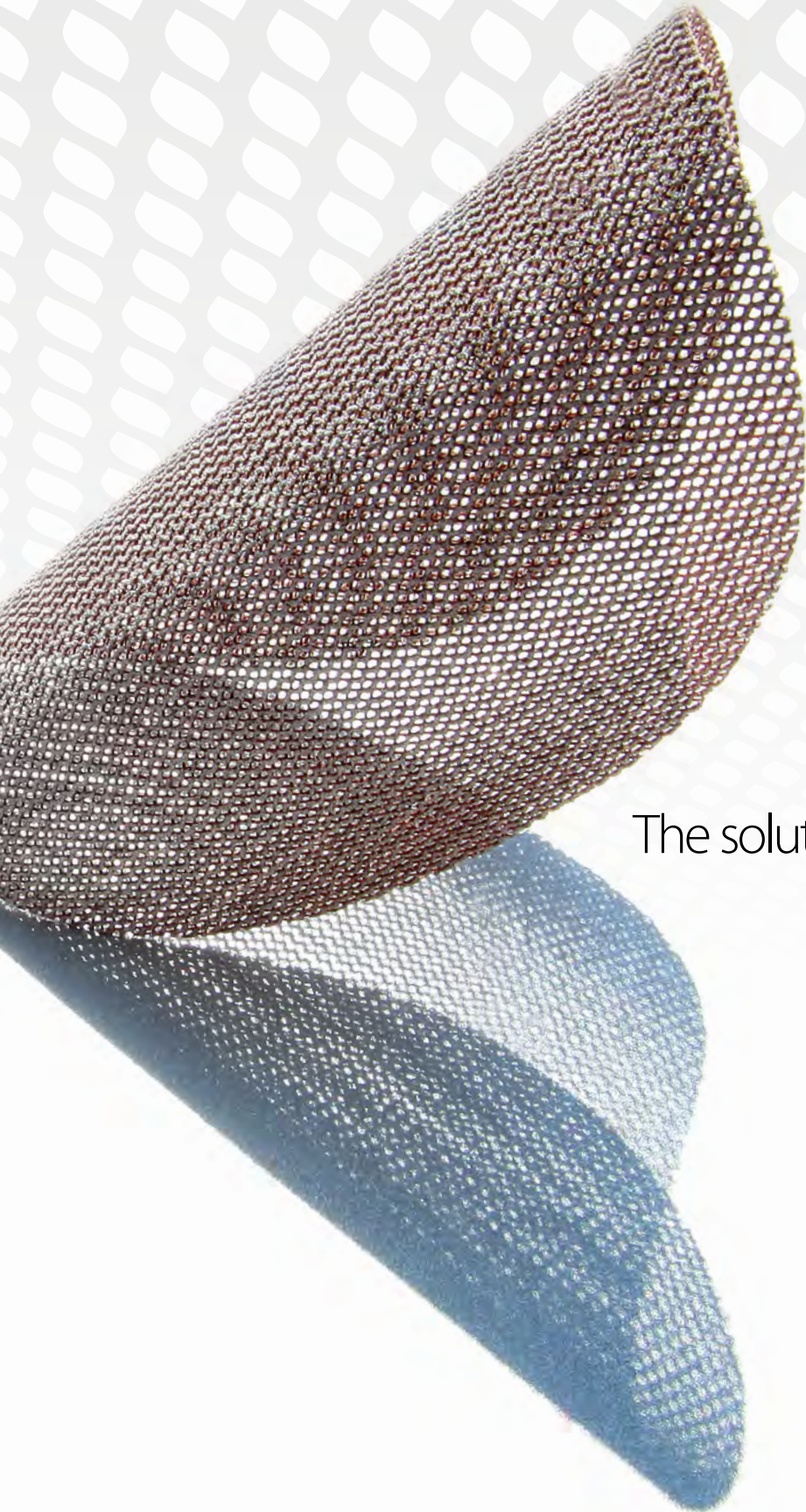


MIRKA



Abranet[®]

