

The Mirka logo is displayed in a bold, black, sans-serif font on a bright yellow rectangular background. The background image of the entire slide is a close-up of a mechanical process where a red abrasive belt is being used to finish a polished metal roller. The roller is held in a fixture, and the belt is guided by a metal arm. The scene is industrial and well-lit, showing the texture of the metal and the grain of the abrasive belt.

MIRKA

Microfinishing Solutions for Industrial Roller Conditioning

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% 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.



Optimise Your Microfinishing Process for Unique Results

An ultra-smooth finish is essential for a wide variety of hightech business to business and business to consumer products. Adapting quickly to changing demands must be balanced with manufacturing efficiency in order to create a sustainable competitive advantage.

Smarter production methods are needed due to stronger competition, greater market segmentation, as well as an increasing need for product customisation. It is therefore essential to find an efficient, resourceful partner to co-create innovative microfinishing solutions. Joint development optimises the finishing process and ensures exclusive end product quality, with service that has both a local and global reach.



"Partnership is the key in solving complex surface finishing challenges."

Develop Your Productivity in High-Tech Surfaces

▶ How does your microfinishing process improve profitability?
Real profits are earned by optimising the productivity of the finishing process.

An ideal solution combines and optimises consistent ultra-smooth quality, a faster, cleaner production process and reduced downtime. When a unique surface finishing solution is required, choose Mirka's solutions and get concrete benefits.

Ultra-smooth finishing means fast, consistent and reproducible surfaces achieved through a fluent and cost-efficient microfinishing process.

Adding value with Mirka Superior surface finishing

- ▶ Optimised finishing processes
- ▶ Consistent quality
- ▶ Increased cost efficiency



Recommendations for use



Product	MI241D	MI232C	MI231C	MI231A	MI231G
Grain	Diamond Lapping film	Aluminium oxide, ceramic, cross pattern	Aluminium oxide, ceramic	Aluminium oxide	Silicon carbide
Properties	For hard surfaces	Antiloading	Tough cut	Fine cut	For soft & tough surfaces

Hard

Carbides	●				
Hard ceramic	●	●	●		
Hard Chrome	●	●	●		
Composite	●	●	●		●
Granite	●	●	●		●
Hard rubber	●	●	●	●	●
Soft ceramic		●	●	●	●
Steel		●	●	●	
Cast iron		●	●	●	
Polyurethane		●	●	●	●
Zinc soft surfaces		●		●	●
Soft rubber		●		●	●
Non ferrous steel		●			●
Copper		●			●

Soft

Our concepts cover both hard and soft materials, such as hardened metals and steel, aluminum, alloys, composites, plastic, polycarbonates, painted surfaces and glass.

- New advanced abrasive production line
- Flexible and fast set ups, enabling easy production of tailor made concepts
- High Tech on line monitoring & quality control systems

- New coating technology enabling special pattern design for optimal sanding performance
- IPR (*Intellectual Property Rights*) have been secured both by own patent applications and technology licensing
- Close cooperation with microfinishing machine producers, research centers and universities to develop new solutions for demanding microfinishing applications

A Mirka Partnership Strenghtens Your Development Res



ources

Joint development

By involving Mirka at an early stage of your innovation process you can also utilize the strength of joint development. Combining know-how and development resources allowing joint development of optimally engineered surface finishing solutions that match your particular requirements. Moreover, a competent, global microfinishing partner adds value and enables you to focus on your own expertise. Mirka is a solution-focused partner, providing skilled resources for joint development projects. Benefit from our comprehensive approach, modern Technology Center and Six Sigma certified R&D professionals.

Product development

We have over 70 years' experience in developing revolutionary sanding systems for visible and functional surface finishes for various fields such as the metal, paper and automotive industries. We offer a global-scale partnership with local technical and sales support that you can rely on. To ensure high business standards, all our solutions and products are developed and manufactured in Finland.

Technical support and training

Our latest investments include modern production facilities as well as a new Technology Center – demonstrating that we do more than just talk the talk. This international knowledge and training centre provides excellent resources for co-creating and testing new abrasive technologies and for training our partners' staff to use new innovative systems and tools.



Improve the Consistency of Roller Conditioning

Large-scale industrial roller surfaces must be consistent and precise in order to produce perfect products in a continuous process. Demanding roller applications are many - from metal, paper and film industries to printing industry. How to secure roundness and cylindricity, how to prolong service intervals and reduce the maintenance time of the rollers? Mirka has microfinishing specialists who specifically focus on rollers, to help you find the ideal microfinishing solution.

