

MIRKA

Mirka Vehicle Solutions

About Mirka

KWH MIRKA LTD is a family-owned Finnish company and a world leader in abrasives technology innovation. We are offering a complete range of technically superior, high quality abrasives, innovatively designed tools, complete sanding systems and supplementary products. This total innovative solution delivers real benefits to customers in terms of speed, first-class efficiency, surface finish quality and cost effectiveness, even when tackling the most demanding applications.

Mirka is the first company in its sector to obtain the three most important quality standards. The

production process guarantees 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.

95 percent of our products are exported and sold across the globe through our subsidiaries and importers.

Read more: www.mirka.com



Corporate Responsibility

CONTINUOUS IMPROVEMENT TOWARDS SUSTAINABILITY. Changing conditions inspire us to improve and grow our business. We see that our customers are as interested in sustainability as we are. This is why our product development is focused on innovating the best sustainable products and systems, while continually improving our own environmental performance.

Our business is focused on providing the best surface finishing preparation tools and systems to customers. To be the most sustainable finishing systems provider, we are digging deep down to the core of our company to figure out what it really means to be sustainable. We have accomplished a great deal already and have many more

initiatives we will take on in the future.

For people working at Mirka, it has always been clear to not waste financial or material resources – of our own or those of our customers. We find it is equally clear to preserve the planet’s resources. Sustainability is a natural extension of this approach. It means taking the economy, the earth, and people into consideration when we make business decisions – now and for future generations.

We are continuously looking for opportunities to reduce our environmental footprint – this aligns with our company values and also cuts costs. We have worked hard to conserve energy and raw materials, reduce waste, increase recycling, and


decrease the use of persistent chemicals. We are developing healthier, safer, and more efficient products and processes so that our customers and employees will benefit. For example, our dust-free sanding systems help protect the lungs of workers while giving a cleaner and better surface finish.





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 Every year more than 90 million vehicles are produced worldwide. The automotive original equipment manufacturing industry is a prioritized sector for Mirka. Our goal is to be a partner that provides overall solutions for the industry. We work closely with our customers to develop innovative and

advanced solutions. We are developing healthier, safer and more efficient products and processes from which our customers will benefit.

The dust-free sanding concept developed by Mirka offers many advantages, i.e. makes the processes faster, more efficient and cost-effective.



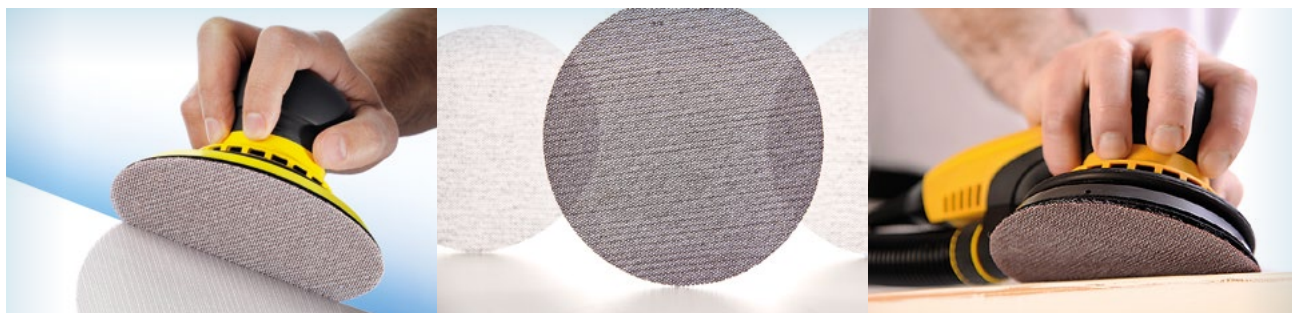
NET SANDING PRODUCTS

MIRKA'S INNOVATIVE net sanding concept is unlike any other. The construction consists of a dense network of polyamide fabric threads onto which the abrasive grit is bonded. This open weave, net structure means that no dust particle is more than 0,5 mm from a dust extraction hole. The result is phenomenal dust extraction across the entire abrasive surface and virtually dust-free sanding.

Tests have shown that net sanding produce a miniscule amount of dust compared to conventional dry sanding technology with extraction. The Mirka net products are so efficient at removing potentially dangerous sanding dust that minimize dust contamination in the workplace and create far healthier environment.

It was a five-year process to bring this revolutionary technology to the market and it took almost ten years to gain buy-in to the market. Our net abrasives have won many product innovation awards and been a best seller across the globe.

