

Abrasives for contour and  
surface grinding in the metal industry



# Genuine STARCKE. Since 1829.



## EXCELLENCE IS NOT A MATTER OF CHANCE

**A**brasives from STARCKE are typical “Made in Germany” quality. For customers and partners world-wide, this means they can rely on a leading supplier for professional abrasive operations in industrial manufacturing. We offer efficient solutions ensuring perfect results in all lines of industry and areas of application.

**T**he STARCKE organization is a medium-sized and independent fourth-generation family-run business and ranks among the leading suppliers of quality abrasives. For more than a century, STARCKE abrasive cloth and paper have been used to give the

required finish to all kinds of different products, ensuring top-quality results.

**Q**uality is one of our top priorities and continually reviewed. This involves inspecting our batches on a regular basis and documenting the results. In addition to being ISO 9001 certified, STARCKE also complies with individual customer-defined standards, for example in the automotive industry.

## OUR KNOW-HOW IN METALWORKING

We are the specialist for the processing of metallic materials and workpieces. Our abrasives always provide you with an economical solution, from pre-grinding to polish-like high-gloss surfaces.

### **We offer this perfect result through:**

- Customized advice
- Impressive supply programme
- Consistent product quality “Made in Germany”
- Reliable supplies



# METAL EXPERTISE

Your partner for all grinding application in metalworking



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# Contour grinding

The hand-guided and robot-guided dry contour grinding method is used to process aluminium, stainless steel and brass at high volumes. Grinding tools specialised in these applications are based on highly-flexible cloth backings with silicon carbide and aluminium oxide as the cutting materials.



## ARTICLE 942 J

Backing	Light J-weight cotton cloth
Grain type	Silicon carbide
Coat	Semi open
Grits	P80 - P180, P240 - P320
Applications	Faucets, Implants, Turbine blades

Material	Non-ferrous metal, Stainless steel, Titanium
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### Benefits



- Good adaptation to highly contoured workpieces due to the flexible and smooth J-weight cotton cloth backing
- Ideal belt tracking due to the alignment of the backing
- Long service life due to the ideal self sharpening effect of the silicon-carbide abrasive grain
- Achieving high class surfaces by precisely coated abrasive grain

## ARTICLE 541JF

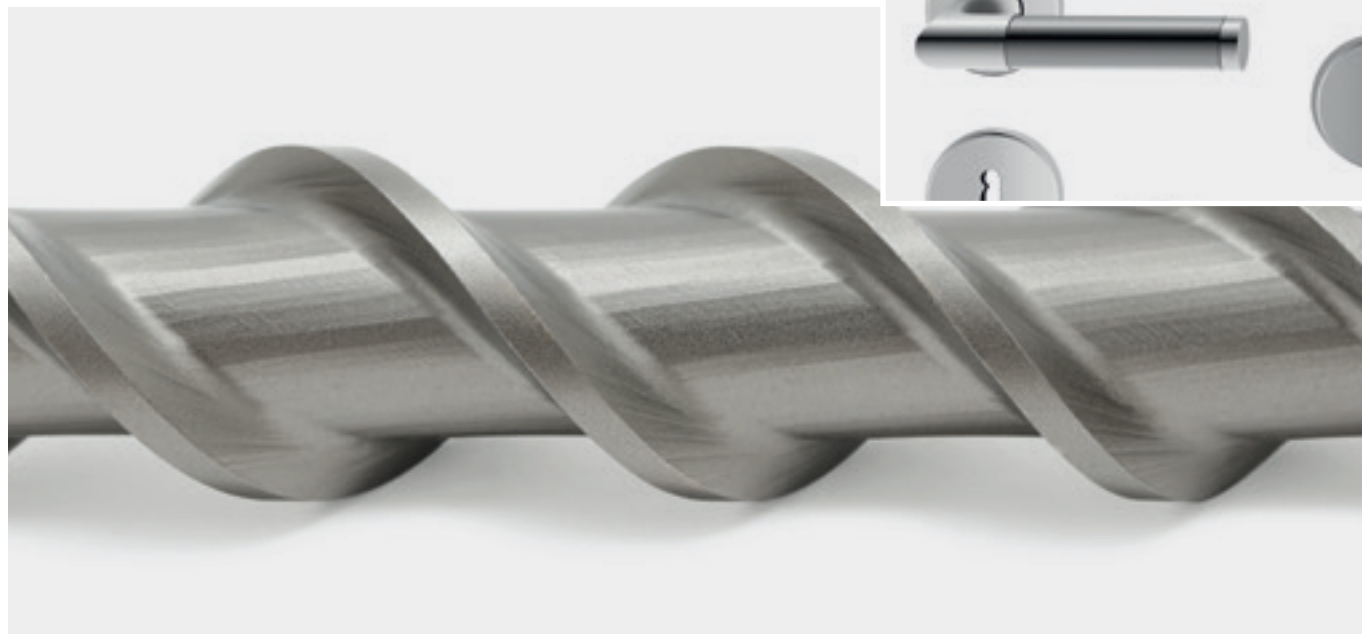
Backing	Light, flexible J-weight poly-cotton cloth
Grain type	Aluminium oxide
Coat	Closed
Grits	P60 - P400
Applications	Knives and cutlery, Implants, Door handles and dress plates