The solution to the dust problem

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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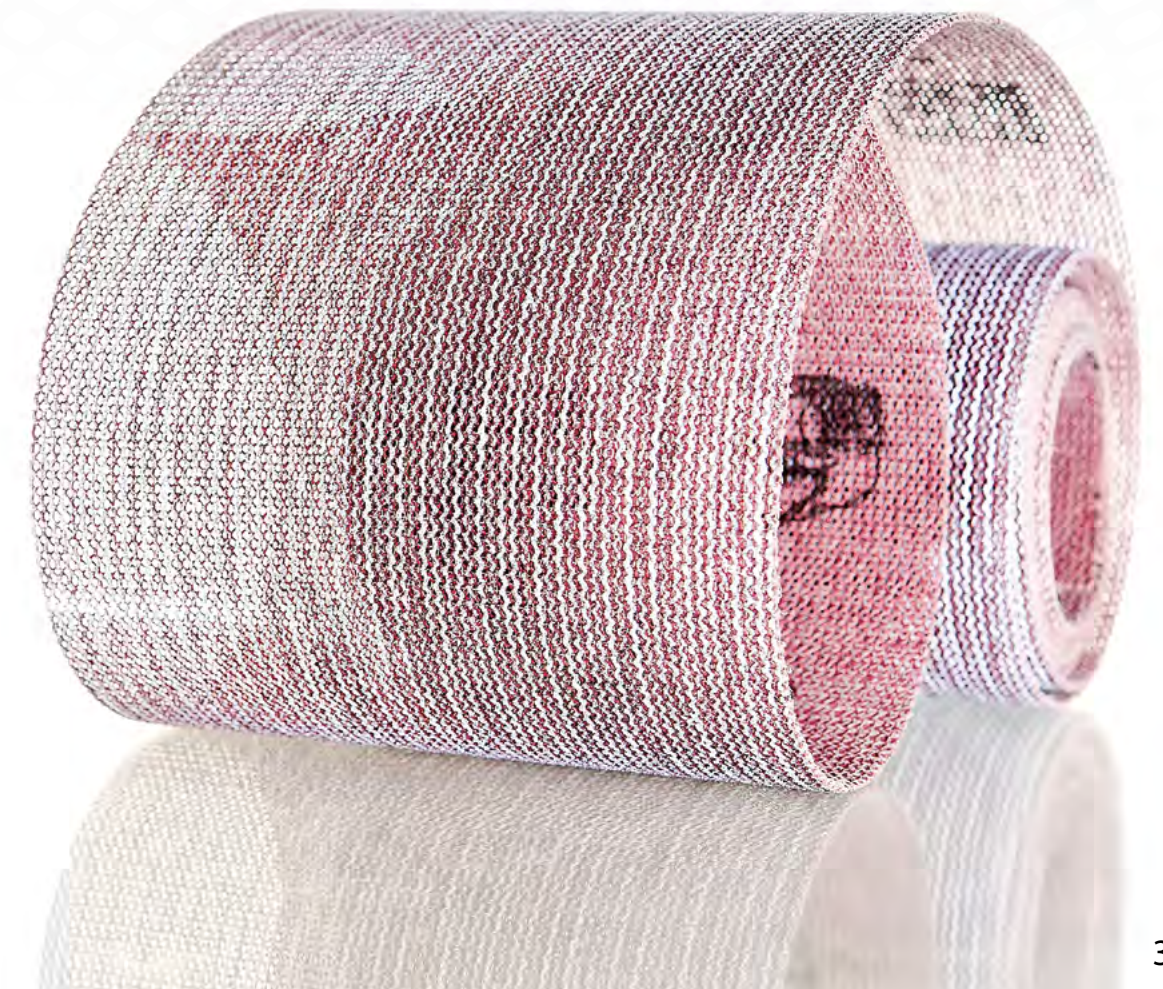
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ABRANET® – THE NET ABRASIVE FAMILY

Development going ahead in leaps and bounds. Abranet is a major leap ahead within the sanding technology.

↘ Sanding dust is a major health problem in many industries. Dust from fiber glass, carbon fiber, aluminum and hardwood, for example, usually contains harmful particles. Mirka offers a simple but clever solution to the dust problem – Abranet sanding solutions. Now worker's lungs can be protected from dangerous sanding dust.

Mirka's Abranet sanding solutions also make it easier and more fun to work. Sanding without disturbing dust particles also provides better control over the work. Moreover, the final result will be better. You will get a cleaner surface and a better surface finish.

One of the many advantages is that the net products usually have a longer lifespan than traditional abrasives.

Customers using Mirka's Abranet sanding solutions know that this translates into clever savings, i.e. better profitability and competitiveness.

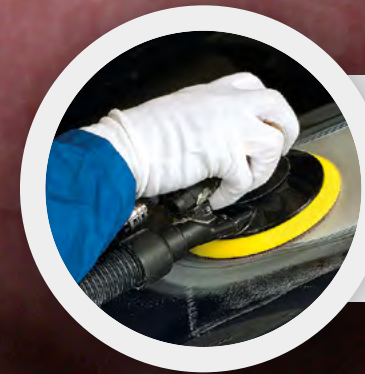
The use of Abranet has spread like wildfire from branch to branch. At the same time Mirka is expanding its Abranet range with new products and solutions.

Take the full advantage of Mirka's Abranet sanding solutions.



HIGHER PROFITABILITY

Abranet is more efficient and economical to use than traditional abrasives.



BETTER WORK ENVIRONMENT

Sanding dust can contain harmful particles. Abranet reduces the dust impact on the lungs.



FUN AND EASY

It is easier and more fun to sand using Abranet. Better control over the work guarantees a better final result.

THE ABRANET® STORY

➔ Mirka's innovative Abranet sanding concept is unlike any other. The patented 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 0.5mm 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 Abranet produce a miniscule amount of dust compared to conventional dry sanding technology with extraction. Abranet is so efficient at removing potentially dangerous sanding dust that it

minimises dust contamination in the workplace and creates a far healthier environment.

