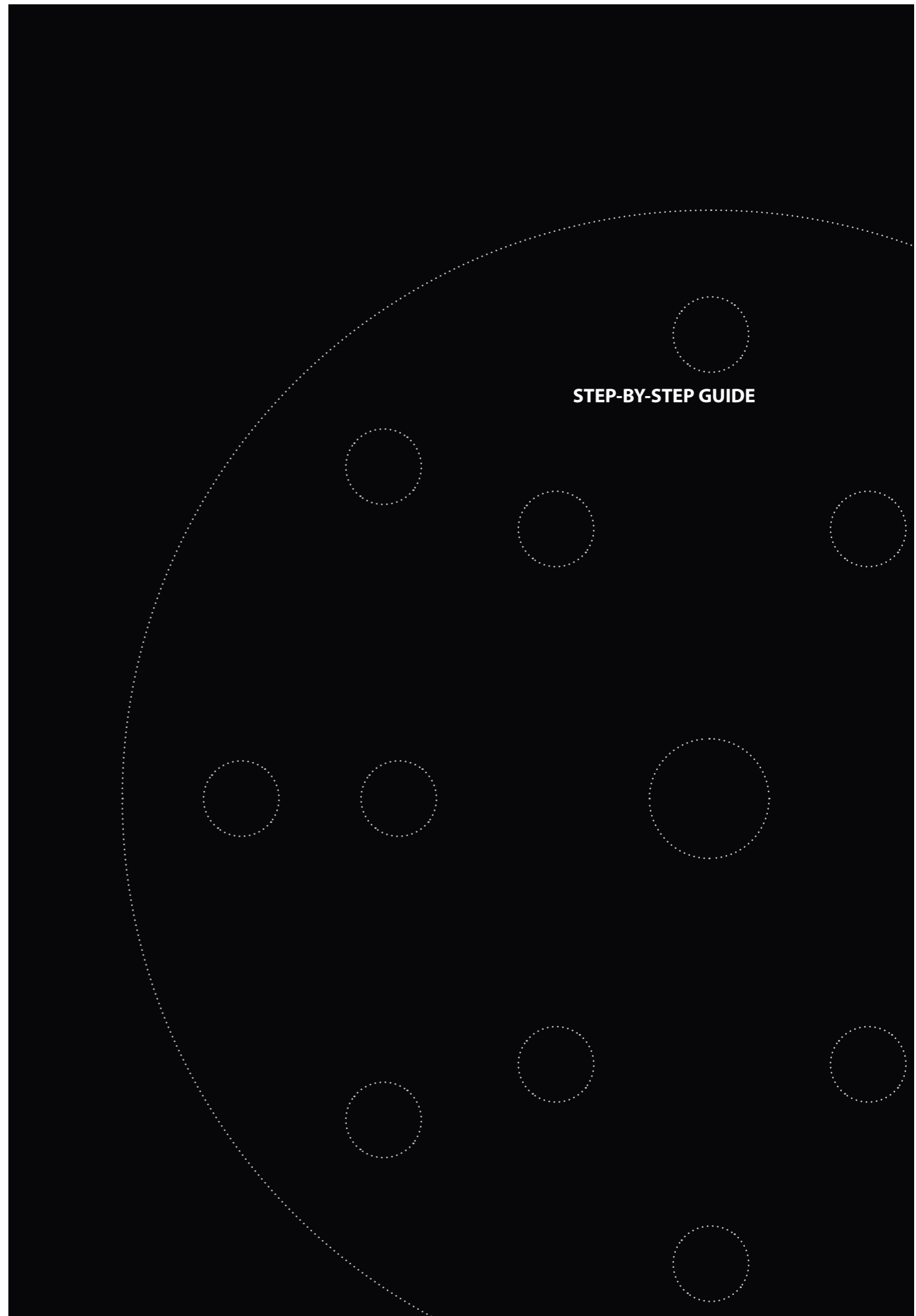
115x230 mm

■ Designed specifically for today's automotive refinish industry, Mirlon is a highly flexible, three-dimensional non-woven abrasive that produces an excellent surface finish. Due to its unique structure, Mirlon is easy to use on contoured and profiled surfaces where it creates an outstanding base for the next coating layer. It gives modern bodyshops the ability to effectively and efficiently handle the technically advanced coatings used on vehicles today.

