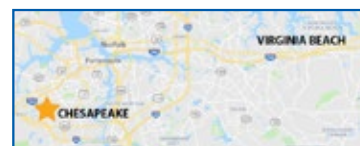


Sumitomo Drive Technologies

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

Headquarters



4200 Holland Blvd
Chesapeake, VA 23323

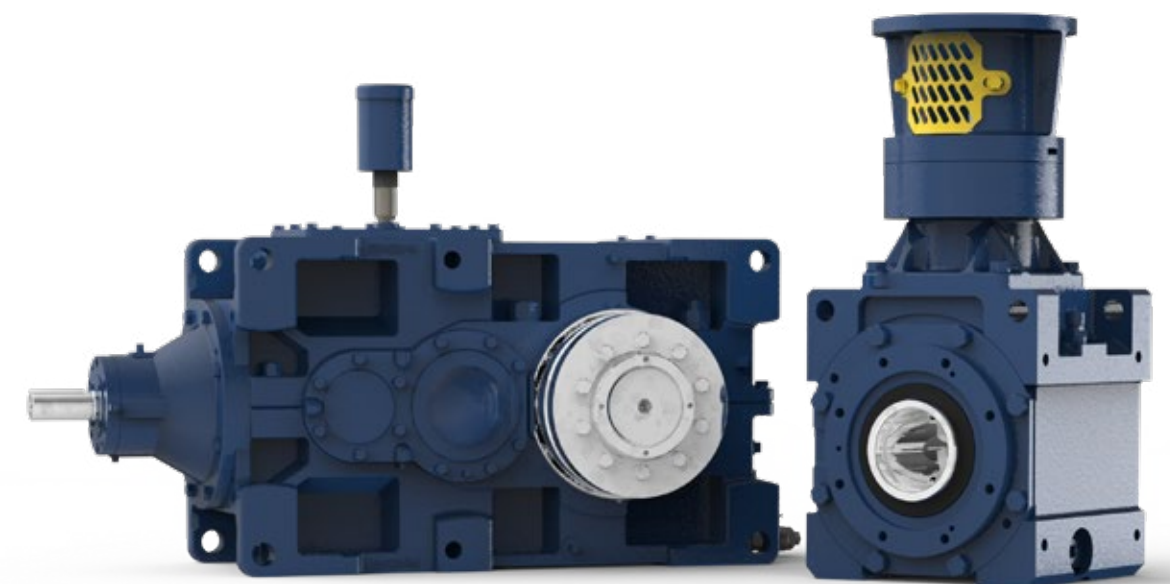
email: SMA.CustomerService@shi-g.com
phone: 757-485-3355

Sumitomo Machinery Corporation of America

www.sumitomodrive.com

For worldwide locations, please visit www.sumitomodrive.com/worldwide
Contact your local representative at www.sumitomodrive.com/representative
Tel: 1-800-SM-CYCLO (762-9256) 01.H06.51.004 Aggregate Brochure 2023

Aggregate



Sumitomo Drive Technologies

Why choose Sumitomo Drive Technologies for Mining & Quarry applications?

We offer the toughest drives available to meet the harshest demands.

We know the Aggregate Industry

The Aggregate industry plays a vital role in some of our everyday needs. Materials produced through US aggregate operations are essential for our country's operation. Sumitomo Drive Technologies understands the global reliance on the aggregate industry as well as its importance to our nation's infrastructure. As a company, we've expanded our efforts in supporting this essential industry with a robust combination of products, people, production, programs, and perseverance. Whether it's crushed rock, sand, or gravel, Sumitomo has a product to fit the application. From excavation and crushing to screening and conveying, our products have been customized and configured for each application. With so many ways to lower your total cost of ownership, let our experts support keeping your operation running effectively and efficiently with little to no downtime.