Long-term investment in innovation pays off. Mirka was the first abrasives company in the world to develop a dust-free sanding system. It was a five-year process to bring this revolutionary technology to the market and almost ten years to gain buy-in to the market. It has been well worth it. Abranet has won many product innovation awards and have been a best seller across the globe. The story will continue.

The Abranet® sanding concept is a unique invention that delivers many advantages:

- **HEALTHIER WORKING ENVIRONMENT** – Dust-free sanding
- **EASY TO USE** – The hook and loop system means the net sanding product attaches easily to your sanding tool
- **SAVES TIME** – No dust, reduces clean up time
- **SAVES MONEY** – Net sanding products virtually eliminate clogging and, therefore, last longer than traditional paper products
- **QUALITY FINISH** – The unique net construction characteristics create a finer scratch pattern resulting in a better surface finish.
- **PRACTICAL** – No need for covering material or equipment to protect them from dust



Abranet®



Abranet® Soft



Autonet®



Abranet® HD



OSP



Abranet® Ace

2000

Mirka's net sanding story begins with **Abranet** in year 2000. Abranet is the multifunctional, dust-free net abrasive, especially developed for sanding putty, primers, lacquers, composite materials and a large amount of other materials for industrial use.

2006

The next product joining Mirka's Abranet family is **Abranet Soft** in 2006. Abranet Soft is a combination of the highly effective sanding net with a thin foam layer. The foam layer and open structure provide flexibility that allows the material to easily follow surface contours. Since dust collects in the foam layer during sanding, the result is a smooth surface finish. Abranet Soft is suitable for pre-polishing lacquered surfaces, while coarser grits can be used for intermediate sanding of lacquered wooden surfaces by hand and recommended for wet sanding.

2008

Autonet, especially developed for the automotive industry offering speed, efficiency and amazing dust extraction ability was launched in 2008.

2009

Abranet Heavy Duty or **Abranet HD**, since 2009, is achieving outstanding results on the most challenging surface conditioning and repair applications. Abranet HD has a nylon mesh backing material (in contrast to paper) to create a more flexible and durable abrasive product. Abranet HD has been specifically developed to efficiently tackle the most demanding surface conditioning and repair applications, such as paint stripping and coarse putty sanding.

2012

Mirka's Abranet success story took a big step forward in 2012 when the groundbreaking **OSP** (Optimized Surface Preparation) system was introduced to the market. The OSP system is a net sanding system solution for Automotive Refinishing, a simple standardised system with a clearly defined process and maximised performance. Easy to learn, with fewer steps than traditional methods and of course dust-free as all Abranet products.

2013

Abranet Ace is a newest addition to the growing dust-free Abranet family. This product is developed for tougher and more demanding sanding applications. Because of its optimized net construction and ceramic grains, Abranet Ace offers superior cut and performance for hard wood (such as beech and oak) and a fast cutting on various solid surface materials. Abranet Ace is also working excellent on primer sanding applications, creating an optimal performance and life time.

THE SECRET BEHIND ABRANET®



With Abranet, Mirka has succeeded with something where many others have previously failed – to develop a completely even sanding net. A sanding net with thousands of holes provides a phenomenal dust extraction. The maximum distance from each sanding particle to the closest dust extraction hole is 0.5 mm! Abranet’s clever construction provides many advantages. Because the dust is being continuously sucked away, sanding is virtually dust free. Tests have shown that the dust release from Abranet is only minuscule when compared to the dust released from traditional abrasives with dust extraction. When the abrasive and the sanding surface are constantly kept dust free, the lifespan of the abrasive is extended. Since the abrasive maintains its aggressive properties over the entire

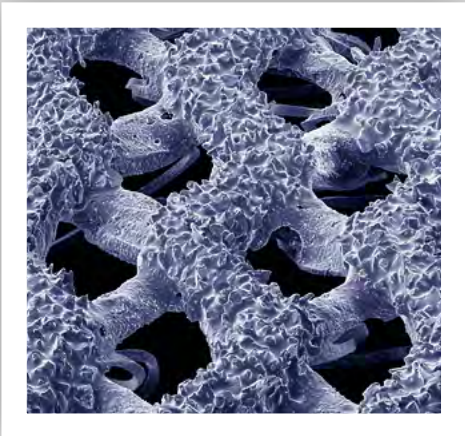
surface, sanding becomes more even and efficient. The sanding result will also be better. Since it is always possible to see what is being sanded, there will be a completely different control over the work, meaning that over-sanding, for example, can be avoided. Additionally, Abranet will solve many old dull problems, such as the formation of so-called “dust pills” and clogging. Since dust can no longer collect in lumps on the sanding discs to the same extent, there is no longer a danger that sanded dust will build up and create grooves on the sanding surface, or fill up the disc and so reduce its sanding capacity.

No wonder everyone chooses Abranet!