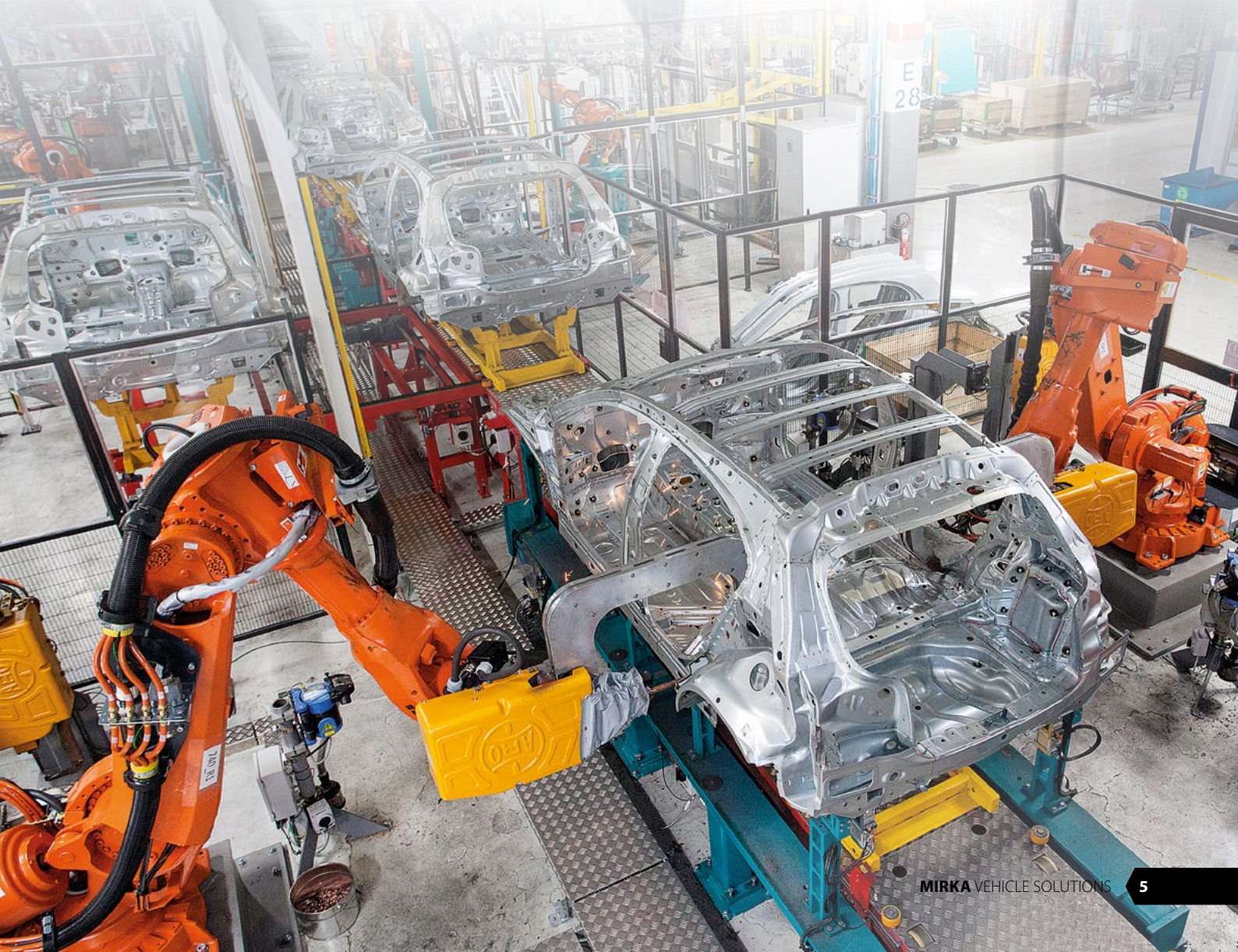
Mirka has also developed a net product which is suitable for the preparation of corrosion sensitive surfaces. Aluminium based material and the demand from AOEMs for sanding corrosive sensitive materials are increasing. Special raw materials containing the lowest possible amounts of heavy metal contaminants have been used when producing Abranet NC and other abrasives belonging to the non-corrosion product range.



MIRKA BODY IN WHITE

The range of products in the body in white process is today much wider than earlier. New materials, such as aluminium, carbon-fibre-reinforced plastics, composites and other types of plastics, are used together with traditional steel. This means that the abrasive range also has to be wider and suitable for these different substrates.

Mirka offers a wide range of abrasives suitable for all the above-mentioned materials.



MIRKA BODY IN WHITE **STEEL**



ROTARY SANDING

» Rotary sanding requires a tougher backing to resist tearing.

ABRASIVE RECOMMENDATIONS

P80 – P120



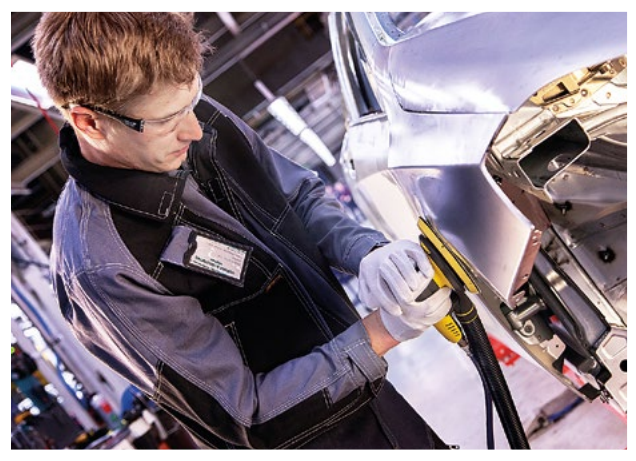
» Abranet® HD



» Coarse Cut



» Fiber A



RANDOM ORBITAL SANDING

» Random orbital sanding requires a more flexible backing to make the surface smoother prior to E-coat.

ABRASIVE RECOMMENDATIONS

P120 – P150



» Abranet® Ace

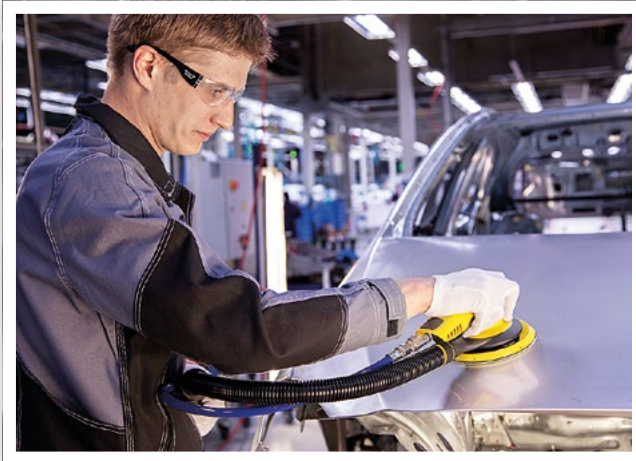


» Q.Silver® Ace



» Coarse Cut

MIRKA BODY IN WHITE ALUMINIUM



RANDOM ORBITAL SANDING

» Aluminium sanding requires finer sanding compared to steel sanding. With Abranet NC or Gold NC you are able to remove the defect quickly in the first step.

» With Mirlon NC you key out the sanding marks from the first step in order to achieve an optimal surface before E-coat.

ABRASIVE RECOMMENDATIONS

P150 – P240



» Abranet® NC



» Gold NC

ABRASIVE RECOMMENDATIONS

Very Fine – 360



» Mirlon® NC

MIRKA NON-CORROSION ABRASIVES

» The preparation of corrosion sensitive surfaces, such as aluminium, requires products which contain the lowest possible amount of heavy metals to avoid contamination.

Contamination can cause corrosion. Mirka is one of the first abrasive producers providing a full range of non-corrosion products, from net to paper based and non-woven discs and sheets.



