



# **ELKA**

Defined surfaces and technical precision

Metal grinding with ELKA-Elastic

Solass grinding with ELKA-Vitro



# Welcome to **ELKA-Elastic**

Founded in 1960, our company has developed over the years into one of the leading manufacturers of grinding wheels.

Profit from a partnership with us! We look forward to working alongside you in finding the "perfect mix", tailored to your requirements.

With sales partners across Germany and worldwide, we would be happy to advise you on-site at your company.

# Our **Production Location** in Wiedergeltingen

Our products are dispatched from our production plant in Wiedergeltingen, Bavaria, to companies across the world. These products assist in producing surfaces with technical and optical precision.

At our laboratory we develop solutions for individual applications, new product groups, innovations and serial processes.

We qualify our products and carry out preliminary tests inhouse, and work together with our customers to define process chains. This saves time and costs.

Experienced employees and modern production guarantee the satisfaction of our customers. For you and your applications, too!



# Our Technical Lead is Your Trump Card!

The call for complex and integrated technical processes is continuously increasing.

Industry can thus profit from strong innovation potential, allowing progress to flow into the production of modern machinery, assemblies or highly specialized individual components as well as serial parts. This leads to the generation of products which enable new applications, increase efficiency or save resources, for example.

In this context, production tolerances become tighter, process times briefer and the demand for technically and optically perfect surfaces greater.

With our know-how and our experience, we contribute to this development and accompany development processes from the laboratory to the serial production lines of our customers. This results in product solutions tailored to the individual grinding and polishing applications of our customers.

Elastic abrasives are indispensable in modern production.



# Over **55 years** of Company History Speak for Themselves!

- » 1960 ELKA is founded as a ceramic grinding wheel factory in Türkheim by ceramics engineer Mr. Lauhinger.
- » 1975 Phenolic resin bonded grinding and cut-off wheels are launched onto the market.

- » 1990 The company is taken over by Mr. Werner Leroch. A switch to the production of elastic bonded abrasives follows.
- » 1991 The company moves to today's production location (5,000 m² / approx. 54,000 ft²) in Wiedergeltingen.
- » 1998 The company is certified according to DIN ISO 9001.
- 2006 ELKA becomes an accredited apprentice training company. The first apprentice is trained as an industrial business management assistant.

Today, with its modern production facilities and 22 employees, ELKA covers a large, diversified market and performs global sales and service activities.

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# THE ELKA ELASTIC PRODUCT SPECTRUM

**Innovative** products for **individual** grinding operations

### AA: Grain types:

- » 10A brown aluminium oxide
- » 20A special aluminium oxide
- » 30A high purity white aluminium oxide
- » 10C green silicon carbide
- » 20C black silicon carbide

35A, 21C, etc.: Special abrasive combinations

### BB: Grain sizes according to FEPA

(mesh screen size) 16 – 1000

## CC: Hardness grades:

Our products are characterized by means of Shore Grades A and D

# Example specifications 10 C 150 A7 E100 636 AA BB CC DD EE

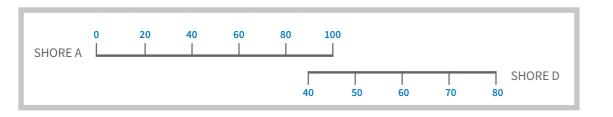
## DD: Bonding systems:

from the product groups PU and EP

#### EE

Based on our expertise and continuous development, we individually adapt our products to your process.