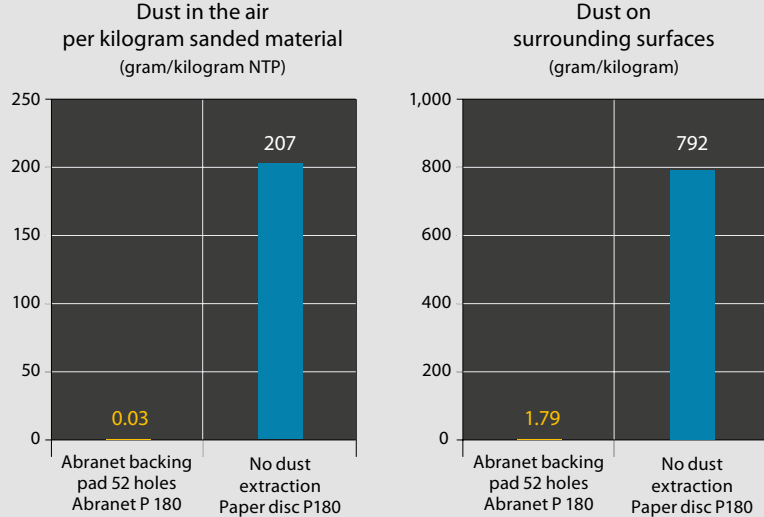
NEW FEELING

Abranet gives a whole new feeling to sanding, since it makes the work easy and efficient. Those who’ve once used Abranet don’t want to change back!



HOW MUCH LONGER?

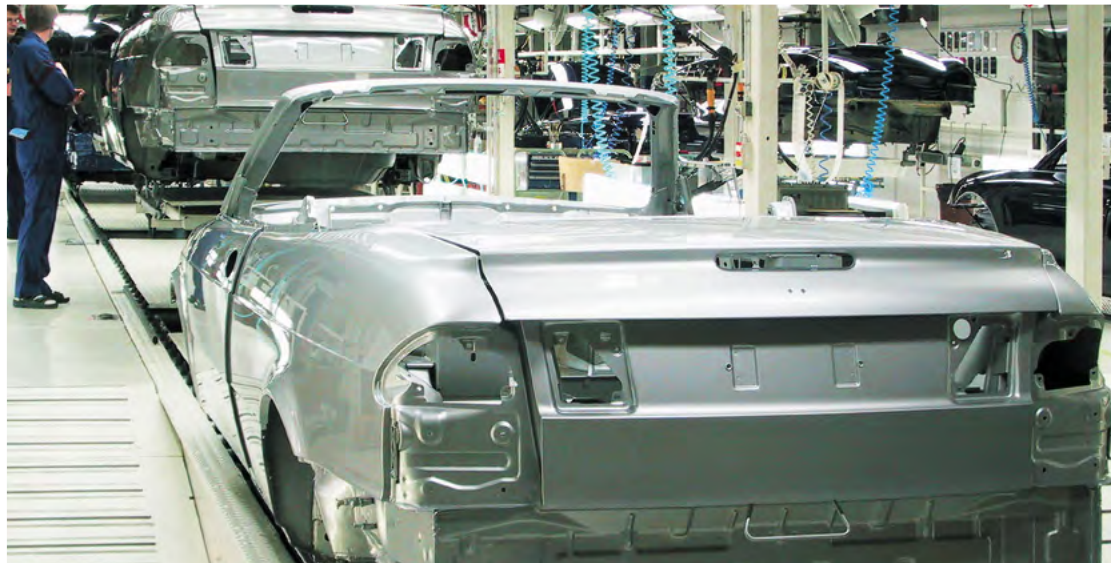
Abranet’s lifespan depends on the type of material being sanded. Generally, it seems as though the disc would last twice as long as traditional abrasives. However, in certain cases where a normal disc would become clogged easily, when sanding soft surfaces for example, Abranet can last up to 10 times longer. When hand sanding with a sheet, Abranet is by far superior compared to competing products.



TEST WINNER

Laboratory tests show that Abranet has solved the dust problem. The amount of dust in the air when machine sanding with Abranet is 6,900 times less than when sanding using traditional abrasives without dust extraction. When Abranet was compared to a traditional 6-hole sanding disc with dust extraction system, Abranet also proved itself to be completely superior. The dust concentration from Abranet was max. 0.15 mg/m³, while the corresponding figure for the traditional sanding disc was 1.6 mg/m³. We advise users to follow the FEPA and UAMA recommendations regarding the protection equipment suitable for the method as well as the material being sanded. These recommendations should always be made after conducting a risk assessment at the place of work. Tests also show that besides the air being much cleaner when sanding with Abranet, the surrounding surfaces, for example, are also much cleaner. This means considerable savings in cleaning costs.

FOR MAXIMUM BENEFITS – USE ABRANET®



Abranet® is the product to increase productivity.