Material	Aluminium, Non-ferrous metal, Stainless steel, Steel
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### Benefits



- Smooth grinding transition from flat to moulded surface areas on light contoured workpieces due to the flexible cotton-polyester cloth backing
- Cutting egde modified aluminum oxide grain for a more efficient and a more cooler grinding



#### ARTICLE 531 JFF

Backing Light, highly flexible J-weight cotton cloth

Grain type Aluminium oxide

Coat Closed

Grits P60 - P400, P600 - P1200

Applications Door handles, Cutlery, Faucets

Material Aluminium, Non-ferrous metal, Stainless steel, Steel

Benefits

- Closed coated strong aluminium oxide grain for efficient grinding giving a superb finish
- Good adaptation to extremely moulded workpieces due to the light and highly flexible backing
- Cotton backing, easily to tear for offhand applications



#### ARTICLE 542JFF

Backing Light, extremely flexible J-weight cotton cloth

Grain type Aluminium oxide

Coat Semi open

Grits P60 - P320 + P400 - P600

Applications General hand grinding, Aluminium and stainless steel door handles and dress plates

Material Aluminium, Non-ferrous metal, Stainless steel

Benefits

- For machine grinding very good conformity to the contoured surfaces due to an extremely flexible J-weight cotton cloth backing
- Advanced stock removal on aluminium and non-ferrous metal items caused by the semi open abrasive grain coating
- Very good hand grinding properties on contoured work-pieces achieved by the highly flexible cotton cloth backing



# Contour grinding – cooling active

High-performance materials such as titanium and stainless steel, also known as nickel-chromium steel, require special grinding tools that can reliably dissipate the generated process heat. The right combination of a highly flexible backing, high-performance cutting material and suitable cooling coating are the basis for high-quality results.



## ARTICLE 552JFF

Backing	Light, extremely flexible J-weight cotton cloth
Grain type	Aluminium oxide
Coat	Semi open
Grits	P60 - P320, P400
Applications	Surgical instruments, Implants, Door handles and dress plates
Material	Stainless steel
Benefits	<ul style="list-style-type: none"><li>• Smooth grinding transition from plane to moulded surface areas on contoured workpieces due to the extremely flexible cotton cloth backing</li><li>• The special top coat gives a cool grinding, resulting in a higher output</li></ul>



## ARTICLE 562JFF

Backing	Extremely highly flexible J-weight cotton cloth
Grain type	Aluminium oxide
Coat	Semi open
Grits	P60 - P320 + P400
Applications	Surgical industry, Implants, Door handles, Fittings
Material	Stainless steel, Titanium
Benefits	<ul style="list-style-type: none"><li>• Extremely highly flexible backing for grinding moulded workpieces to achieve a very uniform surface</li><li>• Special active filler in the top coat for a cool grinding process to reduce heat</li><li>• High quality aluminium oxide grain for a extended belt life</li></ul>







#### ARTICLE 052J

Backing	Flexible J-weight cotton cloth
Grain type	Ceramic + Aluminium oxide
Coat	Semi open
Grits	P60 - P220
Applications	Implants, Turbine blades, Knives & Cutlery

Material	Stainless steel, Titanium
Benefits	<ul style="list-style-type: none"> <li>Clearly defined micro crushing of the abrasive grain for ideal self-sharpening and long life</li> <li>Special top-coat for a cool and consistent abrasion</li> <li>Best adaptation of the flexible and smooth J-weight cotton cloth backing to contoured workpieces</li> </ul>