B4 CYCLO® BBB 4

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

Beneficial Features

- Upgraded replacement of belt drive.
 - Eliminates belt maintenance (TIME) – re-installing thrown belts, adjusting tension, replacing broken belts, locking out for maintenance, working on man-lift or ladder, etc.
 - Eliminates need for safety guarding – MSHA target.
 - Eliminates reducer oil leaks due to inappropriate belt tension.
 - Eliminates cost and stocking of belts, sheaves, and guarding.
- Frees up space – smaller overall footprint.
- Cyclo® toothless gearing provides 500% momentary shockload (double conventional gearing). Only Sumitomo has this design. Beneficial for starts/stops, fully loaded starts.
- Larger bevel set (to achieve right-angle) for durability.
- More efficient transmission of torque.
- Easy installation and removal.
- Large access windows in C-face motor adaptor allows access to coupling without removing motor - no crane or lifting device to remove motor increases safety and reduces time.
- Can use existing motor with a C-face transition kit if existing was foot mount only.
- Housing is ductile iron – twice as strong as cast iron other manufacturers use.
- Runs cool with Cyclo® design.
- Double input and output seals.
- Many different mounting, input, and output configurations available.
- Extremely durable backstop.
- Taper-Grip Bushing® XL gives you the great features of our standard taper-grip option, now modified to accept shorter shafts.



The Right Gearbox for the Right Job

We are interested in selling the right gearbox for the application—not just any gearbox in our inventory. Sumitomo Drive Technologies has the products that perform. Standard industrial gearboxes are pre-engineered and manufactured to be assembled from our inventory. Local engineering, manufacturing, and assembly allow us to customize these products to meet your needs. Every industrial gearbox that we produce has various upgrades and performance monitoring products to keep you in action. By following our preventative maintenance procedures, you ensure your gearbox lives a long life.

If your gearbox has an issue, our network of experienced aftermarket experts is always available with after-hours service, quick ship products, and more. Plus, with one of the longest warranties in the gearbox industry, your operation is well protected. We ask the right questions to ensure you have the correct industrial gearbox for your specific application. Customer experience is our top priority, and we want to ensure that our customers can get the modifications or custom options they desire.

• Torque Arm



Multiple types available.

MOUNTING

• Taper-Grip® Bushing



• Shrink Disc



• Keyed Hollow Bore



• Solid Shaft



• Integral Motor



• Quill



• C-Face



INPUTS & OUTPUTS

DUCTILE IRON HOUSING

Twice as strong as cast iron, making it one of the most rugged bevel gearboxes on the market

OPTIONAL TACONITE SEAL ASSEMBLY

Heavy-duty, fortified, grease purgeable system withstands the most demanding applications

TAPERED BEARINGS

Resist axial and radial loads simultaneously

TANDEM DUAL LIP SEALS

Prevent leaks and exclude contaminants

ONE PIECE PINION

Oversized, single-piece pinion provides a robust solution capable of 300% momentary shock-load. Designed and manufactured in the USA.

100% HARDENED STEEL COMPONENTS

Provide long life, smooth operation, and superior strength

BEARING

CYCLO® DISC

All rotating components are fully hardened, vacuum degassed bearing grade steel, for consistent, reliable performance

B4 CYCLO® BEVEL BUDDYBOX® 4

RIGHT ANGLE SPIRAL BEVEL WITH CYCLO® OR PLANETARY INPUTS

A robust, state-of-the-art, mid-sized family of speed reducers and gearmotors. The Cyclo® BBB4 has a unique combination of features that result in a **highly reliable, efficient, and durable gearbox**. The all-steel internal construction, Cyclo® or planetary gear inputs and the ductile iron housing, provide **unmatched ruggedness**.

Also available as a **mixer drive** with an **integrated drywell** and space-saving footprint.

MOBIL SHC™ GEAR HI-SHOCK 150 (Optional)

- High-Performance Synthetic Lubricant
- Available for Cyclo® Products
- Extends the Life up to 3 Times
- Available 3-Year Warranty

OPTIONS



Screw Conveyor



Mixer

SPECS



HP RATING
Up to 100 HP
(75 kW)



DIAMETER
1in to 4-15/16in
(Hollow & Solid)



TORQUE
Up to 159,983 lb·in
(18,076 N·m)



RATIO RANGE
11:1 up to 26,000:1
and greater



* Rating applies to specific products.

