

MIRKA

Mirka Solutions for Buses and Coaches



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.





IN THE BUS MANUFACTURING INDUSTRY there are large surface areas to be treated and sanded. Mirka's products are an excellent choice for these applications. The dust-free concept provided by Mirka offers an efficient system and at the same time users benefit from a clean working environment.

The standardised processes and overall solutions provided by Mirka, ensure consistent quality and the variations in the process can be minimised.

Bus Body Sanding

ABRASIVE RECOMMENDATIONS FOR BUS BODY SANDING AND PAINT PREPARATION



SUBSTRATES	Abranet® Ace	Q.Silver® Ace	Abranet® NC	Gold NC	Mirlon® NC Very Fine 360	Abranet® HD
Steel / Stainless steel	P80 – P120	P80 – P120				
Aluminium			P150 – P240	P150 – P240	360	
Composites	P180 – P240	P180 – P240				
Wood	P80 – P120	P80 – P120				P60 – P80
Putty	P120 – P240	P120 – P240				
Primer	P320 – P400	P320 – P400				



Decal Painting Process

MACHINE SANDING



- Use Abranet® Ace P500 if texture levelling is needed
- Use Abralon® 1000 to matt the surface before decal painting
- Use Mirka® DEROS 650CV or Mirka® CEROS 325CV for smaller areas



HAND SANDING



- Use Goldflex Soft P1000 and Mirlon Total® UF – 1500 for hard-to-reach areas



Polishing Process POLISHING SYSTEM 1

ORANGE PEEL REMOVAL AND PAINT RECTIFICATION ON LARGE AREAS

1 WET HAND SANDING



- Use Aquastar® P1500 – P2000 with Aquastar® Hand Sanding Block to level and remove defects



2 POLISHING



- **Step 1** Use Polarshine® 10 + Yellow Lambswool Pad with Mirka® PS 1437 electric polishing machine to remove sanding marks



- **Step 2** Use Polarshine® 5 + Orange Waffle Foam Pad with Mirka® PS 1437 electric polishing machine to achieve optimal gloss and finish



Polishing Process POLISHING SYSTEM 2

ORANGE PEEL REMOVAL AND PAINT RECTIFICATION ON LARGE AREAS

1A DAMP SANDING PROCESS



- Use Polarstar® P1200 + Abralon® 3000 with Mirka® DEROS 650CV electric sanding machine or Mirka® PROS 650CV pneumatic sanding machine



1B DRY SANDING PROCESS



- Use Microstar® P1200 + Microstar® P2500 with Mirka® DEROS 650CV electric sanding machine or Mirka® PROS 650CV pneumatic sanding machine



2 POLISHING



- **STEP 1** Use Polarshine® 10 + Yellow Lambswool Pad with Mirka® PS 1437 polisher electric polishing machine
- **STEP 2** Use Polarshine® 10 + Orange Waffle Foam Pad with Mirka® PS 1437 electric polishing machine



Polishing Process POLISHING SYSTEM 3

PAINT RECTIFICATION ON SMALL AREAS

1 SANDING



- Use Polarstar® SR5 or WPF P2500 with Mirka® AOS 130NV pneumatic sanding machine



2 POLISHING



- Use Polarshine® 12 + Yellow Waffle Foam Pad with Mirka® ROP2 312NV pneumatic polishing machine





GLASS SANDING

Mirka Glass Sanding Process – It Is All About Time _____

GLASS SANDING AND POLISHING ON TEMPERED OR NORMAL GLASS



Scratched glass.



Always start the process by cleaning the surface using window cleaning liquid. Start sanding with a fine grit, eg. P320, or just polish out the scratch. If the fine grit doesn't sand enough use the next coarser grit. This way you can avoid additional steps when removing the scratches.

The following process starts with grit P180. If grit P320 is used, the next step is Abralon® 360 followed by Abralon® 600 before polishing.



Step 3: Sand with Abralon® 360 and Mirka® PS 1437 Rotary Polisher or Mirka® RP 300NV 77mm Non Vacuum Rotary Polisher. Dry or wet sanding.