#### ARTICLE 052JFF

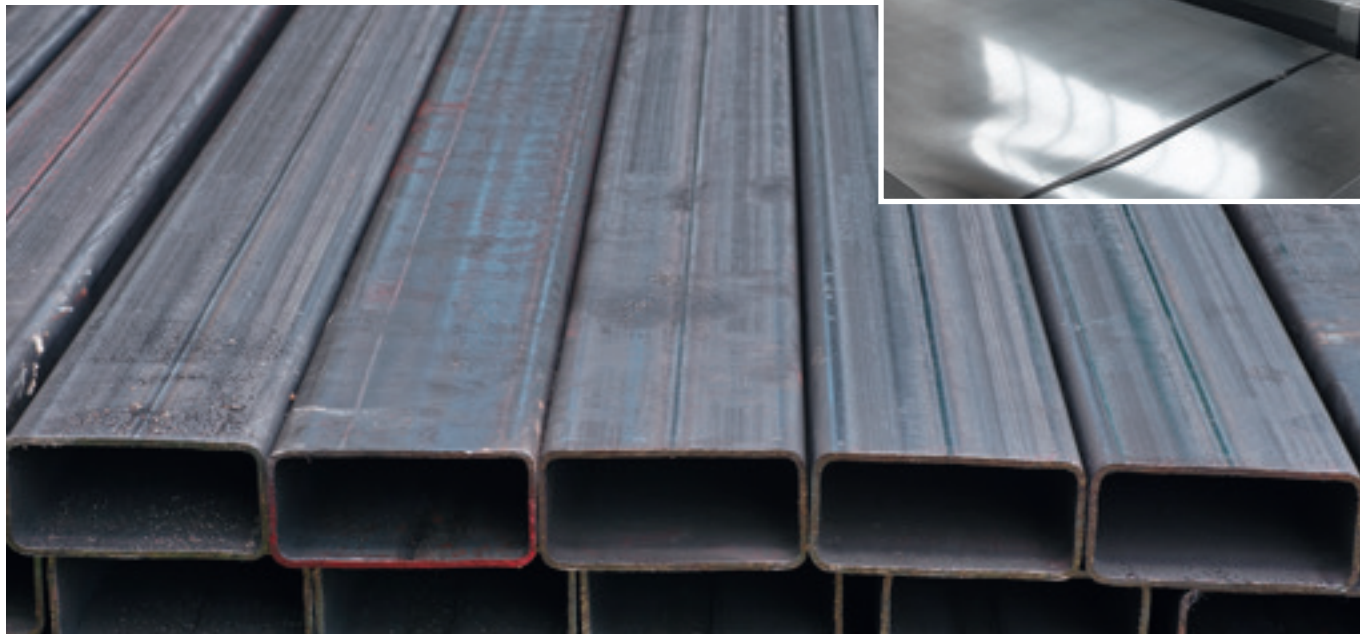
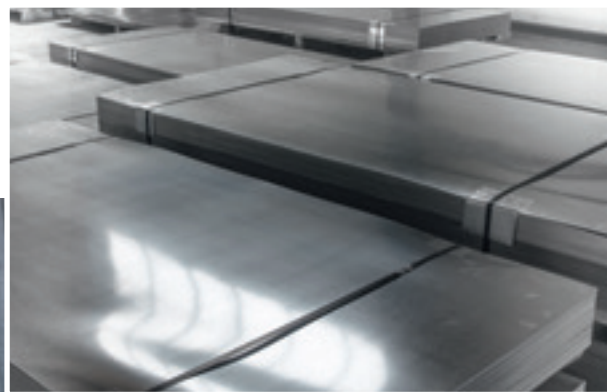
Backing	Light, extremely flexible J-weight cotton cloth
Grain type	Ceramic + aluminium oxide
Coat	Semi open
Grits	P80 - P150
Applications	Implants, Turbine blades, Cutlery

Material	Stainless steel, Titanium
Benefits	<ul style="list-style-type: none"> <li>Clearly defined micro crushing of the abrasive grain for ideal self-sharpening and long life</li> <li>Special top-coat for a cool and consistent abrasion</li> <li>Best adaptation of the flexible and smooth J-weight cotton cloth backing to contoured workpieces</li> </ul>



# Surface grinding

The broad field of surface grinding covers the processing of carbon steels, nickel-chromium steels and aluminium alloys. For each dry grinding process, special grinding tools equipped with solid backings and high-performance cutting materials are available.