# Hardness grade



## **Grinding processes:**

## Surface grinding

- » Flat grinding
- » Single-face grinding
- » Double-face grinding

## External cylindrical grinding

- » Between centers
- » Centerless

# Internal cylindrical grinding

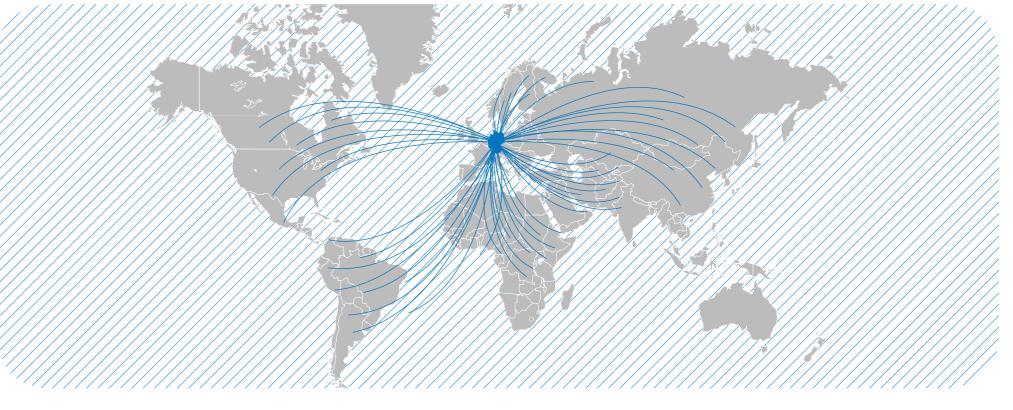
Multi-stage grinding processes
Special grinding processes

- » Path-controlled processes
- » Special machines

# **PROFIT**

from the Flexibility of our **Sales Partners** Worldwide

ELKA-Elastic is there for you with its own sales partners across Germany. Simply call us or contact us via our website www.elka-elastic.com and find your personal local contact.



ELKA-Elastic – Your strong global partner when it comes to individual solutions with abrasives and polishing agents. No matter where you and your company are located, we are the right point of contact for providing customized solutions for your applications.

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# **ELKA-ELASTIC COMFORT / CONTACT**

Porous elastic tools for non-specific solutions

Polishing, deburring, descaling, rounding and structuring with porous foamed abrasives are all established operations for processing parts and surfaces.

In all areas of production, elastic abrasives are used worldwide for rendering processes more efficient and comfortable, or even for making these processes possible in the first place.



## **APPLICATION AREAS**

Surgical instruments, cemented carbides, drive elements, spindles, shafts, jewellery, sheet metal





# **ELKA-ELASTIC HYBRID**

Compact elastic tools for precise machine processes

Surface processing with compact foamed tools is carried out in all technical areas in which conventional grinding tools reach their limits. Irrespective of whether a lubricoolant is used or not, the tool can be individually adapted to the process in an optimum way.

The defined degree of elasticity guarantees a harmonious process with minimized heat input. The geometry is generated according to customer specifications.



## APPLICATION AREAS

Tools, extruders, machine elements, rollers, blades

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# **ELKA-ELASTIC PRECISION**

Tools made of synthesized plastics with a compact structure

These tools are used in precision processes. They often represent the finishing operation in a production process, during which the final technical specifications are ensured.

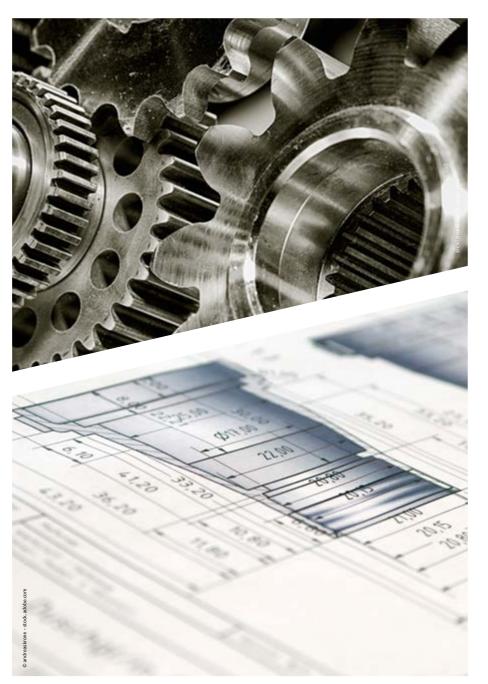
Here, surface values of Rz<0.5µm are achieved while still observing tight tolerances and attaining an increase in technically relevant parameters such as the contact ratio.

