

FINE GRINDING- & POLISHING TOOLS

Innovative solutions for high-quality surfaces and functional surfaces



Automotive

Aviation & Aerospace

Mechanical Engineering

Medical Technology

Semiconductor Technology

Tool Manufacturing

Industrial Knives / Knives / Blades

Food Industry

Jewelry Industry

Materialographic Sample Preparation



Innovative grinding technology since 1895

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The trend towards fine and polished surfaces is increasing year by year. In the medical and food industry, fine surfaces are used to minimize bacterial adhesion. While in gear and drive technology, the focus is primarily on reducing noise, friction reduction is the main concern in engine construction. In traditional mechanical engineering, for example, durability is of high importance due to reduced notch effect. Thus, component design can be optimized accordingly.

In many areas, roughnesses $\leq Ra\ 0.1\ \mu m$ are required. Due to the use of different materials (e.g. soft to hardened steels, ceramics or composite systems), the specification of fine grinding and polishing tools is crucial for surface results, productivity and tool life. Our PU bonding systems can be manufactured in different hardness grades and adapted to the respective application.

While material removal takes place in the grinding process, tips in the topography are mainly smoothed in the polishing process (creating a new topography). The fine grinding or polishing process involves a certain amount of pressure. The dressing process can be carried out with both stationary and rotating tools.

Typical Applications

- Polishing grinding of gears (automotive, aerospace, general mechanical engineering)
- Tool polishing grinding (e.g. chip flutes of carbide drills, form tools)
- Knife polishing grinding (industrial knives, scalpels, kitchen utensils)
- Glass and ceramic processing (protective glasses, lenses / lenses, wafers)
- Laboratory equipment (sample preparation)
- Jewelry industry (e.g. watch cases)

Abrasive	Grain size	Hardness	Bond systems
Silicon carbide	180-1500	L - S	P11X / P12X / P21X / P22X
Aluminum oxide			
Superhard	1-46 μm	L - Q	P11X / P12X / P21X / P22X

Advantages

- High-quality surfaces and functional surfaces
- Comprehensive product portfolio for all fine grinding and polishing applications
- Customized solutions with quality tools
- Comprehensive customer service and support worldwide
- Continuous development through R&D
- On-time delivery, fast delivery times and flexibility
- All products are „Made in Germany“
- Highest precision and excellent tool life
- Disc diameter up to 800 mm