Combine ultra-smooth surface finishing and cost efficiency

Perfect roller conditioning is linked to productivity. Perfect roller conditioning correlates with productivity. New surface finishing

techniques enable a cleaner roller conditioning. Customized finishing processes with better roughness values guarantee required tolerances and savings in roller conditioning material can be achieved. Fewer and shorter maintenance stops provide extra benefits in production.

- **Consistency of surface finishing**
- **Reduced material, production, maintenance and cleaning costs**
- **Improved process speed and uptime**

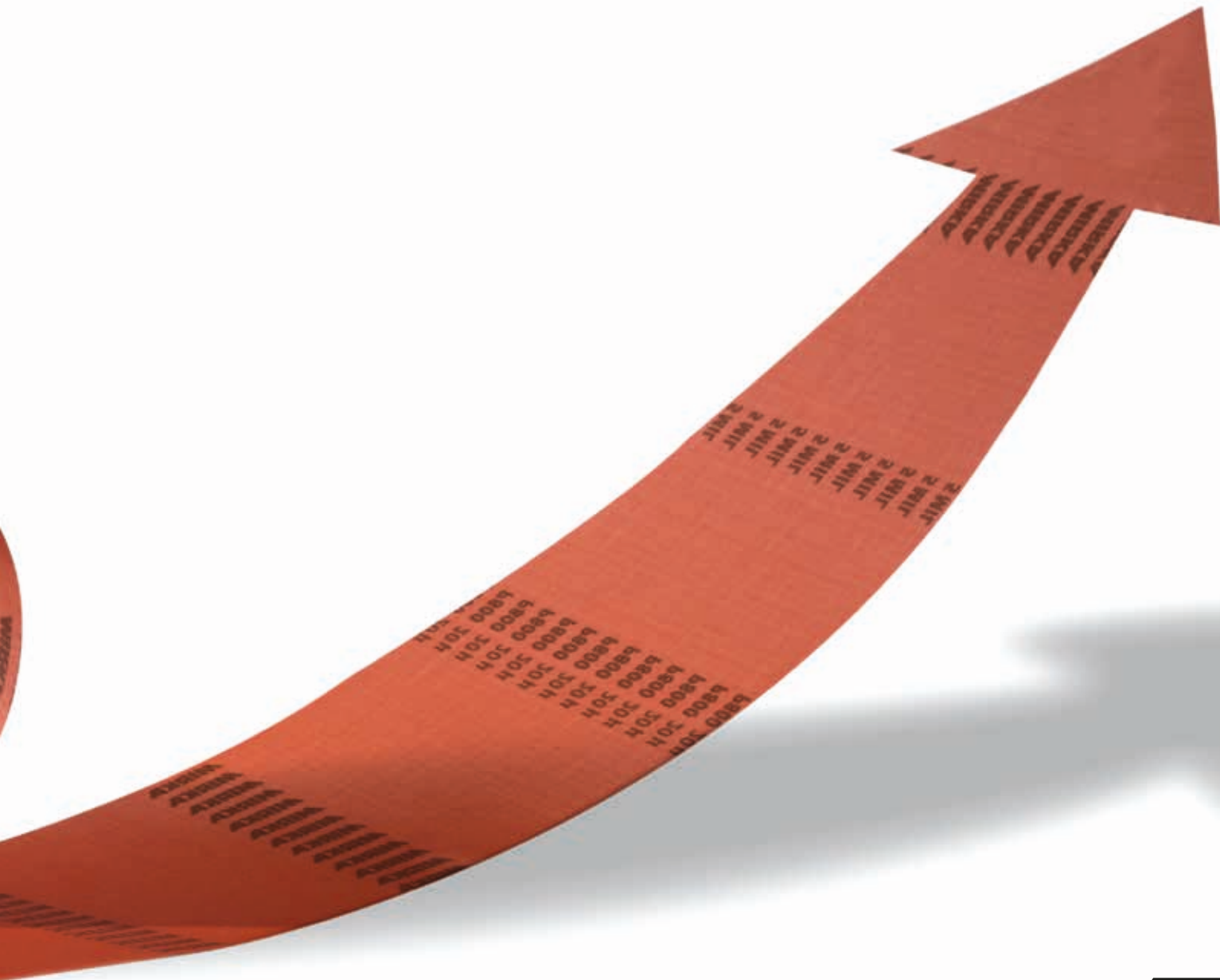
An Ideal Microfinishing Partner with a Fast and Reliable Sup

Understanding the nature and challenges of metal, paper and printing industries provides a solid basis for comprehensive service and cooperation. We offer a global-scale partnership with local technical and sales support that you can rely on.