- Immersion Heater
- Creep Drive
- Anti-Dust Breather



ACCESSORIES

- Solid Shaft



- Shrink Disc



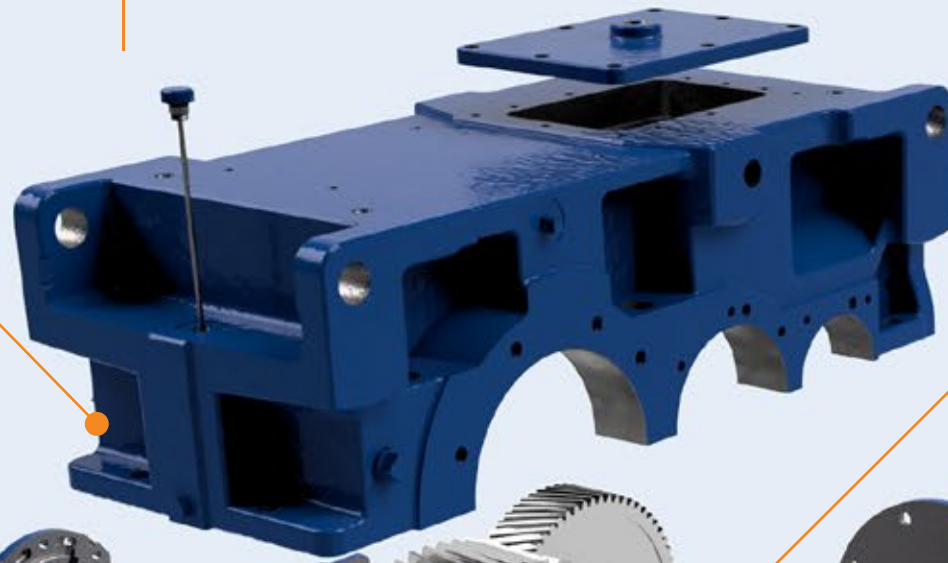
- Keyed Hollow Bore



OUTPUTS

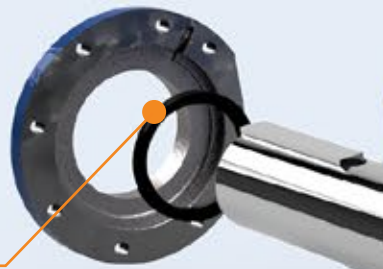
AVAILABLE SPLIT HOUSING

Offered in large frame sizes allowing easy maintenance. Large inspection port provides a window for gear inspection. Standard gray cast iron with ductile and fabricated steel options

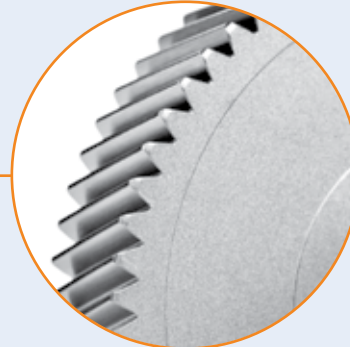
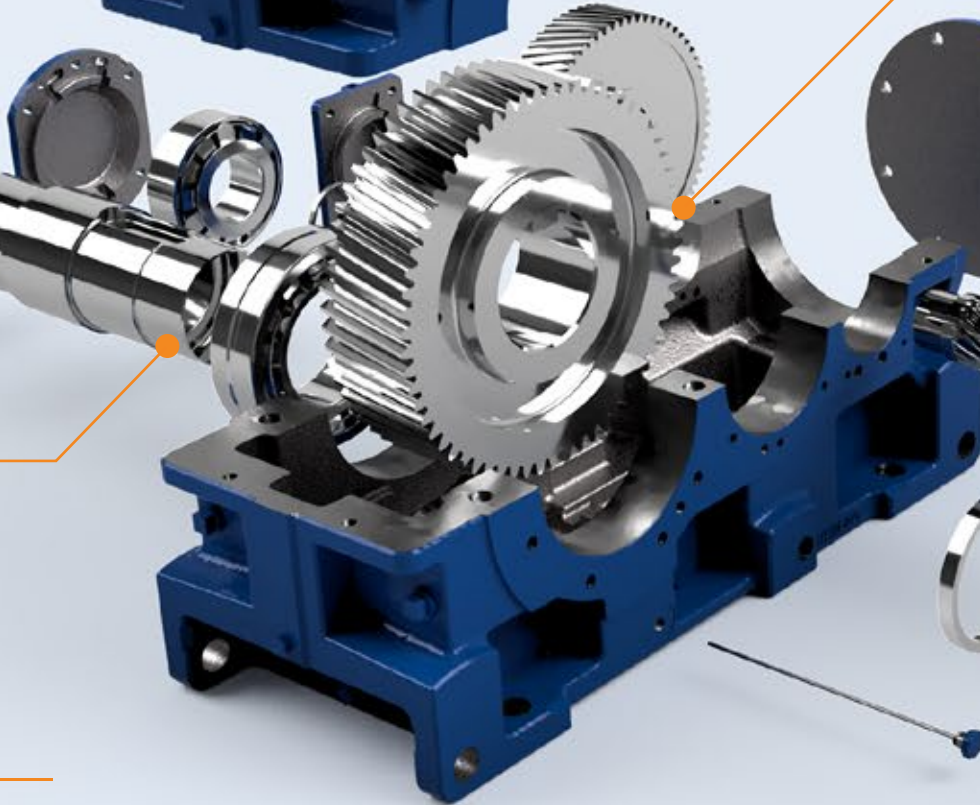