The efficient, fast and uncomplicated product for your technical application.



## **APPLICATION AREAS**

Automotive, storage and transmission technology, aviation, electrical engineering





# **ELKA-ELASTIC PRECISION CUT**

Additional cutting ability

Both the permanent further development of our bonding systems and the new development of bonding systems with various grain bonding strategies lead to diverse application possibilities, tailored to requirements from all areas of technology.

In this way, we can achieve optimum surfaces, even with hardened materials. Rz<0.5µm.



## APPLICATION AREAS

Tools, automotive, transmission technology

**ELKA-Vitro** 

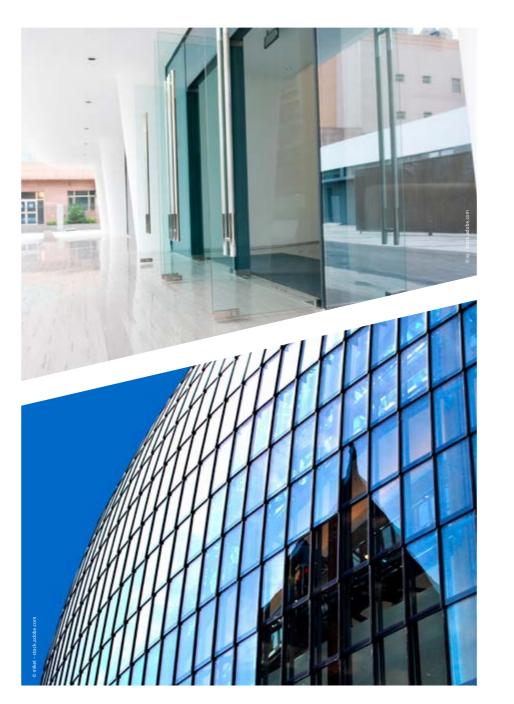
# **ELKA-VITRO**

Glass edge processing - Edge coating removal - Special machines

Glass is one of the oldest materials which people use and process. The single term "glass" stands for a multitude of amorphous structures of various compositions which find a broad spectrum of application. By virtue of its individual and unique properties, this material is modern, innovative and is always being reinvented for applications in all areas of life.



To fully exploit these properties, glass is processed and finished in a targeted way. Here, abrasives and polishing agents are also used. Our long-standing wealth of expertise enables us to meet and even exceed individual customer requirements as well as generate new application possibilities.





### GLASS EDGE PROCESSING

Flat glass, also known as float glass, is produced in a continuous process from molten glass. It is used in a multitude of everyday areas and we come across it all the time. To highlight design and colour features, particular attention is paid to the edges, which are ground and polished.

Here, we offer our customers tools for individual processing – to produce matt, satin or high-gloss glass surfaces. Elka-Vitro tools provide quality and efficiency on all customary single- and double-edge grinding machines for high-quality and cost-efficient processes.

When processing using peripheral wheels, we offer optimized product specifications for achieving perfect edge gloss as well as long tool life and minimized run-in behaviour. Complementing pre-processing operations, Elka-Vitro wheels provide the ultimate tool for grinding and polishing processes.

### **EDGE COATING REMOVAL**

To minimize energy losses in the window and facade area, low-e glass is used. The emission reduction is achieved by coating the float glass. Thinly applied metal layers need to be removed from the edge of the functional glass, however, in order to ensure reliable bonding of several glass panes and to prevent corrosion of the metal coating. Our wheels for edge coating removal can be used on all suitable manual and automatic machines, and they achieve a clean and reliable result.

### SPECIAL MACHINES

Based on empirical values from glass processing, we offer not only standard wheels (cup and peripheral wheels) but also special geometries. The established standard specifications can be adapted to individual processes. The wheel shape can be defined by the customer and is produced according to drawing.

