



# Why choose Sumitomo Drive Technologies for Airport applications?

# We have the toughest drives that can withstand the harshest environments.

#### We know the Airport Industry

Sumitomo Drive Technologies is an industry leader in power transmission solutions that are utilized throughout airports worldwide. Our units are specified among the prominent names in baggage handling solution designers and airline companies. We offer gearboxes that help optimize flow performance across all airport logistic applications, from boarding bridges to escalators to Baggage Handling Systems.

Today's Baggage Handling Systems utilize incredibly sophisticated systems of integrated conveyors. As heightened security measures and airport expansions require faster baggage transport to and from terminals and gates, airports must implement the best power transmission solutions to ensure efficient and dependable system operation.

You need a solid partner to guarantee your Baggage Handling System meets all of your requirements--choose Sumitomo to provide quality power transmission components for all of your airport logistics applications.

#### Sumitomo Solutions

#### **Taper-Grip® Bushing**

A simple shaft-mounting device that provides self-aligning, backlash-free torque transmission.

- Easy unit mounting and removal
- Resistance to fretting and corrosion
- Multiple stock bore sizes for quick delivery



#### Easy-Grip®

Unique interchangeable bushings and a shrink disc set to allow easy attachment of the gear reducers to standard available shafting up to h11 tolerances.

- 3-Part Keyless Shaft Locking System
- Easy installation and removal
- Commercial tolerance



#### BBB-H

- Low Reduction Ratios
- Compact Design
- Easy-Grip<sup>™</sup> Compatibility
- The Green Solution



#### **G** CYCLO® 6000

- Cycloidal Technology
- Reliable Performance
- Maintenance-Free



#### HYPONIC®

- 93% Efficiency
- Maintenance-Free
- Large Ratio Range



#### **CYCLO**® BBB 4

- Taper-Grip<sup>®</sup> Bushing
- Compact Design
- Multiple Output Styles



#### **HELICAL** Shaft Mount

- Taper-Grip® Bushing
- Compact Design



#### **LAFERT MOTORS**

- Integral construction motor/drive
- Surface Mounted Permanent Magnets
- Interior Permanent Magnets



#### **INVERTERS** P2

- Integral Brake Transistor
- 98% Typical Efficiency
- User-Friendly Interface

## Unwanted and unpredictable downtimes can cause delays and cost money.

#### The Challenge: **Downtime and Delays**

The Baggage Handling System (BHS) is one of the most complex and critical operations in today's airports. Unscheduled downtimes and delays may lead to a backup of passenger luggage and missed flights costing airlines time, money and customer satisfaction. Furthermore, unplanned asset repair or replacement could lead to duplicate repair time and costs.

#### **Industry Problems:**

- Low performance baggage handling systems
  - Unplanned downtimes •
- Unpredictable delays cost the company money
  - Travel delays for passengers •
- Technical support personnel have to constanly make repairs

System failures will negatively impact operations •

### Sumitomo has the solution to predict failures and cut down on downtimes and costs.

#### The Solution:

CycloSMART®

CycloSMART® is the perfect solution to mitigate the probability of system downtime and alleviate the burden on the technical support personnel. Your company can worry less about the costs of delays with our predictive maintenance accessory. CycloSMART® allows you to monitor and predict potential system failures ahead of time. With the ease of installation and compatibility, CycloSMART® is a must to keep systems going.

#### **Sumitomo Problem Solvers:**

- Early detection of change in asset performance minimizing cost of downtime
- Compatible with new and existing systems
- Easy installation
- Monitors various assets, such as gearmotors, for vibration, temperature, and oil quality and levels
- Predict unit failures before they happen



**Ticket Counters** 





**Baggage Carousels** 



**Power Curves** 



**Passenger** 

**Boarding Bridges** 



**Vertical Sorters** 



**Diverters** 



Queue and **Transport** 

**Conveyors** 









Loaders







Avoid catastrophic failure, minimize risk and increase machine uptime.

## System Management And Reliability Technology (SMART)

SMART is a range of products and reducer options that were developed to help end users in their reliability and asset management initiatives within their plant's daily operations.



#### **Reliability Monitoring**

These reducer option packages will help in the consistent collection of data. For Vibration analysis, as well as oil condition and cleanliness testing

#### **Large Industrial Gearboxes**

#### **OPTIONS\***

Opt 1: Machined Accelerometer Mounting Pads Only

Opt 2: Opt 1 + Accelerometers Wired to Junction Box

Opt 3: Opt 2 + Outputs to Customer PLC or DCS

**YOU THINK!** 



#### **Condition Monitoring**

Fully customizable systems provide real time condition data of any piece of rotating equipment. Providing an accurate condition signal without the need for further analysis

#### **All Gearboxes**

#### **OPTIONS** \*\*

Vibration + Temperature Input

Vibration + Oil Level Input

Vibration + Oil Condition

**WETHINK!** 

#### CycloSMART® Benefits

#### Safe

Monitor assets from the safety of your desk via networked connections

#### Predictive

Machine diagnostics for early warning and detection to avoid failure

#### Optimization

Customizable systems to meet many different application needs

# **ENGINE LIGHT** SPEED REDUCERS

- \* All DriveSMART\* options include: Oil sampling pitot tube, and Oil Breather package that incorporates oil fill and drain ports.
- \*\* All CycloSMART® systems are customizable with many different options for data monitoring. Examples are shown.

