**ECI-series drives from ebm-papst can now be combined with low-backlash planetary gears in the factory. Case-hardening makes lower wear and a longer service life possible. In turn, this enables more precise positioning: an important factor for intralogistics applications.**

**Low-backlash transmissions for intralogistics applications**

The interplay between ground gear parts and other precision transmission components ensures that transmissions in low-backlash, precision design meet the demand for high performance and high availability. This is a key factor for applications in industrial automation and intralogistics, which have tighter requirements for precision and stiffness.

**High transmission quality thanks to case-hardened gears**

PE-series transmissions use case-hardened, ground, and needle-bearing mounted ring, planetary, and sun gears. Thanks to their special surface treatment, they feature a long service life and therefore yield higher transmission quality. High-quality toothed flanks and an equally high-quality permanent grease lubrication enable the maintenance-free transmission to perform with high efficiency and impressively quiet operation.

**Low backlash and high torsional stiffness**

The robust transmission design and optimized gear geometry yield a transmission with low backlash and high torsional stiffness. Integrated axial length compensation in the motor tap shaft offsets thermal elongation.

**IP64 protection due to shaft seal**

The transmissions are suitable for all installation positions. They can be easily connected to the engine using an interchangeable flange. And a Viton shaft seal guarantees protection class IP64. The motors from ebm-papst in the ECI series are DC motors in electronically commutated design with nominal output powers of 50-750 W. The low-backlash transmissions for this series can be ordered in one-, two-, or three-stage designs from our online portal as of spring 2019: <https://idt-config.ebmpapst.com>.



Fig. 1: ECI-series drives from ebm-papst can now be combined with low-backlash planetary gears in the factory.

# Fig. 1 ebm-papst

# Characters Approx. 2,100, including headings and sub-headings

# Tags Drives, low-backlash transmission, case-hardening, transmission quality, gear geometry

# Link <https://idt.ebmpapst.com> <https://idt-config.ebmpapst.com>

**About ebm-papst**

The ebm-papst Group is the world's leading manufacturer of fans and motors. Since it was founded, the technology company has continuously set global industry standards: from the digital interconnection of electronically controlled EC fans to aerodynamic improvements for fan blades to the use of eco-friendly materials.

In fiscal year 2017/18, the company achieved sales of over € 2 billion. ebm-papst employs over 15,000 people at 27 production sites (e.g. in Germany, China and the US) and in 48 sales offices worldwide. Fans and motors from the world market leader are used in many industries, including ventilation, air conditioning and refrigeration, household appliances, heating, automotive and drive engineering.