➔ Abranet maximises efficiency and minimises cost, for example when manufacturing cars, lorries, trucks, aeroplanes, trains, boats and wind turbines. Sub-suppliers manufacturing aluminium and plastic components also choose Abranet.

There are many reasons for this:

A modern production process requires a sanding material which is efficient and reliable. Every detail of the process must be controlled, and sanding dust must be reduced to the minimum in order to prevent costly repair sanding. This becomes particularly relevant when the entire production costs are taken into consideration. The deciding factor depends on which sanding material provides the best value for money.

Abranet fulfils all of these demanding requirements. Additionally, Abranet usually has a longer lifespan than traditional abrasives. How much longer depends on the area where the product is used. Some customers report that Abranet lasts twice as long, while others report that the product can last up to six times longer. Abranet can even have a lifespan 10–15 times longer than traditional abrasives within sectors where soft materials are sanded, e.g. when using certain putties and fillers which can easily clog and destroy the abrasives.

ABRASIVES

- » Abranet®
- » Abranet® non-stearate
- » Abranet® Ace
- » Abranet® HD
- » Abranet® Soft
- » Autonet®

TOOLS

- » Mirka® DEROS electric sanders
- » Mirka® PROS random orbital sanders
- » Mirka® AOS angle orbital sander
- » Mirka® ROS2 Two-handed random orbital sanders

MOST ECONOMICAL

When producing different types of products, for example, cars, sailing boats, trains and wind turbines, Abranet is the most economical sanding solution overall.

LUNG PROTECTION

Thanks to Abranet, a worker's lungs are now only exposed to a much smaller amount of dust. With a good dust extraction unit, special metals like zinc and aluminium or composites like carbon fibre and fibre glass can also be sanded.

SOFT MATERIALS

Abranet is ideal for sanding soft materials as the anti-clogging capability will prevent the abrasive from rapid wear / premature wear compared to using traditional abrasives.

GRIT RECOMMENDATIONS / OEM CAR MANUFACTURING

On track

Body-in-white	Abranet® P120–P180
Epoxy dipp coating	Abranet® P320–P600 damp or dry
Primer	Abranet® P500–P1000 damp or dry
	Abranet® Soft P500–P800 damp or dry

Off track (hospital area)

Body repair	Abranet® P320–P1000 damp or dry
	Abranet® Soft P500–P1000 damp or dry

GRIT RECOMMENDATIONS / MARINE

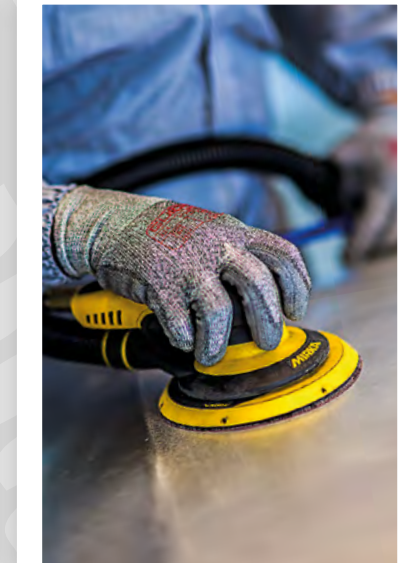
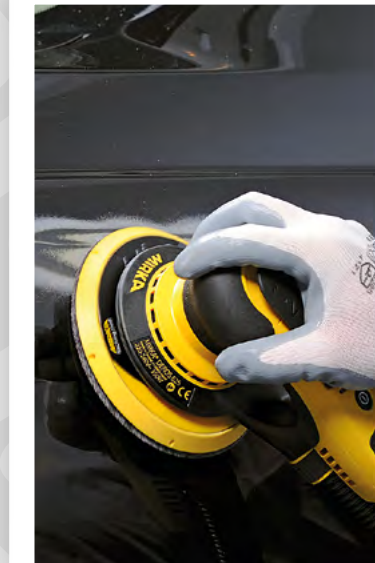
Modul and Plug application

Putty sanding	Abranet® P80–P180
	Abranet® HD P40–P80
Plug coat sanding	Abranet® P500–P1000

Gel coats

Dry sanding	Abranet® P80–P1000
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ABRANET® SETS THE STANDARD



Abranet® is the product to use when repairing cars.

Body damage repair work requires flexibility and efficiency from the bodyshop. Occasionally, the issue at hand is only a small scratch, at other times larger parts must be sanded, filled, painted and polished.

In this area, Abranet really reveals its true strengths. Aided by our sanding system for both hand- as well as machine sanding, an operator will smoothly and quickly manage all the work phases, from the sanding of coarse polyester fillers to the last final polishing. Dust-free effective sanding will be possible during the entire process. Even our hand sanding blocks are equipped with extraction.

Today, an increasing number of cars contain aluminium and zinc coated components. Both aluminium and zinc require effective dust extraction. Even here, Abranet can offer the best solutions when it comes to work protection and final result.