» Mirlon® NC – Very Fine–360
• rolls, discs and sheets



» Abranet® NC – P80–P600
• discs and sheets

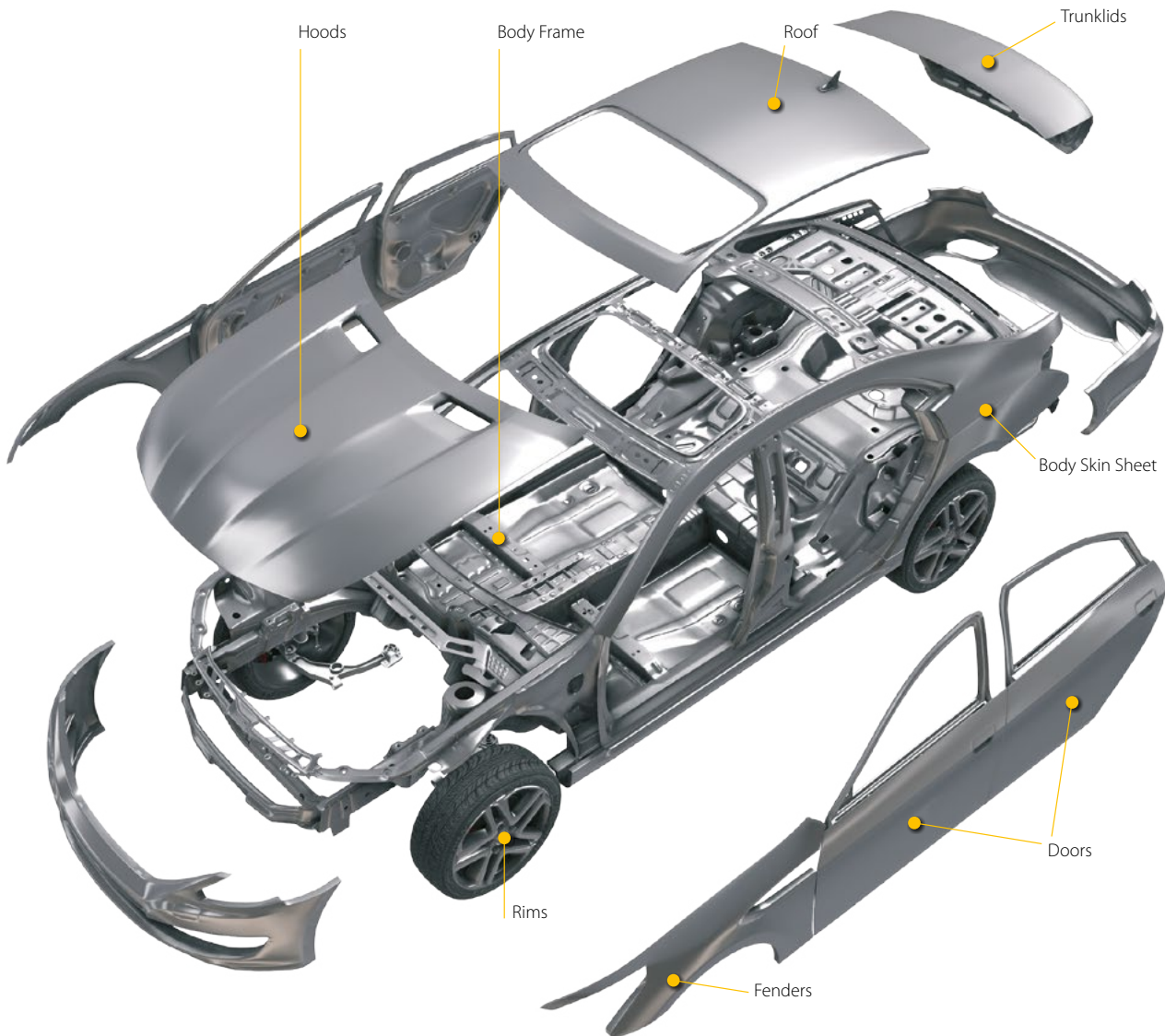


» Abralon® (Standard) – All Grits
• discs and sheets



» Gold NC – P80–P500
• discs

ALUMINIUM AUTOMOTIVE APPLICATIONS TODAY



WHY NC PRODUCTS? Traditional abrasive products contain significant amounts of heavy metals, such as iron, chromium and copper. During the sanding operation, impurities can contaminate the aluminium surface. Scratches or defects in the paint or oxide layer (eloxated aluminium), which occur after the finishing process, can trigger the corrosion process. Parts of the car body, such as bonnets and fender edges, which are exposed to stone chipping and other damages, are also at risk.

WHAT IS THE DIFFERENCE? Special raw materials containing the lowest possible amounts of heavy metal contaminants have been used in the NC product range. Special procedures are applied throughout the production process to reduce the metal contents and ensure a stable quality. Due to the construction, the NC products show significant lower heavy metal contents than the corresponding traditional products.

THE EVIDENCE OF HEAVY METALS IN NON-CORROSION ABRASIVES

| Products | Fe | Cr | Cu | Zn | Ni |
|--------------------------------|-------|------|------|-----|------|
| Mirlon® NC Very Fine – 360 | 62 | 5.3 | <4 | 1.3 | <4 |
| Competitive non-woven abrasive | 1,190 | 26 | 6 | 14 | 6 |
| Abranet® NC P180 | 70 | 4.1 | 2.2 | 2.1 | <3 |
| Competitive paper abrasive | 490 | 5.9 | 5.5 | 5.7 | – |
| Abralon® 360 | 6.7 | 3.1 | <3 | 1.6 | 5 |
| Competitive foam abrasive | 97 | 19 | 6.7 | 2.6 | – |
| Gold NC P150 | 42.3 | 1.08 | 1.16 | 2.6 | <0.5 |
| Competitive paper abrasive | 3,600 | 3.3 | 8.2 | 18 | 1.2 |

AOEM heavy metal content requirement in abrasive products <100 ppm <10 ppm <5 ppm <5 ppm <5 ppm

MIRKA BODY IN WHITE TOOLS



MIRKA POWER TOOLS

TOOLS RECOMMENDATIONS



» Mirka® DEROS

Mirka® DEROS: Powerful, silent and ergonomic electric sander for steel random orbital sanding applications.



» Mirka® AOS

Mirka® AOS: Small orbital sander for sanding with quicklock discs and removing small defects in steel and aluminium.



» Mirka® PROS

Mirka® PROS: Strong and ergonomic pneumatic sander for steel and aluminium random orbital sanding applications.



» Mirka® ROS2

Mirka® ROS2: Powerful and efficient two-handed sander for steel and aluminium random orbital sanding applications where a fast cut is needed.

E-COAT AND PRIMER

Electro-coating provides rust protection and is the only fully covering layer.

The primer hides the defects, so this layer is only applied to the visible surfaces.

For these processes Mirka offers a wide range of abrasives, tools and accessories. Mirka's unique dust-free solution, consisting of net abrasives together with Mirka tools, is a superior choice.



E-COAT – SCUFFING (DRY)



» Mirka scuffing pad with Abranet Products P500–P600 for finding and highlighting defects in E-coat.