## ARTICLE 641XYP - 641XP

Backing Heavy X- or XY-weight polyester cloth

Grain type Aluminium oxide

Coat Closed

Grits P24 , P36 , P40, P60-P180, P240

Applications Aluminium Castings, Welding seams, Rectangular tubes

Material Aluminium, Stainless steel, Steel

Benefits

- The extremely robust polyester backing allows superb stock removal
- This particular polyester backing with its high tensile resin bonding of the aluminium oxide grain guarantees edge stability when deburring cast materials



## ARTICLE 540F

Backing F-weight Paper

Grain type Aluminium oxide

Coat Closed

Grits P40, P60, P80, P120-P180, P240, P320, P400

Applications Coil and thin plate processing, General backstand grinder processing, General metal working

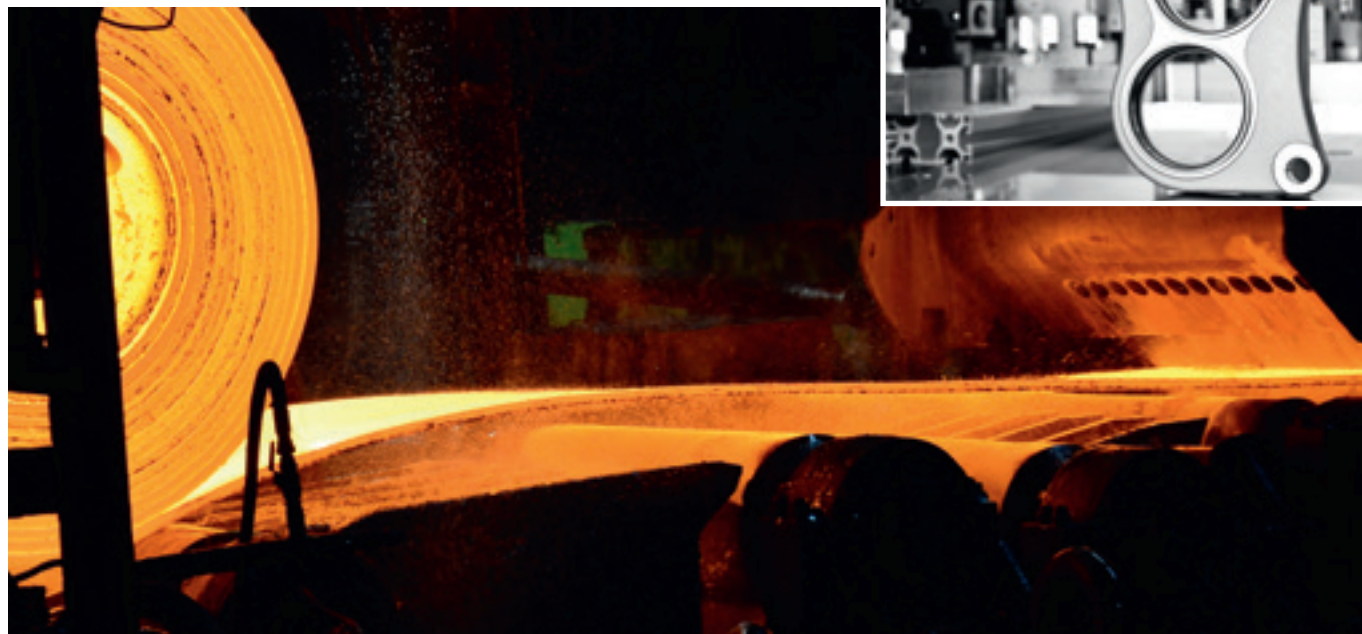
Material Aluminium, Non-ferrous Metal, Stainless steel, Steel

Benefits

- High stock removal rates by robust F-weight paper backing
- Long service life due to large amount of grain
- Achieving high class surfaces by precisely coated abrasive grain







#### ARTICLE 141XYP - 141XP

Backing	Heavy XY- or X-weight polyester cloth
Grain type	Zirconia
Coat	Closed
Grits	P24, P36-P120
Applications	Warm and cold rolled steel plates and coils, Welding seams, Aluminium castings, Tools

Material Stainless steel, Steel

#### Benefits

- Extremely high grinding performance due to high quality zirconia abrasive grain
- A strong tear resistant backing allows high grinding pressure and impressiv stock removal
- The high quality polyester backing allows dry and wet grinding applications



#### ARTICLE 341XP

Backing	Heavy, poly-cotton cloth, emulsion and oil resistant
Grain type	Zirconia + Aluminium oxide
Coat	Closed
Grits	P24, P36-P120
Applications	Turbine blades, Implants, Aluminium castings, Welding seams