ABRASIVES

- » Abranet®
- » Abranet® Ace
- » Abranet® HD
- » Abranet® Soft
- » Autonet®
- » OSP

TOOLS

- » Mirka® DEROS electric sanders
- » Mirka® PROS random orbital sanders
- » Mirka® OS orbital sanders

CLEAN SANDING

Abranet in combination with Mirka power tools ensures a clean sanding which contributes to a clean and healthy working environment.

FAST AND EFFECTIVE

With Abranet dust-free effective sanding can be carried out during the entire repair process, from paint removal to final paint preparation. This saves time and guarantees excellent quality.

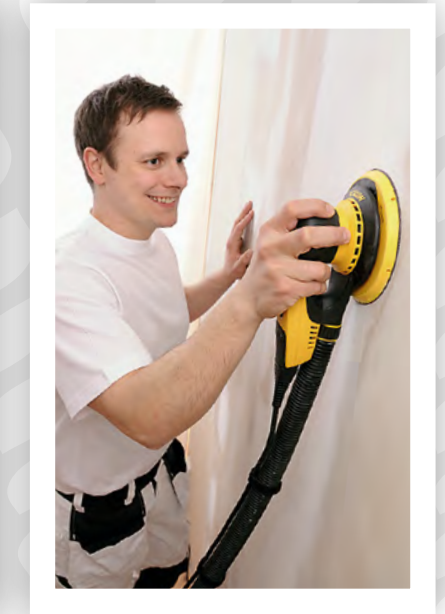
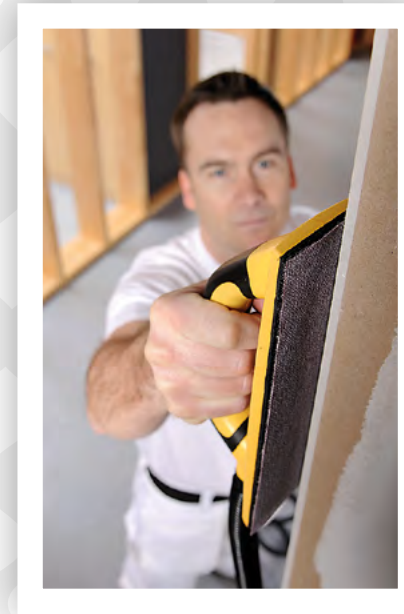
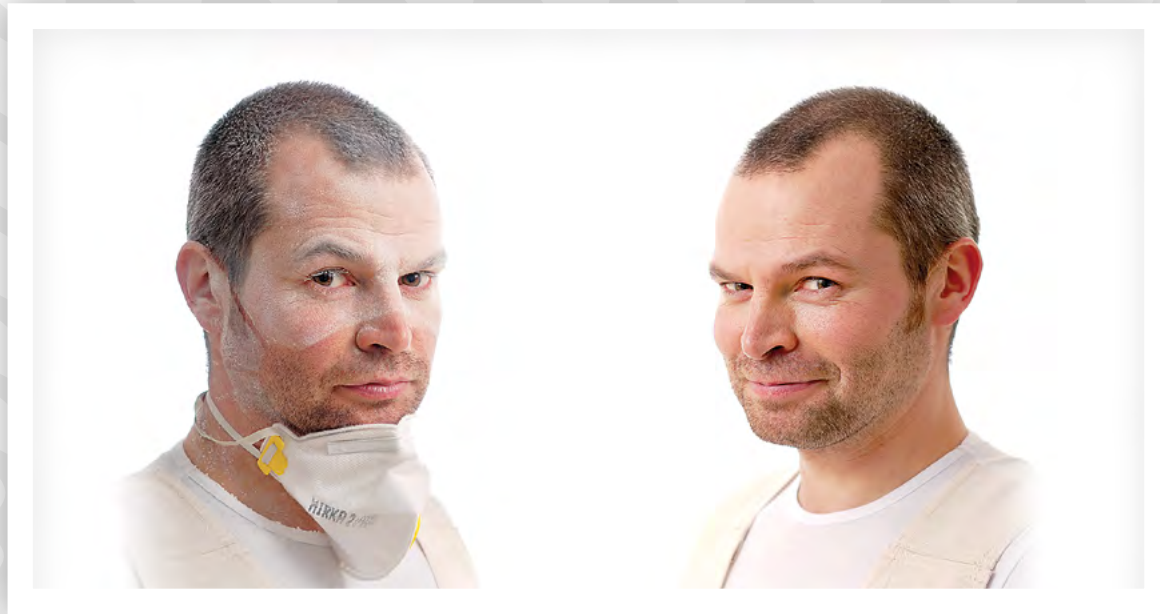
ALUMINIUM

The preparation of corrosive sensitive surfaces requires abrasive products with low content of heavy metals. Abranet NC fulfills the AOEM requirements for abrasive products aimed for aluminium substrate sanding.

GRIT RECOMMENDATIONS

Paint stripping	Abranet® P80-P120
Putty sanding	Abranet® P80-P180
Primer sanding	Abranet® P320-P600
Clear coat / Top coat	Abranet® Soft P800-P1000 damp or dry

ABRANET® – FOR HEALTH REASONS



Why put your health at risk? Thanks to Abranet®, dust-free sanding is possible!

