ROTORS FOR ELECTRIC TURBOCHARGERS

HIGH-PRECISION AND READY-TO-INSTALL

We at MS-Schramberg have successfully supported our customers in the development of electric turbochargers. As a supplier of complex magnetic systems, we offer our customers everything from a single source: From mechanical production to magnetic design – our rotors for electric turbochargers are ready-to-install assemblies. In the production of our high-precision components, we rely on high-strength and thermally resilient alloys and magnetic materials – our matched materials guarantee a high-strength joint even under the highest thermal loads. Using the latest balancing technology, we achieve very low unbalances even at maximum speeds.

Advantages/Benefits
• Everything from a single source: We supply ready-to-install rotors
• Development partner: Together with you, we bring the technology to series-production readiness
• Support in technical design (static/dynamic strength and magnetic field)
• Comprehensive know-how in mechanical manufacturing
• Scalable and automated manufacturing concept
• Cost-effective manufacturing process
• Motor speeds of more than 200,000 rpm can be realised
• Thermally resilient and high strength joint connection
• Very low unbalance possible

Applications
Electric turbocharger for combustion engines
Fuel cell vehicles and turbo compound systems

Technical data
• Sm2Co17 magnet press-fitted into sleeve
• Diametral magnetisation
• Typical remanence of 1100 mT
• e.g. sleeve made of high-strength nickel-chromium alloys (Inconel) or CFRP
BECAUSE OUR AREAS OF EXPERTISE ARE INTERLINKED

IDEAS TRANSFORM INTO A SUCCESS STORY FOR YOU

The requirements expected of permanent magnets and magnet assemblies are becoming ever more individual and, at the same time, ever more complex. We therefore take pleasure in casting light on the entire value-added chain: We are there beside you as a dependable partner, all the way from shared product development to on-schedule delivery. With our unique linked chain of areas of expertise, we can act as a specialist and as an all-rounder, depending on what is required, as a one-stop shop for high-quality processes. Together, we can transform a good idea into a genuine competitive advantage. After all, for you, the perfect amalgam of experience, expertise and technical implementation means, above all, one thing – efficiency. This creates results that firmly embed success in your products.

THE POWER OF THE WHOLE

MS-Schramberg has stood for solution expertise and quality for more than half a century. We are one of Europe’s leading manufacturers of permanent magnets and assemblies. With around 600 employees, we develop and produce customer-specific articles in three plants in the Black Forest, which are used successfully by companies from a wide range of industries worldwide.