

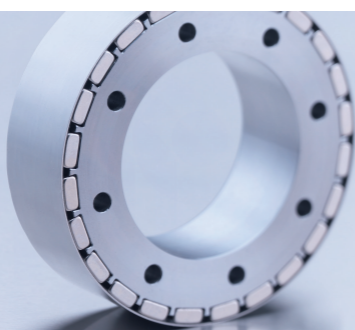
WHO WE ARE

e+a is one of the world's leading companies in the field of customized motor elements for electrical direct driven machines and your partner for:

- High speed and high torque
- High efficiency and Swiss quality
- The design of built-in motor applications

Facts and Strengths

- More than 30 years of experience
- Reliability and quality matters
- Individual solutions and complementary services
- From prototyping to several thousand units per series



WHAT WE DO

We design, calculate and manufacture customized stator and rotor elements. Projects are realized in various industry branches:

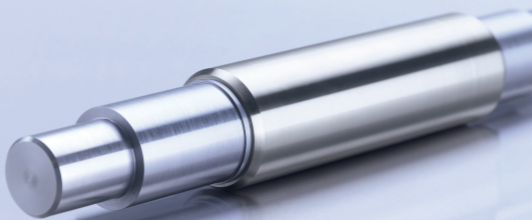
- ✦ Machine tool
- ✦ Energy generation
- ✦ Concrete cutting
- ✦ Automotive
- ✦ Vacuum pumps
- ✦ Test bench
- ✦ Compressor
- ✦ Medical application

So far up to 1 MW and up to 500,000 rpm!

THE SERVICES WE PROVIDE

e+a provides support

- during tests and initial operation
- for converter configuration
- for loss and temperature measurements
- through non-recurring-engineering tasks (NRE)
- through consulting and prototyping
- through providing a network of converter and magnetic bearing partners
- according to individual customer requirements



e+a at a glance

e·i·a

Elektromaschinen
und Antriebe

Beyond motor elements

OUR TECHNOLOGY

Stator variations

- Vacuum pressure impregnation (VPI)
- Vacuum potted (ALKA™, ENCA™)
- In cooling jacket or housing

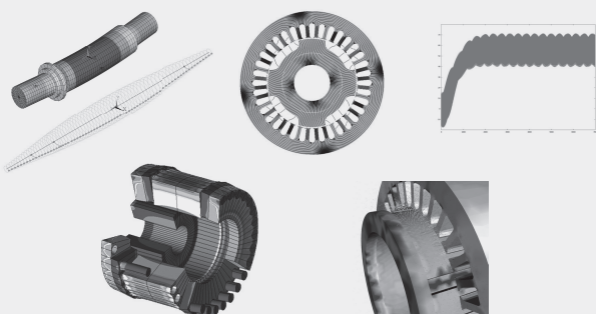
Winding variations

- Distributed
- Concentrated
- Air gap

Rotor variations

- Induction machines
 - Aluminium die cast rotors
 - Laminated copper rotors (up to 240m/s)
 - Copper profile rotors
- Synchronous machines
 - Surface mounted or buried magnets
 - Own carbon fiber sleeve production
 - Metallic sleeves
 - Reluctance rotor
 - Integrated in shaft (surface or core magnet design)

OUR CALCULATION METHODS



- Electromagnetics
- Mechanics
- Rotordynamics
- Acoustics
- Thermal

Validated through in-house test bench.

OUR MACHINE TYPES



- Induction machines
- Permanent magnet machines
- Synchronous torque motors
- Asynchronous torque motors
- Reluctance machines