Developed using Mirka's innovative Total Coating Technology™, Mirlon Total™ is the perfect choice when more flexibility and aggressiveness are required. The strengthened fibres make Mirlon Total™ stronger and even longer-lasting, producing a rapid result with a dense scratch pattern.

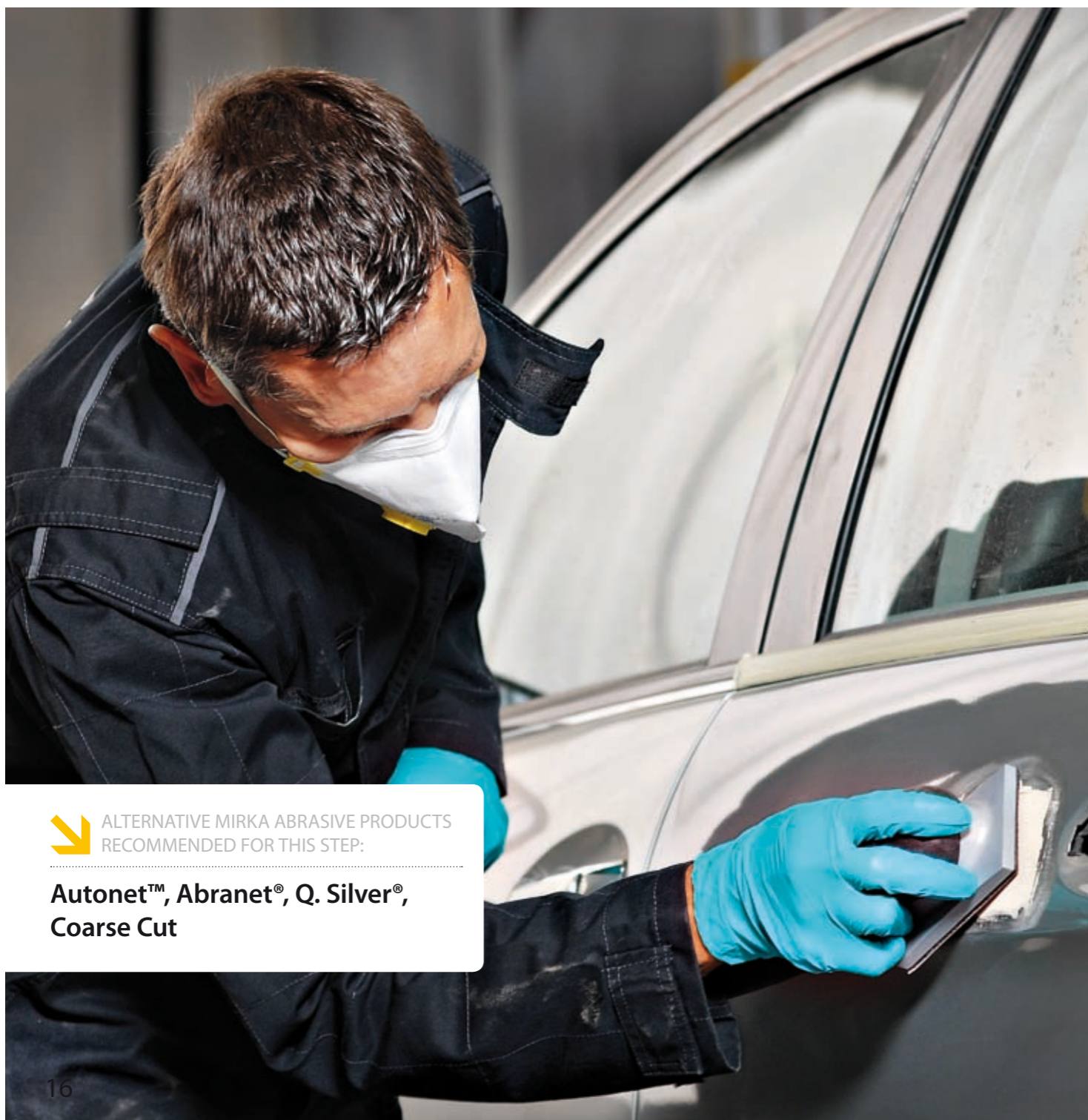
- **Very Fine** (360) is recommended for primary sanding of new parts, old paint layers and sanding of repairs before applying primer.
- **Ultra Fine** (1500) is recommended for enhancing mechanical adhesion and panel blending.
- **Micro Fine** (2500) is ideal for removing overspray and dirt nibs.







