Induction Motor
Wieland K60 & K75

For high-speed induction motors, the aluminium materials frequently used in the rotor of the induction motor have reached their strength limits. For this application, Wieland is able to meet almost all strength requirements at high speeds with a wide range of copper alloys such as the high-strength Wieland K60 (CuCrZr) or Wieland K75 (CuCrSiTi) and is already supplying initial quantities of fabricated copper rotors for induction motors.

The disc-shaped, welded copper rotor offers the following advantages:

– Optimum contact resistance in the joining connection through welding processes
– No high thermal load on the short-circuit ring and lamination stack as happens with die casting or soldering through radial welding
– Specific different material combinations (copper alloys) at surface speeds > 100 m/s possible
– No pores/inclusions thanks to solid material in the rotor bar and short-circuit ring
– Shorter production times and consequently cost-efficient production of large quantities, compared to soldered or cast rotors