ABRASIVE RECOMMENDATIONS

P500 – P600



» Abranet®

E-COAT – DEFECT SANDING, SMALL DEFECTS (DAMP OR DRY)



» The ergonomic hand sanding pad with Abranet products P320–P500.

ABRASIVE RECOMMENDATIONS

P320 – P500



» Abranet®



» Polarstar®



» Goldflex Soft or WPF P320–P500.

ABRASIVE RECOMMENDATIONS

P320 – P500



» Goldflex Soft



» WPF

E-COAT – DEFECT SANDING LARGE DEFECTS (DRY)



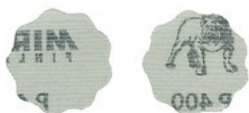
▶ Mirka® AOS 130NV with Polarstar P400. Sanding in hard-to-reach areas.



▶ Mirka® DEROS or Mirka® PROS with Abranet products or Q.Silver Ace P320–P400. Sanding on larger areas.

ABRASIVE RECOMMENDATIONS

P400



▶ Polarstar®

ABRASIVE RECOMMENDATIONS

P320 – P400



▶ Abranet®

▶ Q.Silver® Ace

A dust-free solution

By using the Mirka dust extraction system together with Abranet products you achieve a dust-free solution. This minimises the re-work after painting which saves you both time and money.



+



+



+



=

NO DUST

PRIMER – HAND SANDING, SMALL DEFECTS (DAMP OR DRY)



» The ergonomic hand sanding pad with Abranet Ace P600–P1000.

ABRASIVE RECOMMENDATIONS

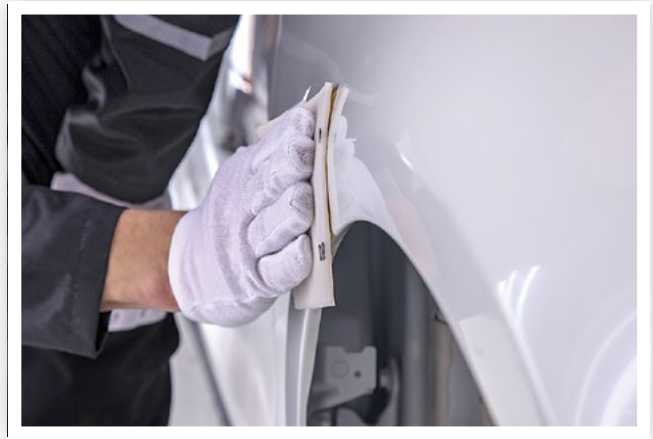
P600 – P1000



» Abranet®



» Polarstar®



» Abralon or Goldflex Soft P600–P1000 for profiles and hard-to-reach areas.

ABRASIVE RECOMMENDATIONS

P600 – P1000



» Abralon®



» Goldflex Soft



» Abranet Soft P800-P1000 with small hand sanding block.

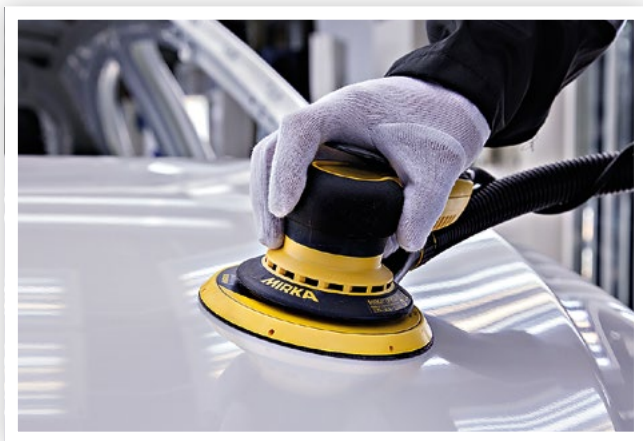
ABRASIVE RECOMMENDATIONS

P800 – P1000



» Abranet® Soft

PRIMER – MACHINE SANDING, LARGER DEFECTS AND AREAS (DRY)



» Abranet Ace / Q.Silver Ace P400–P800 with Mirka® DEROS or Mirka® PROS sander.

ABRASIVE RECOMMENDATIONS

P400 – P800



» Abranet® Ace



» Q.Silver® Ace

E-COAT AND PRIMER TOOLS

MACHINE SANDING



» Mirka® DEROS



» Mirka® PROS



» Mirka® AOS



» Mirka® Dust Extractor 915

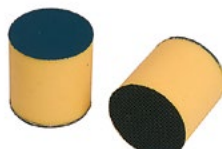
HAND SANDING



» Sanding Pad



» Sanding Block Ergonomic



» Hand Tool for Roses 30 mm



» Sanding Pad Half Round

A dust-free solution

» By using the Mirka dust extraction system together with Abranet products you achieve a dust-free solution. This minimises the re-work after painting which saves you both time and money.

FINESSING

The finessing process is very demanding and requires much precision. The requirements for the products used in the finessing process are very high.

Mirka offers a simple and fast system that functions safely and results in a high-quality surface finish.



FINESSING – ABRASIVES AND SANDING TOOLS



» Polarstar SR gives a high-quality finish enabling a fast polishing process. Mirka recommends the use of damp sanding with the orbital sander or random orbital sander.



» Waterproof finessing discs enable a fast cut and a reliable finish. The product can be used wet or dry with an orbital sander or a random orbital sander.