## Panel repair



ALTERNATIVE MIRKA ABRASIVE PRODUCTS RECOMMENDED FOR THIS STEP:

**Autonet™, Abranet®, Q. Silver®, Coarse Cut**

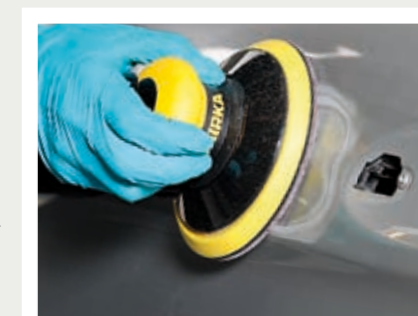
▶ PANEL REPAIR



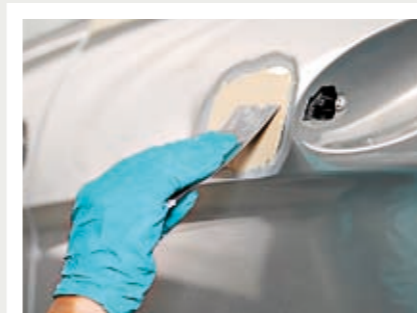
Preparation is key. Degrease the whole working area.



Remove paint from damaged area and feather out edges. Use Mirka grip disc P 80.



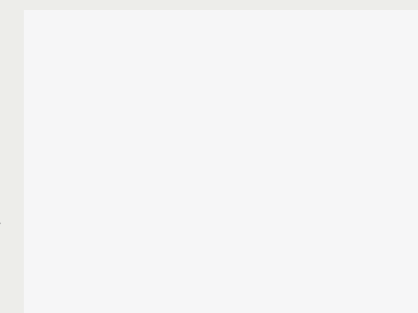
Alternatives: Autonet™, Gold, Q. Silver® or Coarse Cut.



Mix and apply filler to damaged area, avoiding surrounding paintwork.



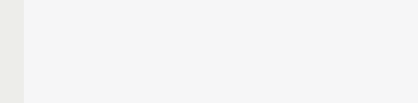
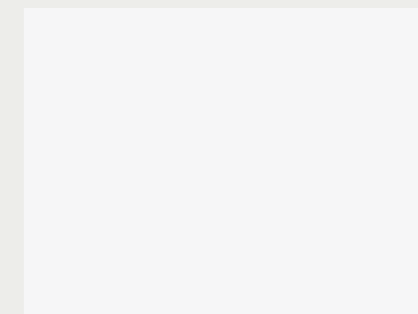
Apply Mirka guide coat to highlight imperfections on the surface.



Hand sand filler area using Mirka Abranet® strip P 80.



Re-apply Mirka guide coat. To further reduce scratch pattern use Mirka Abranet® strip P 180.



## Paint preparation: Stage 1



ALTERNATIVE MIRKA ABRASIVE PRODUCTS  
RECOMMENDED FOR THIS STEP:

**Autonet™, Abranet®, Gold,  
Goldflex-Soft, Q. Silver®,  
Coarse Cut, Mirlon Total VF**

### PAINT PREPARATION: STAGE 1

Prepare surrounding area with Mirka grip disc P 320. Alternatives: Autonet™, Gold or Q. Silver®.