Material Aluminium, Stainless steel, Steel

#### Benefits

- Long belt life when deburring and removing lugs due a very stable poly-cotton backing
- The self sharpening effect of the zirconia and aluminium oxide grain combination guarantees extended belt life
- With its cool cut 341XP will reduce heating of the workpiece
- Superior cutting performance owed to the durable zirconia grain



# Surface grinding – cooling active

High-performance materials such as titanium and stainless steel, also known as nickel-chromium steel, require special grinding tools that can reliably dissipate the generated process heat. The right combination of a solid backing, high-performance cutting material and suitable cooling coating are the basis for high-quality results.



## ARTICLE 151XYP - 151XP

Backing	Heavy XY- or X-weight polyester cloth
Grain type	Zirconia
Coat	Closed
Grits	P36, P40, P60-P120
Applications	<b>Coil grinding:</b> Removing of black scale and mill scale <b>Container grinding:</b> Deburring of welding seams, Stainless steel implants, Virgin steel deburring
Material	Stainless steel, Steel
Benefits	<ul style="list-style-type: none"> <li>• Highest stock removal rate due to premium zirconia abrasive grain and special top coat</li> <li>• Very long service life and cool grinding effect due to special grinding additives</li> <li>• Particular suitable for high grinding pressure because of heavy XY- and X-weight polyester cloth backing</li> </ul>



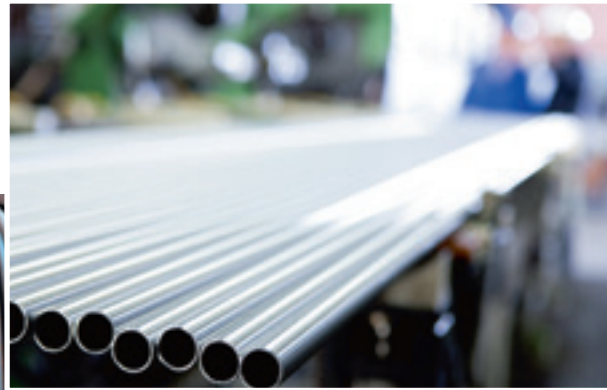
## ARTICLE 051XYP - 051XP

Backing	Heavy XY- or X-weight polyester cloth
Grain type	Ceramic + Aluminium oxide
Coat	Closed
Grits	P24, P36, P40, P60, P80, P120
Applications	<b>Coil grinding:</b> Removing of black scale and mill scale <b>Container grinding:</b> Deburring of welding seams, Stainless steel implants, Virgin steel deburring
Material	Stainless steel, Steel, Titanium
Benefits	<ul style="list-style-type: none"> <li>• Highest stock removal due to ceramic abrasive grain and special top coat</li> <li>• Very long service life and cool grinding effect due to special grinding additives and self sharpening effect</li> <li>• Particular suitable for high grinding pressure because of heavy XY- and X-weight polyester cloth backing</li> </ul>



# Wire and cylindrical grinding

Cylindrical grinding of wire and tubes relies on an extremely high performance potential of the grinding tools. High stock removal and long life grinding belts to cover the full application range of dry and wet grinding. High tear resistant polyester backing belts with its emulsion and water resistance are the basics for the specially designed grinding belts.



## ARTICLE PEARL GRINDING A41XP - C41XP

Backing	Heavy X-weight polyester cloth
Grain type	A41XP - Aluminium oxide agglomerate C41XP - Silicon carbide agglomerate
Coat	Closed
Grits	A41XP: P60, P80, P120-180, P240, P320, P400, P600, P800 C41XP: P80-P120, P180, P240, P320, P400, P600, P800
Applications	Coil and heavy plate processing, Grinding of round piping and rectangular tubing, Wire grinding
Material	Stainless steel, Steel, Titanium
Benefits	<ul style="list-style-type: none"> <li>• Very long belt life due to large amount of grain</li> <li>• Consistent stock removal due to the modified PEARL GRINDING grain bond</li> <li>• Less surface roughness from start to finish thanks to the specific PEARL GRINDING grain ball structure</li> </ul>



