APPLICATION PROFILE

INDUSTRIAL BARCODE SCANNER

Juna Ec Jef Chotol

Airport luggage barcode scanners are essential in routing a significant volume of luggage to the correct destinations. The scanners must scan bar code labels that may be twisted, bent or dirty.

Airports require each scanner to operate reliably for at least five years, which translates to a life of more than 20,000 hours for the motor that drives the scanner.

A large European company that provides scanners to the transportation industry approached Portescap to design a motor that meets the 20,000 hrs. reliable operation requirement.

Portescap engineers experienced in extended life applications focused on a motor bearing design to increase machine longevity. Using a brushless DC motor, they developed a design with optimized ball bearings and an appropriate lubricant, which is paramount in determining bearing life. Bearing lubricants can also affect numerous other aspects of motor performance, including torque and speed capabilities, noise generation, outgassing temperature, and rust susceptibility.

The Portescap customized Ultra EC[™] 16ECP brushless DC motor solution ultimately extended the product life to 30,000 hrs. This provided a durable solution for airport logistics teams to minimize maintenance, increase baggage scanning uptime, and assure that the baggage would arrive safely at its proper destination.

Motor Highlights • Compact size

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- Flexible mechanical design
- Optional hall sensors
- Reliable over extended lifetime

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