



## **GENIS CF**

VITRIFIED BONDED CBN GRINDING TOOLS  
WITH COMPOSITE CORES FOR EXTERNAL  
CYLINDRICAL GRINDING

# GENIS CF

With GENIS CF, TYROLIT is extending the performance spectrum of the GENIS product line with an innovative, fibre-reinforced composite core for numerous external cylindrical grinding applications. In addition to a weight reduction of up to 80 percent, this tool concept is characterised by special damping abilities, which lead to improved grinding results and increased tool life.

### Application

External cylindrical grinding and peel grinding of shafts, predominantly in the automotive and components industry



+ **Low weight:** GENIS CF grinding tools are up to 80 percent lower in weight compared to versions with steel cores. This simplifies handling and protects the machine.

+ **Best damping:** Through the use of fibre-reinforced composite cores, vibration is reduced and workpiece quality (chatter marks, runout tolerance, roundness) is improved significantly.

+ **High economic efficiency:** In conjunction with a customised abrasive layer, the innovative core guarantees maximum stock removal performance and increases production capacity.



+ **Replating option:** GENIS CF tools can be replated several times by applying a new abrasive layer. This significantly reduces the proportional tool costs.

+ **Simultaneous machining:** Due to the reduced overall weight, different grinding operations can be performed simultaneously in one process step. This considerably reduces machining time.

## Example of application

Grinding time reduced by 25%



Peel grinding of a gear shaft  
 Material: Steel (hardness: 50-58 HRC)  
 Machine: Junker Quickpoint / coolant: oil  
 Dimensions: 350 x 25 x 126.94  
 Grinding wheel: GEN B126V CF