ABRASIVE AND SANDING TOOL RECOMMENDATIONS

ABRASIVES

P2000 – P5000



» Polarstar® SR



» WPF

Polarstar® SR

SR7 = P2500

SR5 = P3000

SR3 = P5000

SANDING TOOLS & ACCESSORIES



» Mirka® AOS 130NV



» Mirka® ROS 150NV



» Hand Tool for Roses 30 mm

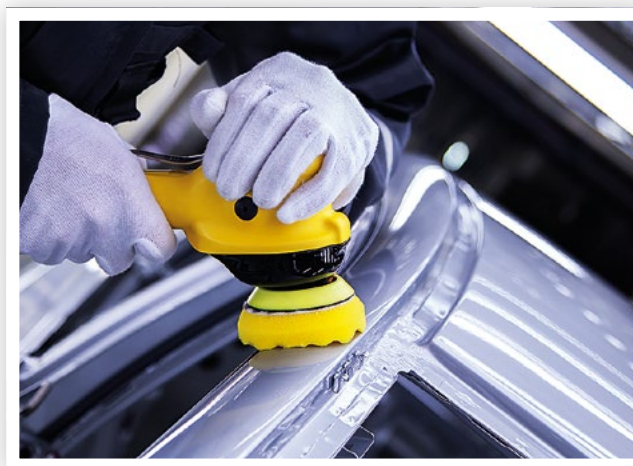
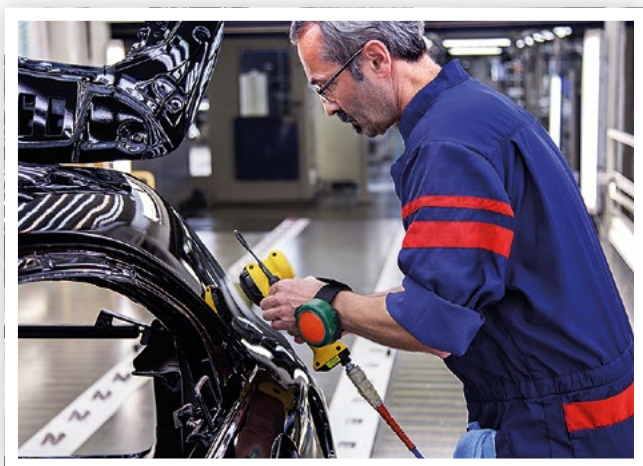


» Finessing Damper 60 ml



» Micro Fiber Cleaning Cloth

FINESSING – POLISHING COMPOUNDS, PADS AND TOOLS



» With the wide range of Mirka products we are able to offer a solution that works for both one-step and two-step processes for most clear coat and top coat systems.

POLISHING COMPOUND, PAD AND TOOL RECOMMENDATIONS

POLISHING COMPOUNDS



» Polarshine® 12 Polarshine® 10 Polarshine® 5

POLISHING TOOLS



» Mirka® ROP2 312NV 77 mm » Mirka® RP2 300NV 77 mm » Mirka® RP 300NV 77 mm

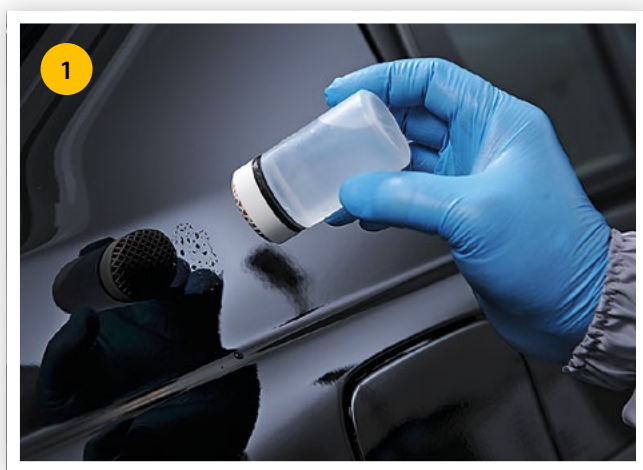
POLISHING PADS



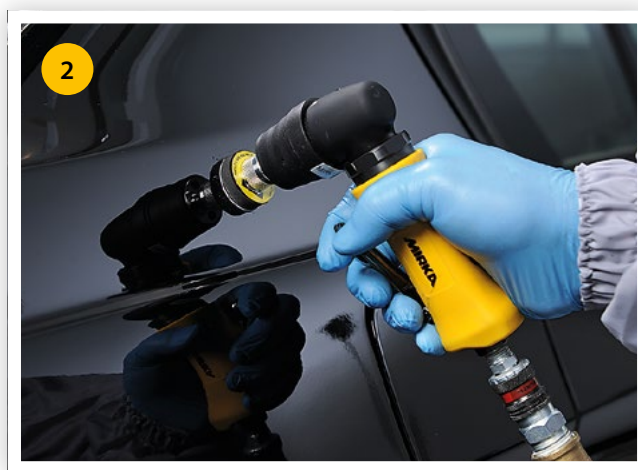
» Lambswool Pad Pro Grip » Polishing Foam Pad White Flat Ret. » Polishing Foam Pad Yellow Waffle » Polishing Foam Pad Orange Waffle » Polishing Foam Pad Black Waffle

FINESSING SYSTEM **EXAMPLE**

FINESSING – ABRASIVES AND SANDING TOOLS



➤ Add water to the surface with Mirka damper.



➤ Sand with Polarstar SR5 or WPF P2500.

TOOLS



➤ Mirka® AOS 130NV or Mirka® ROS 150NV

ABRASIVE AND LIQUID

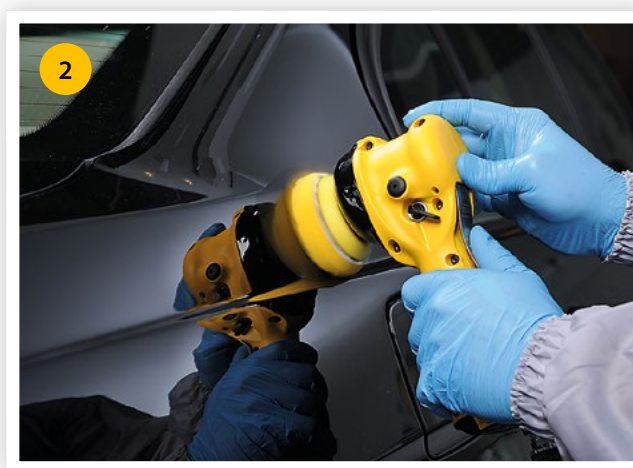


➤ Polarstar® SR5 or WPF P2500;
Liquid in damper: Water

FINESSING – POLISHING COMPOUNDS, PADS AND TOOLS



➤ Apply 1–2 drops of Polarshine 12 compound to the surface.



➤ Use Mirka Yellow Waffle Foam Pad with the Mirka random orbital polisher for a one-step polishing process.

TOOLS



➤ Mirka® ROP2 312NV (random orbital) and Yellow Waffle Pad 85 x 20 mm

COMPOUND



➤ Polarshine® 12



PRODUCT OVERVIEW



ABRASIVES

Abranet® HD

» Abranet HD features exceptional resistance to edge wear and clogging which means it retains its highly efficient sanding properties for far longer, especially in demanding situations.

Grit range: P40, P60, P80, P120–P180



Q.Silver® Ace

» Q.Silver Ace is a new ceramic abrasive product with paper backing. The ceramic grains give a boost, especially when sanding harder applications.

Grit range: P80–P8000



Coarse Cut

» Coarse Cut features a Progressive Bond™ technology, which makes Coarse Cut ideal for rounded surfaces with excellent edge wear resistance.