Woodworking produces a lot of dust that can contain hazardous particles. The latest research shows that sanding wood is dangerous to the health.

When sanding furniture, kitchen and bathroom furniture, windows and doors, it is important to have good dust extraction – both for health reasons as well as for the final result. Naturally, the best alternative is to change and begin using the Abranet system, which is virtually dust free. Abranet reduces the dust load from dangerous particles on lungs, as well as provides many other time and money savings.

A dust-free work environment ensures control of the sanding work. When sanding, other work phases can be made simultaneously in the same room. And of course there will be less tidying up afterwards!

Abranet is known for its long lifespan – which means that the abrasive doesn't have to be changed as often as before.

ABRASIVES

- » Abranet®
- » Abranet® Ace
- » Abranet® HD

TOOLS

Wood

- » Mirka® DEROS electric sanders
- » Mirka® PROS random orbital sanders
- » Mirka® OS orbital sanders

Construction

- » Mirka® Handy hand sanding block
- » Mirka® DEROS electric sanders
- » Miro 955° wall sander
- » Mirka® dust extractor

HAZARDOUS DUST

Sanding dust can contain harmful particles. The latest research shows that sanding wood is dangerous to the health.

BETTER PRODUCTIVITY

The open structure of Abranet prevents clogging and enables faster sanding. And there will be less tidying up afterwards. Another advantage is that Abranet maintains its aggressive properties much longer than traditional sanding materials.

DUST-FREE ENVIRONMENT

Abranet used together with Mirka's innovative electric sanders ensures a perfect result and a dust-free environment.

GRIT RECOMMENDATIONS

Construction / Decoration

Plaster sanding	Abranet® P120–P180
Paint removal	Abranet® P60–P120

Universal wood sanding

Coarse sanding	Abranet® P80–P120
Prior to coat	Abranet® P150–P180
Between coats	Abranet® P240–P400
Surface sanding	Abranet® P120–P180
Intermediate sanding	Abranet® P240–P1000
High gloss finish	Abranet® Soft P1500

A GROWING FAMILY

Today, the Abranet system is used in most of the industries and branches. The complete Abranet sanding system consists of a vacuum system, sanding machines, backing pads and hand sanding block, as well as various types of sanding products. There are also polishing compounds for the automotive and marine industries. Special tools to sand walls and ceilings have been created for those working in the construction industry.

Abranet can be used immediately, without taking on large additional investments, if a vacuum system and sanding machines are already in place. All that is needed for machine sanding are Abranet discs and a specially designed backing pad. For hand sanding Abranet sheets and our special hand sanding blocks are required. The Abranet system contains a special interface that is attached between the abrasive and the pad. It attaches the Abranet firmly to the sanding machine, and reduces the wear and tear on the pad.

We can offer solutions to suit both larger and smaller production lines for those requiring a completely new system.



Abranet® Ace



An addition to the growing dust-free Abranet family. This product is developed for tougher and more demanding sanding applications. Because of its optimized net construction and ceramic grains, Abranet Ace offers superior cut and performance for hard wood (such as beech and oak) and a fast cutting on various solid surface materials. Abranet Ace is also working excellent on primer sanding applications, creating an optimal performance and life time.

ABRANET® ABRASIVES

Technical specifications

Grain	Ceramic/Ceramic coated
Bonding	Resin over resin
Backing	Net
Coating	Closed
Colour	Grey
Grit range	P80-P240, P320-P1000

Available as:

77 mm	70 x 125 mm	75 mm x 10 m
125 mm	70 x 198 mm	115 mm x 10 m
150 mm	70 x 420 mm	
200 mm	115 x 230 mm	

Abranet®



The multifunctional and dust-free Abranet, especially developed for sanding putty, primers, lacquers, composite materials and a large amount of other materials for industrial use. 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.

Technical specifications

Grain	Aluminium oxide
Bonding	Resin over resin
Backing	Polyamide fabric
Coating	Closed
Colour	Brown / white
Grit range	P80-P180, P240, P320-P1000

Available as:

77 mm	70 x 125 mm	75 mm x 10 m
125 mm	70 x 198 mm	75 mm x 25 m
150 mm	70 x 420 mm	93 mm x 10 m
	81 x 133 mm	115 mm x 10 m
	93 x 180 mm	115 mm x 25 m
	115 x 230 mm	



Autonet®

📌 Specially developed for the automotive refinishing industry, Autonet is a new-age surface finishing solution offering speed, efficiency and an amazing dust extraction ability. The patented construction eliminates clogging and pilling and ensures a long lifespan, while other highlights include excellent initial aggressivity, reduced edge wear in finer grits and a versatile range to suit any application.

