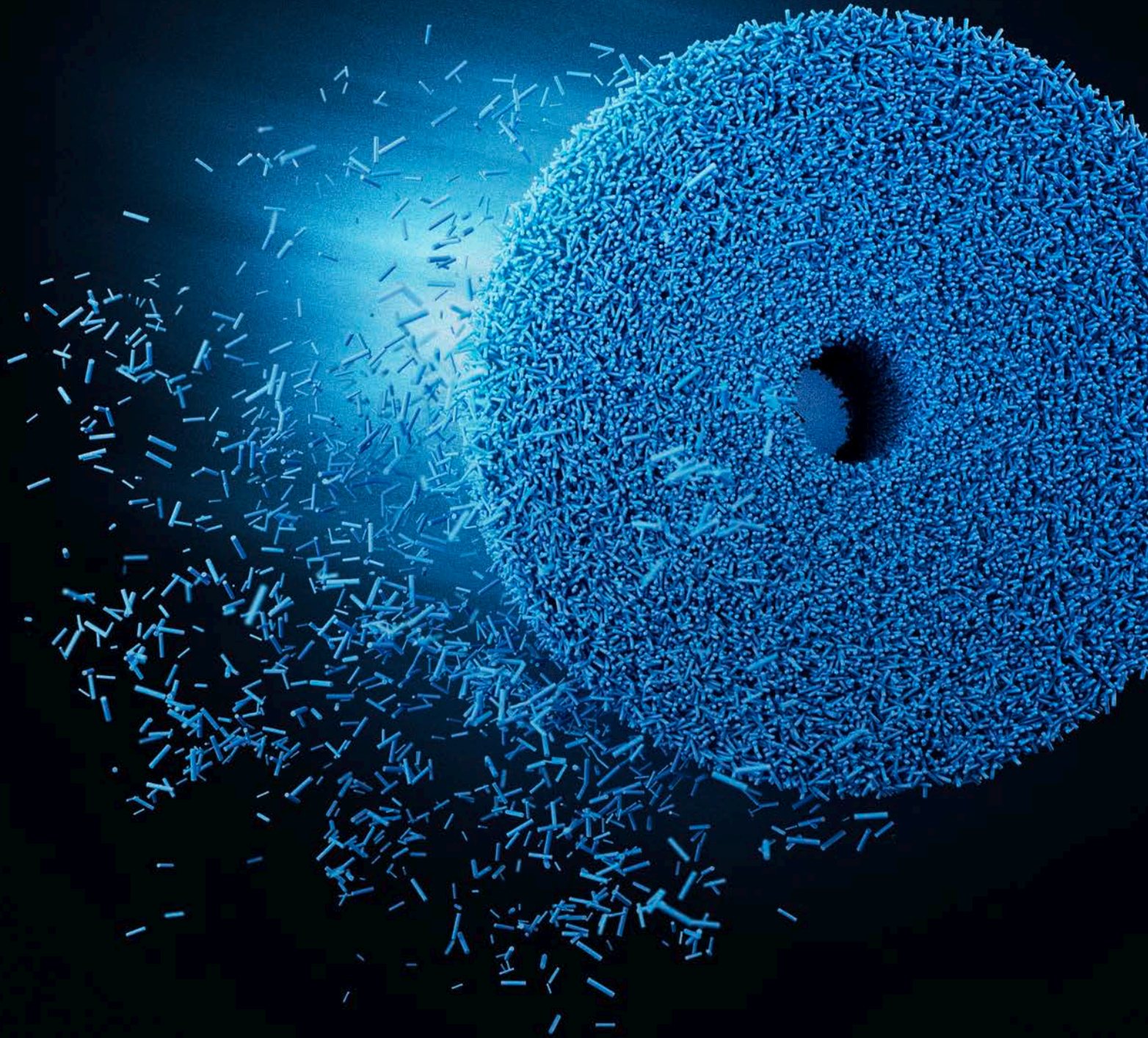


# ALPHA TECHNOLOGY

A new generation of grain



Premium grinding tools since 1919  
[www.tyrolit.com](http://www.tyrolit.com)

**TYROLIT**

## ALPHA TECHNOLOGY

EXCLUSIVELY BY TYROLIT

### New grain from in-house production

The MIRA, STRATO and VIPER products stand for the best results and consistent quality. While the MIRA range is used exclusively for the machining of gears, the STRATO and VIPER products are renowned in the manufacturing of turbine components, used in both surface grinding and creep feed grinding.