Grit range: P36–P40, P60–P150



Abranet® NC

» Net product especially developed for aluminium applications. Abranet NC has a low level of less noble metals to minimize the risk of corrosion on aluminium parts. The same dust-free characteristics as Abranet Ace also apply to Abranet NC.

Grit range: P80–P600



Fiber A

» Fiber A discs have the durability and flexibility needed for sanding difficult surfaces. For example, they feature firm dust binding properties which are essential when removing lacquer and rust or when sanding down welding seams.

Grit range: P16–P120 Aluminium oxide
P24, P36, P60, P80 Zirconium oxide



Gold NC

» Paper-backed product especially developed for aluminium applications. Gold NC has a low level of less noble metals to minimize the risk of corrosion on aluminium parts.

Grit range: P80–P600



Abranet®

» The original, multifunctional net sanding material, Abranet combines high performance and a longer lifespan than traditional abrasives, making it a cost-effective solution. Designed for dry sanding by machine or by hand, its true dust-free sanding characteristics result in a cleaner work environment, as well as a better surface finish.

Grit range: P80–P180, P240, P320–P1000



Mirlon® NC Very Fine

» Mirlon NC is a flexible, three-dimensional fibre sanding material that's easy to use on profiled surfaces and produces an excellent finish. Mirlon NC has a low level of less noble metals to minimize the risk of corrosion on aluminium parts.

Grit range: Very Fine – 360



Abranet® Ace

» Abranet Ace offers superior cut and performance on E-coat and primer sanding applications, ensuring optimal performance and life time. Designed for wet and dry sanding. The true dust-free sanding characteristics result in a cleaner work environment resulting in less rework.

Grit range: P80–P240, P320–P1000



Goldflex Soft

» Goldflex Soft is suitable for sanding profiled surfaces and complex, hard-to-reach areas by hand. The stearate coating prevents clogging. Suitable for dry sanding applications.

Grit range: P150–P320, P400–P1000



Abranet® Soft

» Abranet Soft is suitable for hand sanding of E-coat and primer surfaces when an optimum combination of cut and flexibility is needed. The net structure also prevents clogging. Recommended for wet sanding.

Grit range: P320, P500, P800, P1000



WPF

» Mirka waterproof abrasive is most suitable for wet or dry hand sanding applications in the paint shop. Mirka WPF features a latex-impregnated paper backing material and extra durable coating which helps to produce a high-quality finish, even on coarser surfaces.

Grit range: P80–P2500



Abralon®

» Abralon's patented, flexible construction allows it to create a smooth sanding pattern on angled surfaces and edges while minimizing the risk of sanding through the paint layer. Abralon's knitted construction allows water and air to pass freely, making it suitable for both dry and wet sanding, by machine or by hand.

Grit range: 180, 360, 500, 600, 1000, 2000, 3000, 4000



Polarstar® SR

» Polarstar SR sanding film is developed for correction of small painting defects and removing of dust particles in top coats and clear coats. This product is designed for wet sanding, and is suitable for both machine and hand sanding.

Grit range: 3 micron, 5 micron, 7 micron



Polarstar®

» Polarstar is our film alternative for E-coat and primer applications. Polarstar is suitable for wet and dry sanding, by hand or by machine.

Grit range: P320–P1500



Abrasive range



For the complete abrasive range please visit
www.mirka.com

SANDING TOOLS



↘ MACHINE SANDING



Mirka® DEROS

| Model | Mirka® DEROS 650CV | Mirka® DEROS 625 CV | Mirka® DEROS 550CV |
|---------------|--------------------|---------------------|--------------------|
| Size | 150 mm (6") | 150 mm (6") | 125 mm (5") |
| Power | 350 W | 350 W | 350 W |
| Input voltage | 220 – 240 V | 220 – 240 V | 220 – 240 V |
| Speed | 4,000 – 10,000 rpm | 4,000 – 10,000 rpm | 4,000 – 10,000 rpm |
| Orbit | 5.0 mm | 2.5 mm | 5.0 mm |
| Noise level | 71 dB(A) | 72 dB(A) | 71 dB(A) |
| Weight | 1.0 kg | 1.0 kg | 1.0 kg |



Mirka® PROS

| Model | Mirka® PROS 650CV | Mirka® PROS 625 CV | Mirka® PROS 550CV |
|------------------|-------------------|--------------------|-------------------|
| Size | 150 mm (6") | 150 mm (6") | 125 mm (5") |
| Air consumption | 485 l/min | 485 l/min | 485 l/min |
| Working pressure | 6.2 bar | 6.2 bar | 6.2 bar |
| Speed | 12,000 rpm | 12,000 rpm | 12,000 rpm |
| Orbit | 5.0 mm | 2.5 mm | 5.0 mm |
| Noise level | 75 dB(A) | 73 dB(A) | 74 dB(A) |
| Weight | 0.93 kg | 0.90 kg | 0.89 kg |



Mirka® ROS2

| Model | Mirka® ROS2 610CV |
|-----------------|-------------------|
| Size | 150 mm (6") |
| Air consumption | 594 l/min |
| Power | 343 W |
| Speed | 12,000 rpm |
| Orbit | 10.0 mm |
| Noise level | 81 dB(A) |
| Weight | 1.2 kg |

▶ MACHINE SANDING



Mirka® AOS

| Model | Mirka® AOS 130NV |
|------------------|------------------|
| Size | 32 mm (1 1/4") |
| Air consumption | 509 l/min |
| Working pressure | 6.2 bar |
| Power | 357 W |
| Speed | 8,500 rpm |
| Orbit | 3.0 mm |
| Noise level | 75 dB(A) |
| Weight | 0.60 kg |



Mirka® ROS 150NV

| Model | Mirka® ROS 150NV |
|------------------|------------------|
| Size | 32 mm (1 1/4") |
| Air consumption | 425 l/min |
| Working pressure | 6.2 bar |
| Power | 112 W |
| Speed | 12,000 rpm |
| Orbit | 5.0 mm |
| Noise level | 71 dB(A) |
| Weight | 0.49 kg |

▶ DUST EXTRACTION



Mirka® Dust Extractor 915

▶ This highly versatile industrial Dust Extractor for professional use is equipped with an automatic electric start, adjustable suction and an earthed hose connection to eliminate static electricity in the hose. A fleece dust bag is also included. This Dust Extractor should always be used with Mirka antistatic hoses.

Please note that this model is not approved for aluminium sanding.

