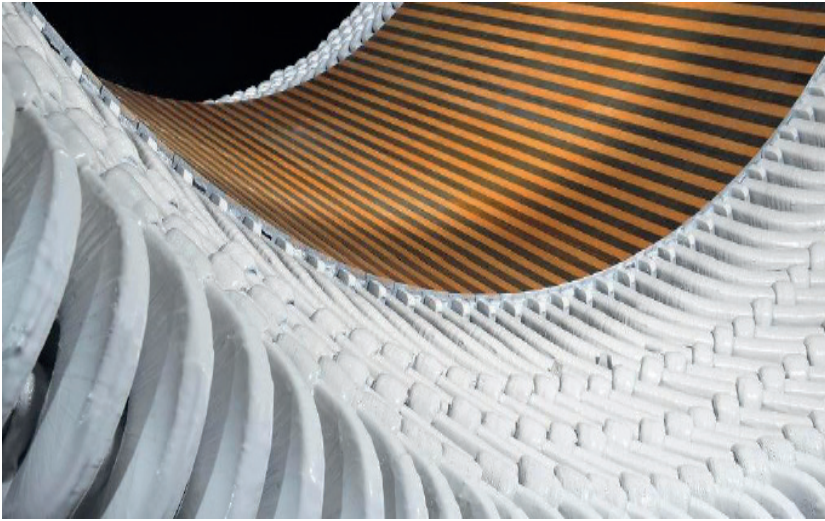


Engineering Services



Birr Machines Ltd

Electrical Machines offers products and services to guarantee a high level of availability for your motors and generators in the range of 500 kW to 30 MW in order to prevent unscheduled interruptions of your operations. Our specialized services include comprehensive consulting, diagnostics, preventive maintenance, original spare parts, retrofitting, upgrading solutions or engineering, as well as design and manufacturing of special machines which exactly fit your individual requirement.

Engineering

Our highly skilled and experienced engineers perform a broad range of specialized services for your most demanding machine requirements.

Services

Our technical competence covers all kind of different machines, induction and synchronous motors and generators. Over 100 years of machine manufacturing experience combined with state-of-the-art tools are in the focus of our technical competence.

Machine condition monitoring

- Winding diagnosis
- Electrical and mechanical measurements and tests in our test bay or on site
- Vibration monitoring & diagnosis

Engineering Support

- Lateral critical speed analysis
- Torsional analysis
- Modal analysis of motor and motor-foundation structures
- Seismic qualifications
- Special mechanical and electrical design and calculation
- Machine design, manufacturing and certification according IEC, NEMA, Shell DEP, DNV, ATEX Standards

Investigation and Expertise

- Mechanical failure analysis
- Material defect and fracture analysis
- Electrical failure analysis
- Motor failure analysis
- Root Cause Analysis (RCA)