Use Mirlon Total VF for awkward areas and to expand area around the repair. Finish panel by wiping area.

Alternatives: Goldflex-Soft P 320.

Apply high build primer according to paint manufacturers recommendations.

Apply Mirka guide coat.

Flat high build primer with Mirka Abranet® strip P 320 or P 400.

To reduce scratch pattern sand with Mirka grip disc P 500. Alternatives: Autonet™, Gold or Q. Silver®.

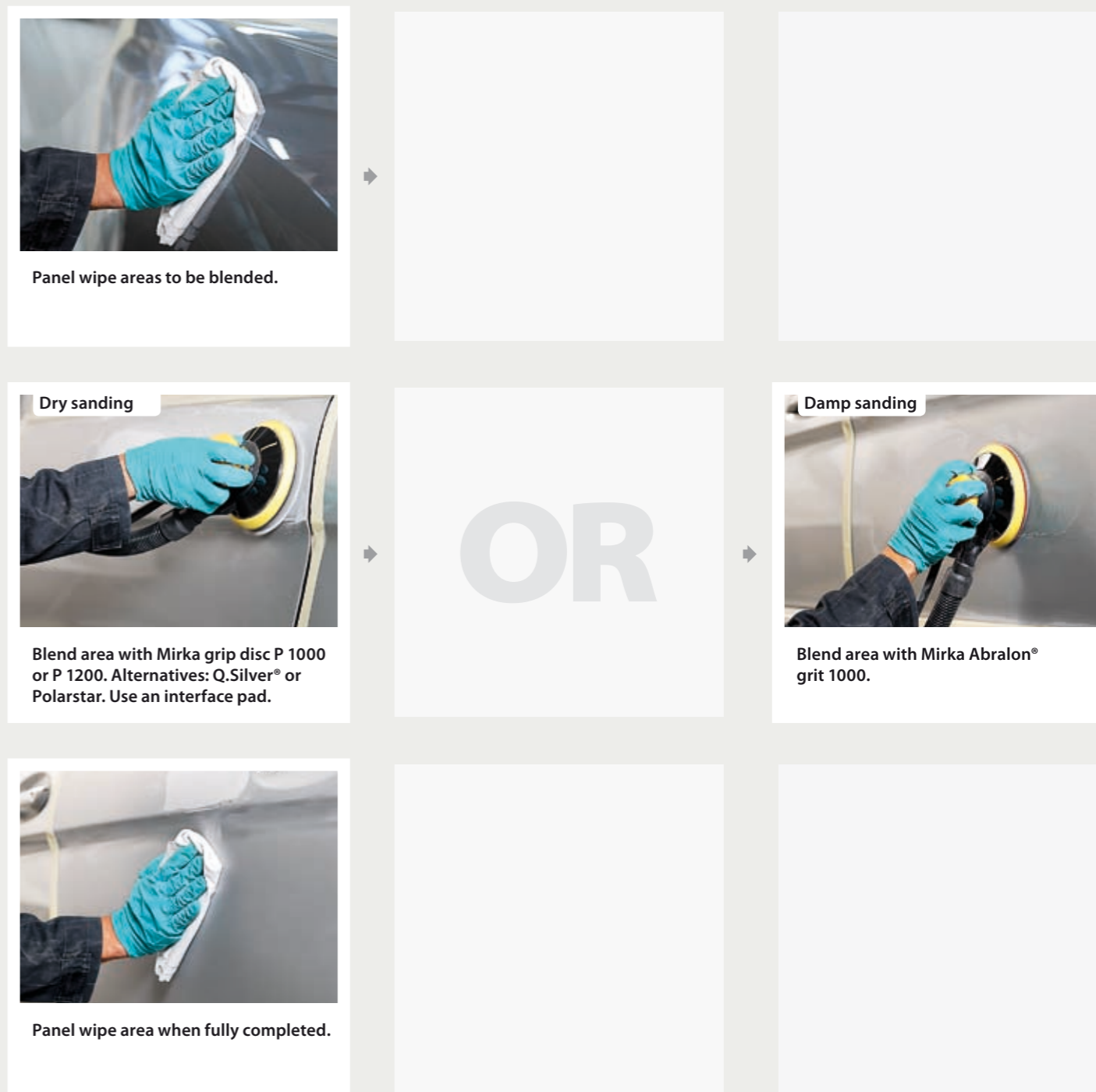
## Paint preparation: Stage 2



ALTERNATIVE MIRKA ABRASIVE PRODUCTS RECOMMENDED FOR THIS STEP:

**Q.Silver®, Polarstar, Abralon®**

PAINT PREPARATION: STAGE 2



# Paint rectification

➤ REMOVAL OF DIRT PARTICLES, FLATTENING OF ORANGE PEEL OR BLENDING ZONE

## 1 DIRT NIBS



**1a Sanding.** Remove dirt nib by machine or by hand. Use Mirka 34 mm disc P 2500. Alternatives: Abranet Soft or WPF.



**1b Compounding.** Remove sanding scratches with Polarshine T10 and lamb's wool pad 77 mm.



**1c Polishing.** Polish with T10 and black dotted foam pad 77 mm.

## 2 SMALL AREA



**2a Sanding.** Flat/level surface by machine. Use Mirka sanding disc P 1500 77 mm. Alternatives: Abranet Soft damp or Q.Silver®/Polarstar damp or dry.  
Further reduce scratch pattern by machine sanding damp. Use Abranet Soft 2500 or Abralon® 2000/4000.



**2b Compounding.** Remove sanding marks with Polarshine T10 and lamb's wool pad 77 mm or 150 mm.



**2c Polishing.** Polish with T10 and black dotted foam pad 77 mm or 150 mm.

## 3 LARGE AREA



**3a Sanding.** Flat/level surface by machine. Use Mirka sanding disc P 1500 150 mm. Alternatives: Abranet Soft damp or Polarstar dry or damp + interface pad.  
Further reduce scratch pattern by machine sanding damp. Use Abralon 2000/4000.



**3b Compounding.** Remove sanding marks with Polarshine C20 and white foam pad 150 mm.



**3c Polishing.** Polish with F05 and black dotted foam pad 150 mm.

## 4 SURFACE PROTECTION



**4a By hand.** Apply a small amount of UF3 or Lwax on the surface. Wipe the surface with a cleaning cloth until a glossy finish is achieved.



**4b By machine.** Apply a small amount of UF3 on the black dotted foam pad. Polish until a glossy finish is achieved.

# Mirka sanding tools and accessories



**TOOLS & ACCESSORIES.** Mirka offers a wide range of tools and accessories that provide a complete sanding solution and ensure that customers get the very best from using Mirka abrasive products. The range is constantly being updated as market needs change and new technology becomes available.

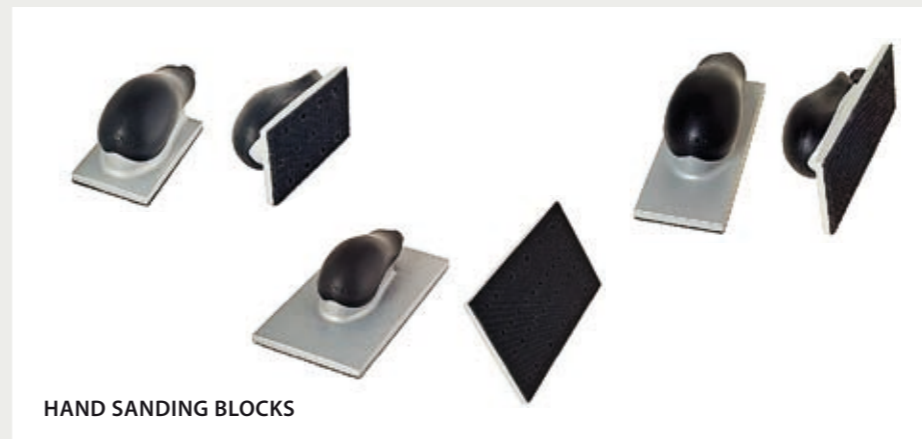
Listed below is a basic range of Mirka tools for sanding operations. A complete range of accessories can be found in a separate brochure.