Tool range



For the complete tool range please visit www.mirka.com



» HAND SANDING

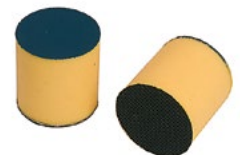
Sanding Pad

» Developed for ergonomic scuffing on E-coat and primer. The adjustable strap makes it non-operator-dependent. Available as 125 mm, 150 mm and 115x140 mm. Pad thickness available only in 6 mm.



Hand Tool for Roses 30 mm

» Suitable mostly for wet hand sanding of small defects on clear coat applications. The 30 mm block can be used with both PSA and grip discs.



Sanding Block Ergonomic

» Used for wet hand sanding on E-coat and primer. The ergonomic design makes the sanding block comfortable to use. Available in 50 mm and 77 mm.



Sanding Pad Half Round

» The half round pad is designed for sanding hard-to-reach areas. Available as 125 mm and 150 mm grip.



POLISHING

▶ POLISHING COMPOUNDS

Polarshine® 12

▶ Mirka's new Polarshine 12 is a water-based and silicone-free one-step polishing compound. Polarshine 12 removes scratches from P2500 or finer (depending on the surface and polishing pad) and it has a perfect balance of haze and hologram removal versus speed of cut.



Polarshine® 10

▶ Polarshine 10 is a medium-coarse allround polishing compound for clear coats and topcoats. Polarshine 10 is suitable for all paint systems and removes scratches from P3000 and finer. Polarshine 10 is silicone-free and waterborne.



Polarshine® 5

▶ Polarshine 5 is a fine second-step polishing compound suitable for hologram removal on darker colors. Polarshine 5 is silicone-free and waterborne.



▶ POLISHING PADS

Polishing Foam Pad White Flat Ret.

▶ Mirka white foam pad is designed to provide a good cut and gloss on hard clear coat applications and is mainly intended for use with the Mirka® ROP2 312NV polisher.

Available in: 77 mm size. **Foam:** Hard.



Polishing Foam Pad Yellow Waffle

▶ The Mirka yellow waffle pad is suitable for all kinds of polishing processes because it provides an optimal cut and gloss balance.

Available in: 85 mm, 135 mm, 150 mm and 180 mm. **Foam:** Medium hard.



Polishing Foam Pad Orange Waffle

Mirka orange waffle pad is suitable for softer clear coats and paints to achieve a perfect finish in a one-step process for vehicle and Tier 1 applications. The orange foam is softer than our yellow foam and leaves the best gloss and least holograms.

Available in: 85mm, 135mm, 150 mm and 180 mm. **Foam:** Soft.



Polishing Foam Pad Black Waffle

▶ Mirka black waffle foam pad is suitable as the second step in the two step polishing process for hologram removal.

Available in: 85 mm and 150 mm. **Foam:** Very Soft.



Lambswool Pad Pro Grip

▶ Mirka lambswool pad pro is fully natural and made of premium wool fibers. The fibres are optimized to maintain high performance for demanding use. The pad is suitable for polishing all kinds of paintworks in OEM applications where a fast cut is needed.



Available in: 80 mm, 135 mm, 150 mm and 180 mm.

▶ POLISHING TOOLS



Mirka® ROP2 312NV 77 mm

| Model | Mirka® ROP2 312NV |
|-----------------|-------------------|
| Size | 77 mm (3") |
| Air consumption | 538 l/min |
| Power | 276 W |
| Speed | 10,000 rpm |
| Orbit | 12.0 mm |
| Noise level | 80 dB(A) |
| Weight | 1.1 kg |



Mirka® RP2 300NV 77 mm

| Model | Mirka® RP2 300NV |
|-----------------|------------------|
| Size | 77 mm (3") |
| Air consumption | 481 l/min |
| Power | 209 W |
| Speed | 3,000 rpm |
| Noise level | 85 dB(A) |
| Weight | 0.96 kg |



Mirka® RP 300NV 77 mm


| Model | Mirka® RP 300NV |
|-----------------|-----------------|
| Size | 77 mm (3") |
| Air consumption | 481 l/min |
| Power | 209 W |
| Speed | 3,000 rpm |
| Noise level | 81 dB(A) |
| Weight | 0.55 kg |

POWERTRAIN COMPONENTS

Mirka's microfinishing solutions are used for cylindrical parts that require minimum tolerances in many engine applications, mainly for the automotive industry. High-performance car manufacturers require extremely reliable processes from engine part producers. The long-term durability of crankshafts and camshafts must be reproducible and performance must be guaranteed in order to pass the requirements of manufacturers and end users. The right microfinishing technologies minimize wear and prolong the service lifetime of demanding engine parts.

The optimized engine part finishing process ensures the desired performance of engines.

Stabilize the quality of precision components in the powertrain industry

 A consistent, high-quality finish provides a competitive advantage in the form of longer engine lifetime and more satisfied end customers. Additional value is created through the improved process and increased productivity

- » Consistent engine part quality and performance
- » Cost-effective production process
- » Reputational value of technology leadership
- » Uniform and reproducible surface structures



PRODUCT RANGE



MI232C

 Cross pattern (patented) film product designed for the surface finishing of automotive powertrain components. Due to the patented surface construction (tessellated) it is more aggressive and resist to surface loading creating a faster total finishing process. Recommended for rough polishing. Available on a 5 MIL new (patented) anti-slip backing. Semi-open grain distribution.



MI231C

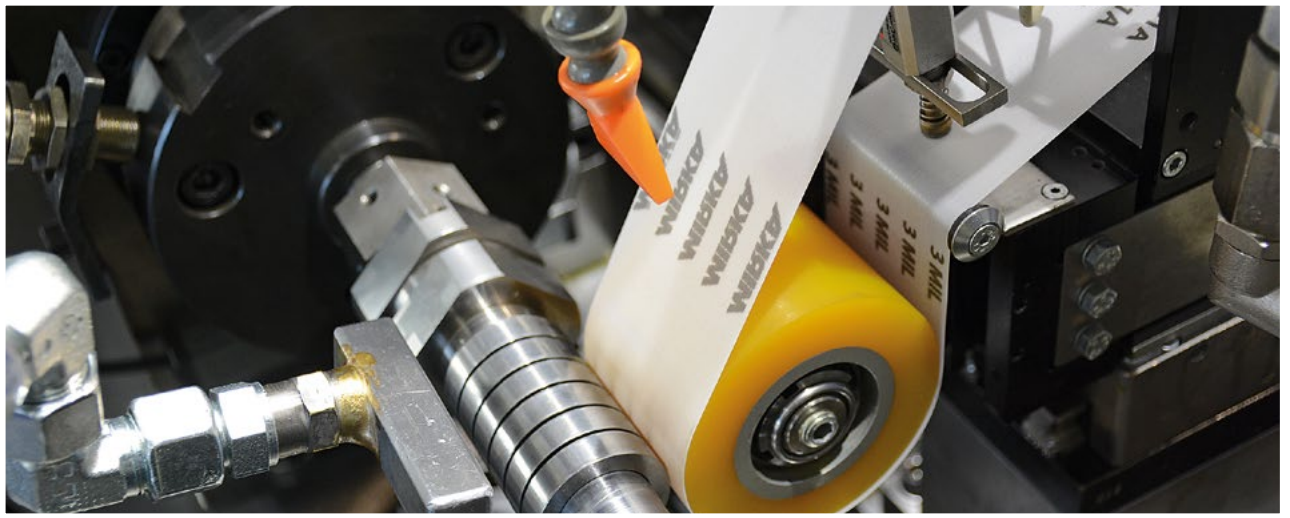
 Microfinishing film product designed for surface finishing of automotive powertrain components. Available on 5 MIL anti-slip (patented) backing. The grain distribution is semi-open and the product is more aggressive than normal Aluminum oxide films. Recommended for rough polishing.



