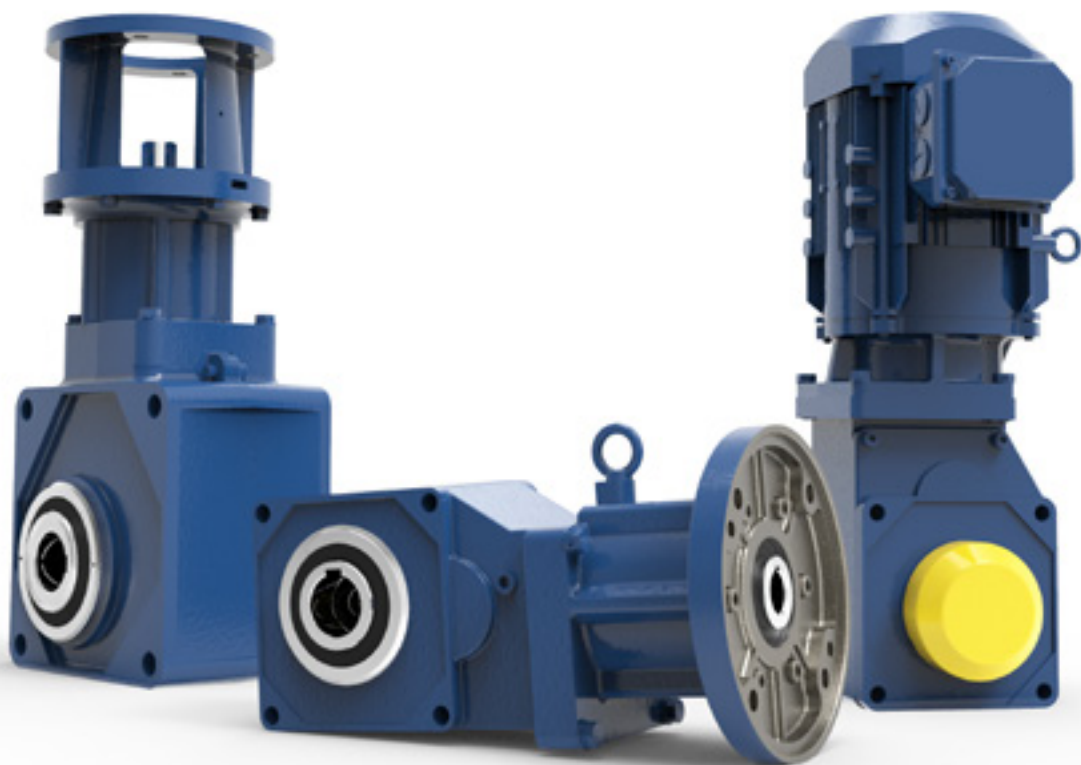




Sumitomo Drive Technologies

AIRPORT

INDUSTRY-LEADING DRIVES AND SOLUTIONS



Why choose Sumitomo Drive Technologies for Airport applications?

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 Drive Technologies to provide **quality power transmission** components for all of your airport logistics applications.

OUR 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



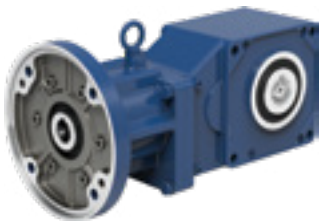
EASY-GRIP™

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



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



■ BEVEL BUDDYBOX® H

- Low Reduction Ratios
- Compact Design
- Easy-Grip™ Compatibility
- The Green Solution



■ HYPONIC®

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



■ CYCLO® 6000

- Cycloidal Technology
- Reliable Performance
- Maintenance-Free



■ HELICAL SHAFT MOUNT

- Taper-Grip® Bushing
- Compact Design



■ CYCLO® BBB 4

- Taper-Grip® Bushing
- Compact Design
- Multiple Output Styles



■ INVERTERS P2

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



■ LAFERT MOTORS

- Integral Construction Motor/Drive
- Surface Mounted Permanent Magnets
- Interior Permanent Magnets

Unwanted and unpredictable downtimes can cause delays and cost money.