SANDING MACHINES



BACKING PADS, PAD SAVER & INTERFACE



HAND SANDING BLOCKS



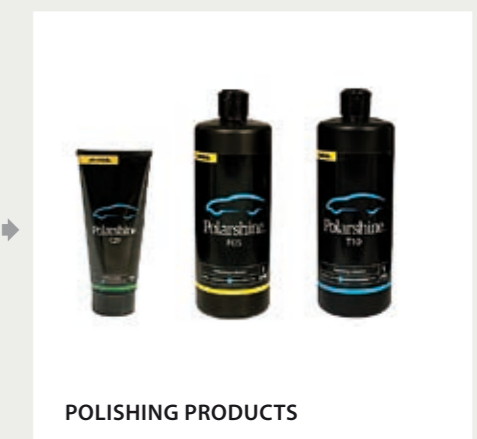
VACUUM CLEANER & HOSE



POLISHING MACHINE



PADS & PAD WASHER



POLISHING PRODUCTS



**KWH Mirka Ltd**

FI-66850 Jeppo  
Finland  
Tel. +358 20 760 2111  
sales@mirka.com

**Mirka Abrasives, Inc.**

7950 Bavaria Road  
Twinsburg, Ohio 44087  
USA  
Tel. +1-330-963-6421

**Mirka Slipmaterial AB**

Frögatan 9  
SE-653 43 Karlstad  
Sweden  
Tel. +46-54-69 09 50  
sales.se@mirka.com

**Mirka Abrasives Ltd**

Unit 7  
Holdom Avenue, Bletchley  
Milton Keynes MK1 1QU  
Great Britain  
Tel. +44-1908-375533  
sales.uk@mirka.com

**Mirka Abrasifs s.a.r.l.**

Immeuble Atria  
2, Allée Bienvenue  
FR-93885 Noisy le Grand Cedex  
France  
Tel. +33-1-4305 4800  
ventes.fr@mirka.com

**Mirka Schleifmittel GmbH**

Otto-Volger-Straße 2  
D-65843 Sulzbach  
Germany  
Tel. +49-6196-76160  
info@mirka.de

**Mirka Italia s.r.l.**

Via Toscana, 20  
IT-62014 Corridonia-Macerata  
Italy  
Tel. +39-0733-2075  
info@mirkaitalia.com

**KWH Mirka Iberica, S.A.U.**

C/Industria 16-18  
08740 Sant Andreu de la  
Barca (Barcelona)  
Spain  
Tel. +34-93-682 09 62

[www.mirka.com](http://www.mirka.com)

**Mirka Asia Pacific Pte Ltd**

10 Anson road #28-05A  
International Plaza  
Singapore 079903  
Tel. +65 6733 5422  
sales.sg@mirka.com

**KWH Mirka Mexicana S.A. de C.V.**

Bosques de Alisos 47-B  
Local A1-02, Oficina 25  
Col. Bosques de las Lomas  
Cuajimalpa, D.F., 05120  
México  
Tel. + 52 55 5148 3212  
ventas.mx@mirka.com

**KWH Mirka Ltd Eesti filiaal**

Laki 34  
12915 Tallinn  
Estonia  
Tel. +372 677 3699  
sales.ee@mirka.com

**KWH Mirka Ltd**

(Shanghai Representative Office)  
Suite 1906A,  
Shenergy International Building  
1 Fuxing Rd(M), Shanghai 200021  
China  
Tel. +86-21-6391 9371  
sales.cn@mirka.com

**Mirka Brasil Ltda.**

Av. Ver. José Diniz,  
3725 cj.32 – Campo Belo Building  
São Paulo – SP  
04603-004 Brasil  
Tel. +55 11 5543 3639  
vendas.br@mirka.com



Quality from start to finish