Fast, flexible and reliable deliveries are important in industrial processes. Mirka's microfinishing products are produced against customers' orders and supplied through our own local warehouses located on each continent.



Supply Chain



Industrial Roller Conditioning Products

Microfinishing film abrasives

MI232C

This new microfinishing film product is designed for the surface finishing of industrial rollers. The material is available on a 5MIL anti-slip backing. MI232C is manufactured to the highest standard using the most technically advanced materials and processes, capable of producing a consistently high quality film product. MI232C has a semi open grain distribution, which in combination with a designed cross pattern (patented by Mirka) makes the product resist surface loading and produce consistently fine surface scratch patterns during use.

Application can be wet with lubricants or dry.



Technical specifications	
Bonding	Low VOC resin system
Grain	Aluminium oxide with ceramic coating
Coating	Semi-open on a cross shaped coating pattern
Colour	Red
Grit range	20µ (P800), 30µ (P500), 40µ (P360)
Backing	5MIL Polyester film

MI231C

This new microfinishing film product is designed for the surface finishing of industrial rollers. The material is available on a 5MIL antislip backing. MI231C is manufactured to the highest standard using the most technically advanced materials and processes, capable of producing a consistently high quality film product. MI231C has a semi open grain distribution.

Application can be wet with lubricants or dry.



Technical specifications	
Bonding	Low VOC resin system
Grain	Aluminium oxide with ceramic coating
Coating	Semi-open
Colour	Red
Grit range	20µ (P800), 30µ (P500), 40µ (P360)
Backing	5MIL Polyester film

MI231A

This new microfinishing film product is designed for the surface finishing of industrial rollers. Depending on the application, there are two thicknesses of anti-slip backing film material available, 3MIL or 5MIL. MI231A is manufactured to the highest standard using the most technically advanced materials and processes, capable of producing a consistently high quality film product. MI231A has a semi open grain distribution that will resist surface loading and produce consistently fine surface scratch patterns during use.

Application can be wet with lubricants or dry.



Technical specifications	
Bonding	Low VOC resin system
Grain	Aluminium oxide
Coating	Semi-open
Colour	White
Grit range	9µ (P2500), 15µ (P1200), 20µ (P800), 30µ (P500), 40µ (P360)
Backing	3MIL/5MIL Polyester film

MI231G

This new microfinishing film product is designed for the surface finishing of industrial rollers, with a focus on softer surfaces. Depending on the application, there are two thicknesses of anti-slip backing film material available, 3MIL or 5MIL. MI231G is manufactured to the highest standard using the most technically advanced materials and processes, capable of producing a consistently high quality film product. MI231G has a semi open grain distribution that will resist surface loading and produce consistently fine surface scratch patterns during use.

Application can be wet with lubricants or dry.



Technical specifications	
Bonding	Low VOC resin system
Grain	Green Silicon Carbide
Coating	Semi-open
Colour	Green
Grit range	15µ (P1200), 20µ (P800), 30µ (P500), 40µ (P400)
Backing	3MIL/5MIL Polyester film

MI241D

This slurry coated diamond film product is designed for very hard surfaces such as carbide, ceramics, composites and hardened metals. The material is available on a 5MIL film in grit 60µ and 3MIL film for 45µ, 30µ, 15µ, 9µ and 3µ.

MI241D is manufactured with precisely graded diamonds producing a consistently high quality film product. MI241D has a smooth and strong polyester film backing to provide a consistent surface finish.



Technical specifications	
Bonding	Resin bonded
Grain	Diamond
Coating	Slurry
Colour	Colour coded grits
Grit range	60µ, 45µ, 30µ, 15µ, 9µ and 3µ
Backing	Polyester film

Industrial Roller Conditioning Products

Microfinishing net abrasives

Abranet® Ace

Abranet Ace is developed for tougher and more demanding sanding applications. Because of its optimised net construction and ceramic grains Abranet Ace offers superior cut and performance on various surface materials and is excellent for cleaning of different industrial rollers.



