RESIN AND METAL BOND

SOFT RESIN BONDING

Resin bonds have a wide range of applications. From fine polish-grinding through to creep-feed processes with high metal removal rates: The resin bonded wheel is an excellent compromise both in dry and wet grinding. The most frequent application is grinding of high-speed steels (HS) and carbides (HW, HF, HT).

The manufacturing process using resin bonds requires no pores, so their application field has been restricted in favor of vitrified bonds. Normally, these bonding systems can only be profiled on offline dressing devices and are therefore unsuitable for all grinding tasks.

TOUGH METAL BONDING

Sintered metal bonding combines high bonding hardness with toughness. Abrasive grits are firmly embedded by the bond and are released slowly. Therefore, they generate a relatively high amount of heat which must be compensated by excellent process cooling. Process-parallel profiling is not normally possible and must therefore be performed on external machines.

Excellent applications for metal bonding are grinding wheels for intricate profiles which must achieve long service lives without profiling.