Sanding time: Approx. 2–3 minutes. Wipe clean before next sanding step.



Step 4: The "pre-polish step": Sand with Abralon® 600 and continue with Abralon® 1000 using the Mirka® PS 1437 Rotary Polisher or Mirka® RP 300NV 77mm Non Vacuum Rotary Polisher. Dry or wet sanding.

Sanding time: Approx. 3–4 minutes for each grit. Wipe clean before polishing.



1.

Step 1: For removal of glass scratches sand with Abranet® Sic P180 and Mirka® PS 1437 Rotary Polisher or Mirka® RP 300NV 77mm Non Vacuum Rotary Polisher. Dry or wet sanding.

Sanding time: Never do a short sanding sequence. Wipe clean before next sanding step.



2.

Step 2: Sand with Abralon® 180 and Mirka® PS 1437 Rotary Polisher or Mirka® RP 300NV 77mm Non Vacuum Rotary Polisher. Dry or wet sanding.

Sanding time: Approx. 2 minutes. Wipe clean before next sanding step.



5.

Step 5: Polish with Polarshine® E3 Glass Polishing Compound. Use Mirka® PS 1437 Rotary Polisher or Mirka® RP 300NV 77mm Non Vacuum Rotary Polisher and Mirka White Polishing Felt Pad. Wipe the surface clean to check the surface. Use a soft microfiber cloth and a window cleaning liquid. Continue polishing for 4 minutes or more.



Completed process.

ABRASIVES



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.



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.



Q.SILVER® ACE

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



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.



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.

Abrasives



MIRLON® NC VERY FINE – 360

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.



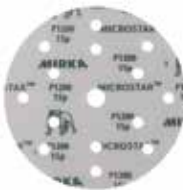
ABRALON®

Abralon has a patented, flexible construction that 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.



POLARSTAR®

The polyester film backing material creates a more flexible and much smoother abrasive surface, compared to paper backing. In particular, it offers outstanding performance on hard clear coats. Can be used wet and dry.



MICROSTAR®

An abrasive film product designed for surface keying and paint rectification of top- and clear coat applications. Thanks to the special stearate layer and smooth film backing, Microstar provides a fine scratch pattern that is easy to polish. Microstar has been developed for dry sanding only.



ABRANET® SiC NS

is a multifunctional net abrasive developed mainly for glass sanding. A combination of high performance and a longer lifespan than traditional abrasives gives a cost-effective solution. The bonding is of resin type, and Abranet SiC NS is coated with a dense, uniform layer of silicon carbide grains.

Abrasives



AQUASTAR®

Aquastar is an innovative patented flexible film abrasive for wet hand-sanding applications. This product has a flexible plastic backing, and a pattern consisting of multiple abrasive zones surrounded by interconnected channels. Thanks to the plastic backing material there is no need to pre-soak Aquastar before use.

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.

MIRLON TOTAL® UF - 1500

Developed using Mirka's innovative Total Coating™ Technology, Mirlon Total is more aggressive than Mirlon and produces a dense scratch pattern and rapid result. Suitable for use in wet and dry modes, it features an open and flexible structure and reinforced fibres, which make it strong and long-lasting.

POLARSTAR® SR

Polarstar SR sanding film is developed for the correction of small painting defects and removal 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.

WATERPROOF

Mirka Waterproof sanding discs and roses are suitable for the correction of small painting defects and removal of dust particles in top coats and clear coats. This product can be used wet or dry, by hand or by machine.