Technical specifications	
Bonding	Resin over resin
Grain	Ceramic/Ceramic coated
Coating	Closed
Colour	Light maroon
Grit range	P80–P240, P320–P1000
Backing	PA-Net

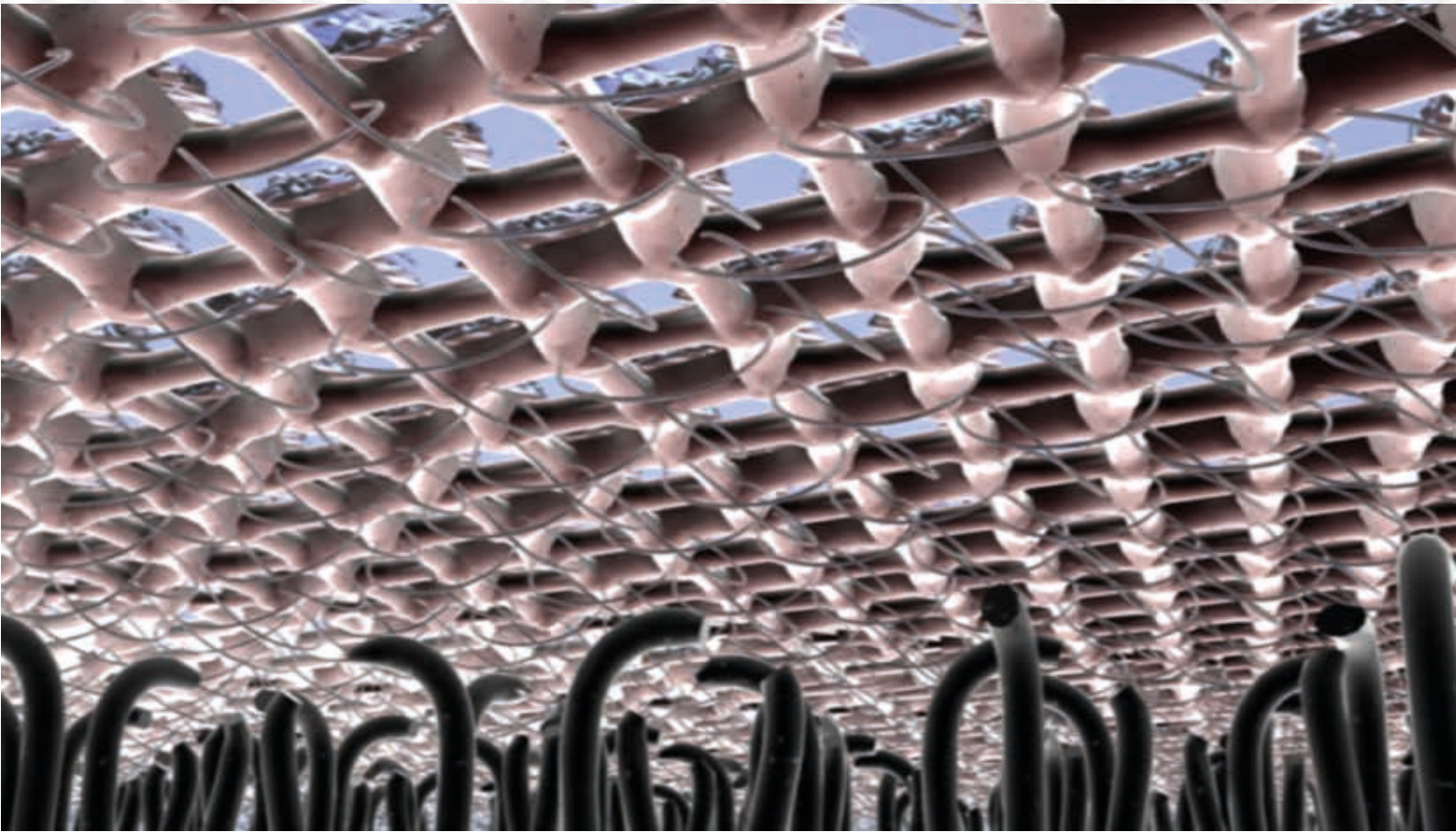
Abranet® NS

Abranet NS, a multifunctional net abrasive without stearate. A combination of high performance and a longer lifespan than traditional abrasives gives a cost effective solution. Abranet NS is excellent for cleaning of different industrial rollers.



Technical specifications	
Bonding	Resin over resin
Grain	Aluminium oxide
Coating	Closed
Colour	Brownish
Grit range	P80–P180, P240, P320–P1000
Backing	PA-Net

The Secret Behind Abranet®



➔ A modern production process requires a sanding material which is efficient and reliable. The open structure of Abranet prevents clogging and enables faster sanding. The patented construction consists of a dense network of polyamide fabric threads onto which the abrasive grit is bonded.

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