Technical specifications	
Grain	Aluminium oxide
Bonding	Resin over resin
Backing	Polyamide fabric
Coating	Closed
Colour	Grey
Grit range	P80, P120–P320, P400–P800

Available as:



- | | |
|--------|--------------|
| 77 mm | 70 x 125 mm |
| 125 mm | 70 x 198 mm |
| 150 mm | 70 x 420 mm |
| | 81 x 133 mm |
| | 93 x 180 mm |
| | 115 x 230 mm |

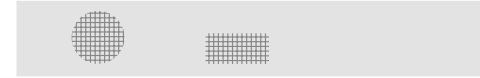


Abranet® Soft

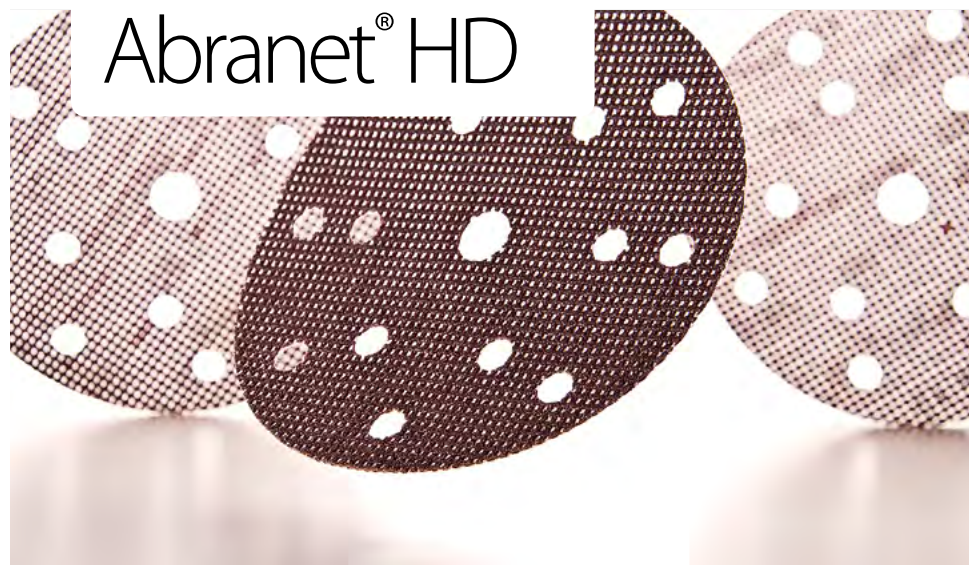
📌 A combination of Mirka's patented, highly effective sanding net and a thin foam layer, Abranet Soft is a type of sanding material that was developed to minimise clogging, whether being used for hand or machine sanding. The foam layer and open structure provide flexibility that allows the material to easily follow surface contours. Since dust collects in the foam layer during sanding, the result is a smooth surface finish. Abranet Soft is suitable for pre-polishing lacquered surfaces, while coarser grits can be used for intermediate sanding of lacquered wooden surfaces by hand. Recommended for wet sanding.

Technical specifications	
Grain	Aluminum oxide
Bonding	Resin
Backing	PA-net/foam/velcro
Coating	Closed
Colour	Maroon
Grit range	Discs P320, P500, P800, P1000 Pads P500, P800

Available as:



- | | |
|--------|--------------|
| 77 mm | 115 x 140 mm |
| 125 mm | |
| 150 mm | |



Abranet® HD

📌 Abranet HD is achieving outstanding results on the most challenging surface conditioning and repair applications such as paint stripping and , coarse putty sanding. Abranet HD has a nylon mesh backing material (in contrast to paper) to create a more flexible and durable abrasive product which produces a more consistent surface finish more quickly. Designed for optimum performance in wet and dry modes, it features exceptional resistance to edge wear and clogging which means it retains its high efficiency sanding properties for far longer, especially in demanding situations. It's also manufactured using an environmentally friendly, solvent-free coating.

Technical specifications	
Grain	Special aluminium oxide
Bonding	Resin over resin
Backing	Nylon mesh
Coating	Semi-open
Colour	Brown / white
Grit range	P40, P60, P80, P120–P180

Available as:







- | |
|--------|
| 125 mm |
| 150 mm |



OSP system

📌 Mirka's Abranet success story took a big step forward when the ground breaking OSP (Optimized Surface Preparation) system was introduced to the market. The OSP system is a dust-free solution for Automotive Refinishing, a simple standardized system with a clearly defined process and maximized performance. Easy to learn, with fewer steps than traditional systems and of course dust-free as the whole Mirka Abranet range.

Available as:

- | | | | |
|---|---------------------------------|---------------------------------|---------------------------------|
|  | OSP-1
77 mm
150 mm | OSP-2
77 mm
150 mm | OSP-3
77 mm
150 mm |
|  | OSP-1
70 x 198 mm | OSP-2
70 x 198 mm | OSP-3
70 x 198 mm |
|  | OSP-4
77 mm
150 mm | | |
|  | OSP-4
115 x 125 mm | | |

**KWH MIRKA LTD**
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please visit www.mirka.com

Quality from start to finish