SANDING TOOLS

Sanding tools MACHINE SANDING

MIRKA® DEROS

Model	Mirka® DEROS 650CV	Mirka® DEROS 625CV	Mirka® DEROS 550CV
Size	150 mm (6")	150 mm (6")	125 mm (5")
Power input	350 W	350 W	350 W
Voltage main supply	220 – 240 V~	220 – 240 V~	220 – 240 V~
Main frequency	50/60 Hz	50/60 Hz	50/60 Hz
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
Dust system	Central vacuum	Central vacuum	Central vacuum



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
Dust system	Central vacuum	Central vacuum	Central vacuum



MIRKA® CEROS

Model	Mirka® CEROS 325CV
Size	77 mm (3")
Power input	350 W
Voltage mains supply	90 – 240 V~
Voltage to sander	22 V ---
Main frequency	50/60 Hz
Speed	4,000 – 10,000 rpm
Orbit	2.5 mm
Noise level	68 dB(A)
Weight	0.70 kg
Dust system	Central vacuum



Sanding tools 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	375 W
Speed	8,500 opm
Orbit	3.0 mm
Noise level	75 dBA
Weight	0.60 kg
Dust system	Non vacuum



Sanding tools HAND SANDING

SANDING BLOCK AQUASTAR® 125 x 60 x 12 mm 2-S Soft/Hard

A flexible sanding block to be used in combination with Aquastar
115 x 140 mm sheets.



Sanding tools ACCESSORIES

CLEANING CLOTH 330 x 330 mm Yellow, 2/Pack

A yellow soft micro fiber cloth, with a fine texture. Absorbs residue well and is washable.





Polishing COMPOUNDS

POLARSHINE® 5 POLISHING COMPOUND

Polarshine 5 is a fine 2nd step polishing compound suitable for hologram removal on darker colors. Polarshine 5 is silicone-free and waterborne.



POLARSHINE® 10 POLISHING COMPOUND

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® 12 POLISHING COMPOUND

Polarshine 12 is a water-based and silicone-free 1 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® E3 GLASS POLISHING COMPOUND

Water-based, silicone-free polishing compound designed for polishing out scratches on glass surfaces. Suitable for most glass types and removes marks permanently. Polarshine E3 should be used together with the Mirka felt pad and on a rotary polisher.



Polishing PADS

POLISHING FOAM PAD YELLOW WAFFLE

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 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 85 mm, 135 mm, 150 mm, and 180 mm.

Foam: Soft.



LAMBSWOOL PAD PRO GRIP

Mirka Lambswool Pad Pro is fully natural and made of premium wool fibres. The fibres are optimised 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 FELT PAD WHITE

A flat hard 6 mm thick white felt pad, designed for glass polishing applications. The thick felt pad construction has a good balance and feels stable during polishing. The pad is designed to be used in combination with Polarshine E3 polishing compound and that combination provides a good glass sanding process.

Available in: 77 mm, 125 mm



Polishing TOOLS _____

MIRKA® ROP2

Model	MIRKA® ROP2 312NV
Size	77 mm (3")
Air consumption	538 l/min
Working pressure	6.2 Bar
Noise level	80 dBA
Power	276 W
Speed	10,000 rpm
Orbit	12.0 mm
Noise level	80 dBA
Weight	1.1 kg
Dust system	Non vacuum



MIRKA® RP

Model	Mirka® RP 300NV
Size	77 mm (3")
Speed	3,000 rpm
Air Consumption	481 l/min
Working pressure	6.2 Bar
Noise level	81 dBA
Power	209 W
Weight	0.55 kg
Backing Pad	77 mm (3") Grip ¼"
Dust system	Non vacuum



Polishing TOOLS

MIRKA® PS

Model	Mirka® PS1437
Size	150 mm (6")
Voltage mains supply	230 V~
Power input	1400 W
Speed	1,100 – 3,700 rpm
Thread	M14
Noise level	84 dB(A)
Weight	1.9 kg



DUST SUCTION HOOD FOR MIRKA® PS 1437 POLISER

A suction hood that is easily attached to Mirka PS 1437 Polisher without a key, for use in demanding sanding applications. When used with Abranet HD it provides a dust-free solution. The front segment can be removed to improve visibility and give access to edges. The springs ensure smoother operation, while the brushes ensure good suction and protect the surface.



BACKING PAD 125 MM M14 GRIP 17H FOR SUCTION HOOD

This 125 mm (5") backing pad is equipped with robust hooks and 17 holes enabling great dust suction. This backing pad should be used together with the Dust Suction Hood (Mirka code 9190152001) only.



MIRKA



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Quality from start to finish

