



More information on the back page or from the colleagues at the booth.

Thinking about tomorrow today.

With our energy-efficient E-grooved ball bearings.

Energy costs are rising, and the demand for reduced noise emissions is growing.

The answer: energy-efficient e-bearings. But how can their energy consumption be reduced?

- 1 Reduced Friction
- 2 Low Noise Grease
- 3 Groove for Labyrinth Seal
- 4 Improved Raceway Quality
- 5 ATCoat Coating
- 6 Ceramic Balls



First, friction. Friction can be reduced - by as much as 35 percent compared to standard designs. And not only that, the noise level is also reduced by 30 percent compared to conventional bearings of the same size.

Second, lubrication. Since many deep groove ball bearings with shields and seals are lubricated for life and the grease type and quantity make a decisive contribution to the heat generation, special quality is required here. Therefore IBC uses a smooth running, low-noise grease with optimized grease quantity. A positive side effect: the low operating temperature decisively extends the grease service life, and thus the life of the bearing.

Third, seal design. Normally, the seal lip contacts the inner ring and thus has a certain amount of friction during operation. With the new E-deep groove ball bearings, the inner ring has a groove, meaning that the seal projects into this groove. In this way, the sealing effect is increased via a labyrinth and provides highly effective non-contact sealing against external influences. There is also potential for optimization in the cage design, for example through improved sheet steel cages. Injection-molded polyamide cages can reduce the friction even further and can keep operating temperatures even lower.

Fourth, surface finish of the raceway. Here too the E-bearings can score points. This is because their roughness values are 25 percent lower than those of standard bearings.

Fifth, ATCoat coating. The coating of the raceways reduces friction and extends service life.

Sixth, ceramic balls. They increase the speed by 30 percent - while at the same time extending service life.

Ultimately, all optimization options must be viewed as a modular system. After all, not every application requires all solutions. Rather, users must decide individually what is required in a specific case. After all, a measure is only effective if it is also economically optimized.

