



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