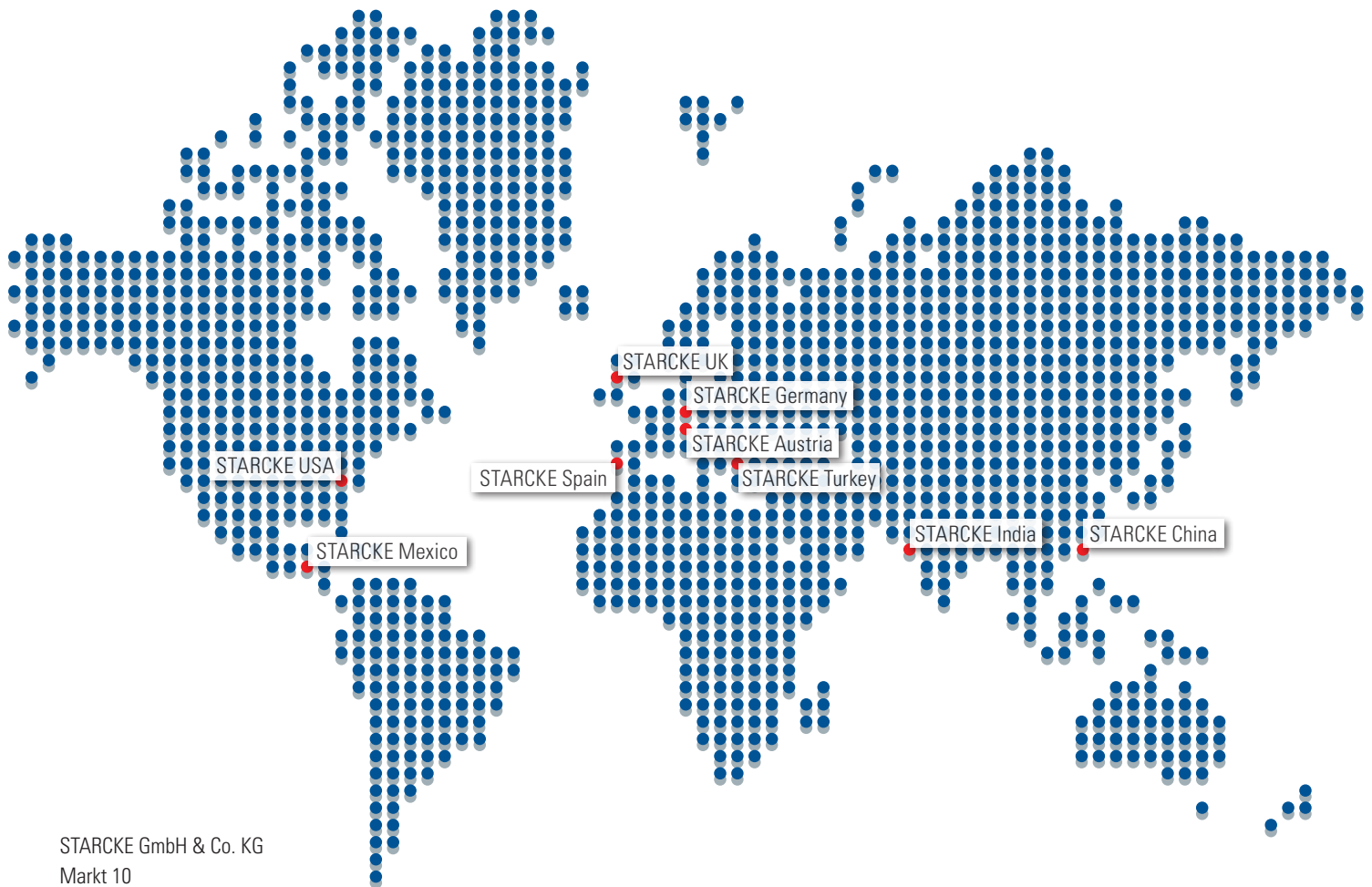
## ARTICLE 341XP

Backing	Heavy, poly-cotton cloth, emulsion and oil resistant
Grain type	Zirconia + Aluminium oxide
Coat	Closed
Grits	P24, P36-P120
Applications	Turbine blades, Implants, Aluminium castings
Material	Aluminium, Stainless steel, Steel
Benefits	<ul style="list-style-type: none"> <li>• Long belt life when deburring and removing lugs due a very stable poly-cotton backing</li> <li>• The self sharpening effect of the zirconia and aluminium oxide grain combination guarantees extended belt life</li> <li>• With its cut 341XP will reduce heating of the workpiece</li> <li>• Superior cutting performance owed to the durable zirconia grain</li> </ul>





## QUALITY THAT SPEAKS FOR ITSELF. Everywhere in the world.



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