MI231A

 Microfinishing film product designed for surface finishing of automotive powertrain components. Two thicknesses of anti-slip (patented) backing film materials available, 3 MIL or 5 MIL. MI231 has a semi-open grain distribution and resists surface loading. Recommended for fine polishing.

Mirka's unique and patented production technology gives valuable benefits to our industry partners



▶ Mirka co-operates closely with leading machine producers and suppliers. Mirka is a trusted industry partner that develops and delivers unique and innovative solutions to meet future needs in engine part finishing.

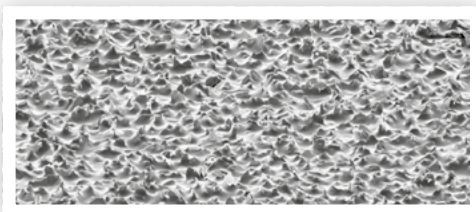
This patented technology provides opportunities to develop suitable materials for special industry needs and customer wishes.

▶ Our unique, environmentally friendly hardening and flexo techniques give our products many valuable properties:

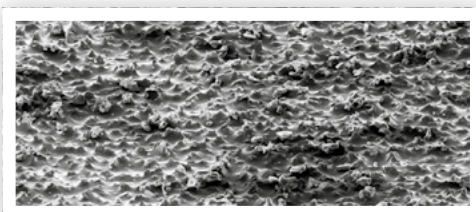
▶ Grain and glue distribution is very even and accurate, which guarantees the promised finishing results

▶ Thanks to our technology you do not need to worry about grain build-up or unevenness of the material

▶ Our technology delivers more flexibility and enables us to tailor our products and respond quickly to changing customer and market needs

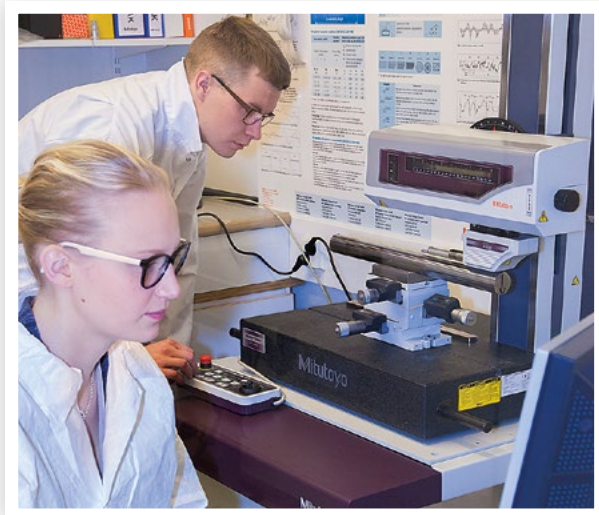


Mirka Alox 30μ



Competitor 30μ

OPTIMAL SURFACE TEXTURING



Tolerances in engine manufacturing are extremely tight, and crankshafts and camshaft surface properties are no exceptions.

Engines need to create less noise, vibration and friction, and should be long-lasting and maintenance-free. They also need to use less fuel and oil, and produce lower emissions. This in turn places higher demands on surface finish.

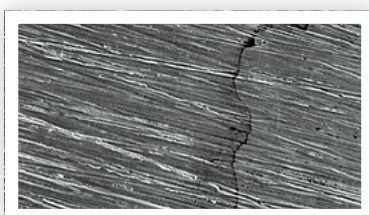
Mirka's unique production technology allows our customers to create basically any kind of surface texturing to improve oil lubrication and friction properties.

METALLOGRAPHIC INSPECTION OF CRANKSHAFT JOURNALS

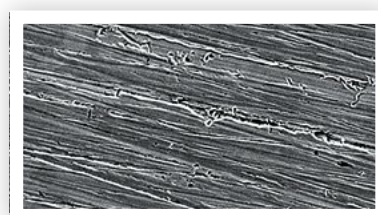


» Surface texturing can have a serious impact on engine performance. Identifying and creating the optimal surface pattern can give benefits in the fight to meet stricter environmental regulations and lower fuel consumption.

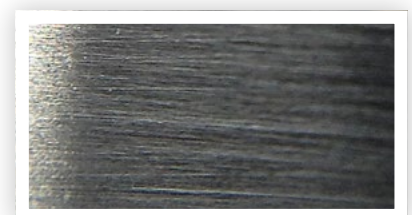
» Energy losses mainly occur in engines, largely as a result of friction. To avoid high frictional losses it is crucial to continuously improve surface texturing.



Uneven and coarse



+ wild scratches



Preferred even surface



KWH MIRKA LTD
Finland

Brazil Mirka Brasil Ltda.

Canada Mirka Abrasives Canada Inc.

China Mirka Trading Shanghai Co., Ltd

Finland & Baltics KWH Mirka Ltd

France Mirka Abrasifs s.a.r.l.

Germany Mirka Schleifmittel GmbH

India Mirka India Pvt Ltd

Italy Mirka Italia s.r.l.

Mexico KWH Mirka Mexicana, S.A. de C.V.

Russia Mirka Rus LLC

Singapore Mirka Asia Pacific Pte Ltd

Spain KWH Mirka Ibérica S.A.U.

Sweden Mirka Scandinavia AB

Turkey Mirka Turkey Zımpara Ltd Şirketi

United Kingdom Mirka (UK) Ltd

USA Mirka Abrasives, Inc

For contact information,
please visit www.mirka.com

Quality from start to finish

