

Optimizing Design in Developing Innovative Products

Bühler Motor Group

Industrial Equipment

Germany

Bühler
Motor



www.buehlermotor.com

ANSYS®

ANSYS® Mechanical™
ANSYS® Emag™ ANSYS® Structural™

Overview

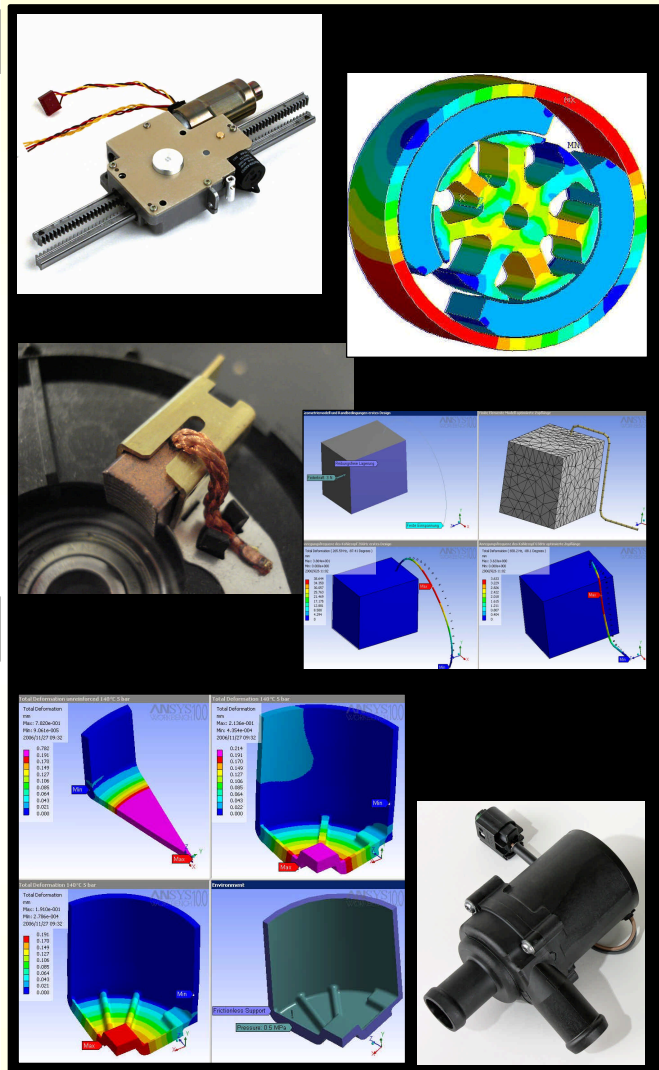
Bühler Motor Group is a global enterprise focused on developing and manufacturing sophisticated mechatronic DC drive solutions. As a leading Tier 2 supplier of the automotive industry, Bühler specializes in innovative motion and fluid control systems for interior, heating, x-by-wire, powertrain, air suspension and many other applications. In addition to supplying the automotive industry strategic markets, the company provides solutions to the aviation sector (for example, aircraft seat adjustments) and the marketplace in general (for example, vending machines, office technology, medical technology and more). In anticipation of the demands of the future, Bühler's engineering staff is creating applications for motion.

Bühler's innovative products are manufactured in Europe, Mexico and Asia and sold throughout the world.

Testimonial

"The development center of Bühler Motor in Nürnberg uses 3-D CAD and FE tools in the virtual design process of DC and gear motors. For more than 10 years, we have systematically analyzed and optimized different components of our products with the FE analysis programs from ANSYS."

Gerhard Hofmann
Manager Concepts & Engineering Services



Challenge

Bühler aims to develop and market and new innovative products.

Prior to the first prototypes, methods and processes are analyzed and optimized.

The aim is to decrease time required for design and development.

Solution

- Bühler uses innovative products from the ANSYS suite.
- ANSYS Mechanical and ANSYS Emag show the flux density, power and torque characteristics of Bühler motors, and therefore enable the company to employ materials optimally.
- Similarly, ANSYS Structural pinpoints significant stress areas and maximum deformation of the products under load.

Benefits

- Designs reach the highest possible optimization level.
- All products are safe and conform to standards.
- In some cases, the prototype becomes the final product meeting all required workloads, specifications and limits.
- Test and simulation agree in a positive way.