■ **THE CHALLENGE:** Downtime & 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 constantly make **repairs**.
- System **failures** will negatively impact operations.

Ticket Counters



Baggage Carousels



Loaders



Power Curves



We have 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.

■ OUR 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.

Passenger
Boarding Bridges



Vertical Sorters



Diversers



Queue and
Transport Conveyors





*We take asset management seriously,
because we know you do.*

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.



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

WE THINK!



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!

Avoid catastrophic failure, minimize risk and increase machine uptime.

■ 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.

- **Expandable**

Multi-reducer monitoring.

- **Reliable**

Schedule machine downtime to avoid lost production.

- **Cost-Effective**

Lower overall ownership cost.

the **CHECK** 
ENGINE LIGHT for
SPEED REDUCERS

* All DriveSMART options include: Hydroscopic breather with 3mm filter, drain/fill connection for on-line filtration, and oil sample pitot tube port.

** All CycloSMART® systems are customizable with many different options for data monitoring. Examples are shown.

Learn more at:
US.SumitomoDrive.com/CycloSmart



OPTIDRIVE P2



Compliant with international standards.

HIGH PERFORMANCE DRIVE

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

A **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.

• **200% Overload for 4 Seconds**

• **98% Typical Efficiency**

• **Integral Brake Transistor**

INTEGRATED DISPLAY

LED multi-language text display.

FAST CONNECTION

5mm rising clamp terminals with captive screws.

INTEGRATED CABLE MANAGEMENT

PLUGGABLE CONTROL TERMINALS

OPTISTICK SMART

This rapid Commissioning Tool allows copying, backup, and restoration of drive parameters.



ENCLOSURES

• **IP20**



• **IP66 Non-Switched**



• **IP66 Switched**



• **IP20**



• **IP55**



• **IP66**



SPECS



HP RATING
Up to 350 HP
(250 kW)



POWER OPTIONS
Single-Phase: 200-240V
3-Phase: 200-600V



TORQUE
Up to 200%
(From Zero Speed)

LAFERT MOTORS

HIGH PERFORMANCE MOTORS

High-performance **permanent magnet, stand-alone, synchronous** motors or **permanent magnet synchronous** motors with 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*



DESIGN

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

EFFICIENCY

Super Premium Efficiency **IE4** or
Ultra Premium Efficiency **IE5**.



SPECS



POWER RATING
0.37kW to 37kW



SPEED
Up to 4,500 RPM



TORQUE
2 N•m to 200 N•m



Our factory capabilities support all of your gearbox needs.

WHY SUMITOMO?

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

Purpose-built facility specifically designed to handle the assembly of our **large industrial gearboxes**.



■ GLENDALE HEIGHTS, IL

Gearmotor Assembly and Support

Our Midwest facility is optimized for high volume solutions focusing on **small to medium gearmotors**.



■ LUFKIN, TX

Manufacturing and Services

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



■ MARINE CITY, MI

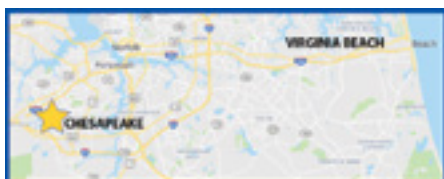
Manufacturing and Services

This facility handles gear **manufacturing** and **repairs** with a 10,000 sq ft **gear grinding** center.

Sumitomo Drive Technologies

A global power transmission solutions provider, with facilities strategically located throughout the world, providing comprehensive products and services in your region.

HEADQUARTERS



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Chesapeake, VA 23323

Email: SMA.CustomerService@shi-g.com

Phone: 757-485-3355

- ★ MANUFACTURING HUB & HEADQUARTERS
- ★ MANUFACTURING HUB
- ASSEMBLY & SERVICE
- SERVICE
- ▲ REGIONAL SALES OFFICE