Learn more at: SumitomoDrive.com/CycloSmart

#### Expandable

Multi-reducer monitoring

#### Reliable

Schedule machine downtime to avoid lost production

#### Cost-Effective

Lower overall ownership cost



#### **OPTIDRIVE P2**



#### LAFERT MOTORS

#### **HIGH PERFORMANCE MOTORS**

High-Performance permanent magnet, stand alone, synchronous motors or permanent magnet synchronous motors with an integrated drive solutions available.

HP generation motor achieves IE4 and IE5 efficiency levels.

Enhanced power/weight ratio, thereby allowing for significant size and weight reduction.

Integral Drive - HPI Series

Stand Alone Motor - HPS Series

#### **HIGH PERFORMANCE DRIVE**

High-performance variable frequency drive for standard induction and permanent magnet motors.

Its user-friendly interface and high performance make it perfect for tackling the most demanding applications smoothly.

Extensive I/O and communications interface capabilities ensure the drive can be integrated quickly and efficiently into a wide variety of control systems.

P1-01

• 200% Overload for 4 secs • 98% Typical Efficiency

• Integral Brake Transistor

#### **INTEGRATED DISPLAY**

LED multi-language text display.



• IP20



IP66 Non-Switched



IP66 Switched







• IP55



IP66

#### **FAST CONNECTION**

5mm rising clamp terminals with captive screws.

#### **INTEGRATED CABLE MANAGEMENT**

#### **PLUGGABLE CONTROL TERMINALS**

#### **OPTISTICK**

A rapid commissioning tool that allows copying, backup, and the restoring of drive parameters.



 $(250 \, kW)$ 



**OPTIDRIVE** 



#### **ENCLOSURES**



















**IPM** (Interior Permanent Magnets) or **SMPM** (Surface Mounted Permanent Magnets) design

> Super Premium Efficiency IE4 or Ultra Premium Efficiency IE5











# Our factory capabilities support all of your gearbox needs.

The most reliable and highest quality products backed by a 400 year heritage.

#### Why Sumitomo?

#### **Our 400 Year Heritage**

The history of the Sumitomo Group started more than 400 years ago when Masatomo Sumitomo opened a book and pharmacy store in the city of Kyoto, Japan.

Today, the Sumitomo Group consists of more than 20 companies who share the Sumitomo Emblem as well as many common values and ideals.

#### **Devoted to Quality**

In addition to one of the most comprehensive product lines of any power transmission company, we offer the most reliable and highest quality products available in the industry. Whether it's product development or manufacturing processes, our Quality culture resonates through our entire global network.

#### **Committed to our Employees and the Community**

We recognize our employees are our most valuable asset. They are the driving force behind our innovative products, our ability to support our customers, and our commitment to continuous process improvement. We strive to be a valuable member of society and take pride in the contributions we make to our communities across North and South America.

#### **Dedicated to Innovative Manufacturing**

With more than a century of expertise in manufacturing, our global capabilities are unmatched in the industry. We have manufacturing and assembly facilities on every continent and continue to make investments in our manufacturing technologies to maintain our position as a leader in innovation.

#### **Centers of Excellence**

Our Centers of Excellence offer customers a nationwide support network. From inventory distribution to manufacturing to assembly, we have the team to ensure high quality, responsiveness, on-time delivery, and quick lead times.



#### Chesapeake, VA

#### Manufacturing, Support, Inventory, and Training

Our Western Hemisphere headquarters has 360,000 sq ft of manufacturing space, and cutting-edge technology. Centralized inventory distribution with a Foreign trade zone (FTZ), focused on inventory optimization, motor assembly, and hands-on training at our Power Institute.



#### Verona, VA

## Industrial Gearbox Production This purpose-built facility is specifically designed to handle the assembly of our large industrial gearboxes.



#### Lufkin, TX

# Manufacturing and Services This 32,000 sq ft facility handles gear manufacturing, gearbox repairs, and reverse engineering.



#### Glendale Heights, IL

Gearmotor Assembly and Support Houses our state-of-the-art paint system for our SHIELD360® packages for Cyclo®, BuddyBox®, and Hyponic®.



#### Corona, CA

Gearmotor Assembly and Support
Our West Coast location offers
repairs and supplies gearmotor
products to U.S. customers.