Now these product lines have been updated with ALPHA TECHNOLOGY and offer even higher performance coupled with significant benefits for customers worldwide:

- + More environmentally friendly production (less waste)
- + Reduced spindle load (less energy consumption)
- + Increased tool life
- + Fewer dressing cycles
- + Cool grinding
- + High profile retention

The production process for the grinding wheels has been switched to much more environmentally friendly materials - without the use of naphthalene. This makes the manufacturing process more energy-efficient and sustainable, as well as significantly reducing CO2 emissions from production.

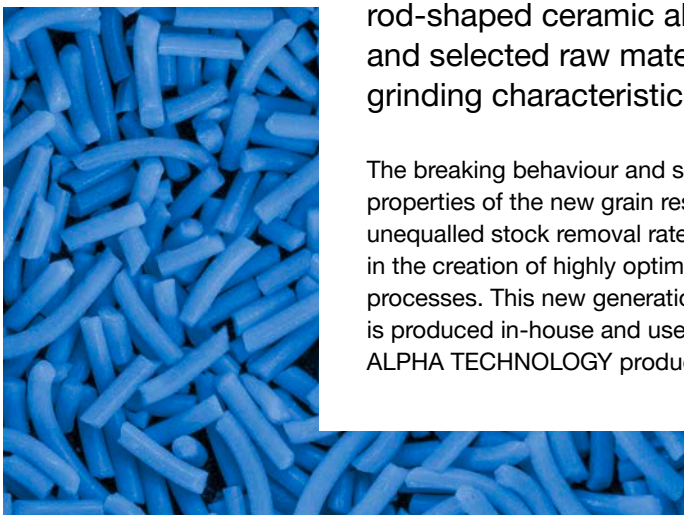


### A new generation of grain

The quality of our ALPHA products is mostly owed to the innovative grain used – BCA-ROD. Tyrolit defines a new performance level for rod-shaped ceramic abrasive grains. A carefully optimized process and selected raw materials lead to a grain with significantly improved grinding characteristics.

The breaking behaviour and self-sharpening properties of the new grain result in unequalled stock removal rates and help in the creation of highly optimised grinding processes. This new generation of grain is produced in-house and used in all our ALPHA TECHNOLOGY products.

A specialty of this grain is the controlled breakage during the grinding process – BCA-ROD has a significantly different fracture behaviour and thus ensures noticeably refined self-sharpening properties. This enables higher removal rates and grinding processes are improved significantly.



## ADVANTAGES

**+ Innovative grain geometry**

The new BCA-ROD grain offers controlled grain breakage and unique self-sharpening properties. It optimises grinding processes and enables higher removal rates.

**+ Sustainability by design**

More environmentally friendly materials and processes ensure increased energy efficiency and CO2 emissions from the production are significantly reduced.

**+ Cool grinding**

ALPHA guarantees consistently cool grinding and good chip removal over the entire lifetime of the grinding wheels despite increased grinding parameters.

**+ Process reliability**

The new technology provides consistently high profile retention and improved surface qualities on difficult workpieces, ensuring optimum grinding results at all times.



MIRA ALPHA



MIRA ALPHA BK



STRATO ALPHA



VIPER ALPHA

### Application example

Test parameters for examples:

**Cycle times:**

Grinding of ring gear (45 teeth) with a cup wheel

**Spindle loads:**

Profile grinding of machine parts

Cycle times **reduced by 50%**



Spindle loads **reduced by 15%**



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