TACONITE SEAL

Option features a dual layer oil and grease sealing system



SLOW SPEED SHAFT



CASE CARBURIZED GEARING

High precision case carburized gearing with a 25° pressure angle offer a thicker dedendum and higher strength ratings than the typical 20° pressure angle.

HIGH TENSILE SHAFT

Strong shaft material optimized for extended operation in rugged environments

SPHERICAL ROLLER BEARING

High capacity bearings increase load capacity without increasing lead-time



PX PARAMAX® 9000

PARALLEL & RIGHT ANGLE LARGE INDUSTRIAL GEARBOXES

Paramax® parallel and right angle drives are some of the **largest and most durable** power transmission systems operating in the world. The series features **double, triple, quadruple reduction** gearboxes, global standardization and availability, and support from our worldwide locations.

Other accessories: Cooling Fan with Split Fan Hood, Resistance Temperature Detector, Coupling Guards & more.

MOUNTING



Swing Base



Baseplate

SPECS



HP RATING
Up to 5,230 HP
(3,900 kW)



DIAMETER
5mm to 360mm
(Hollow & Solid)



TORQUE
Up to 4.9 million lb•in
(553,626 N•m)



RATIO RANGE
6.3:1 to 500:1
Standard

- "H" Foot
- V-Flange
- F-Flange



MOUNTING

- Coupled C-Face
- Integral Motor
- Shovel Base
- Free Shaft
- Quill
- Top Mount



INPUTS

SEALS

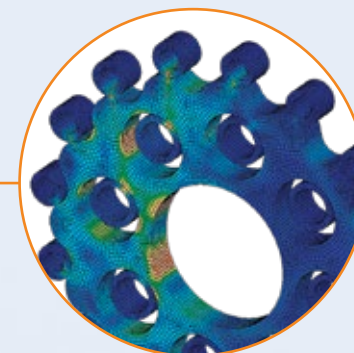
Wear sleeves and pressure-rated to prevent leaks

HOUSING

Rugged, shock-resistant cast iron housing. Optional ductile iron housing also available

RING GEAR HOUSING

High power density, all reduction contained in compact ring gear housing



500% MOMENTARY SHOCK LOAD

The Cyclo® design spreads the load across 2/3 of the reduction components, enabling the units to absorb and dissipate shocks better than typical concentric drives.

CYCLO® DISC

All rotating components are fully hardened, vacuum degassed bearing grade steel, for consistent, reliable performance

DYNAMIC AIR MOTIVATOR

MOTIVATOR COVER

END SHIELD

HIGH-SPEED SHAFT



* Rating applies to specific products.

OIL LEVEL INDICATOR

SLOW-SPEED SHAFT

ECCENTRIC CAM

CYCLO® 6000

UNMATCHED RELIABILITY & EXCEPTIONAL PERFORMANCE

Cyclo® speed reducers and gearmotors are the **premier in-line drives**. The revolutionary Cyclo® design provides **quiet, efficient, and reliable** performance exceeding that of involute tooth gear designs.

Unlike geared designs, the Cyclo®'s reduction components operate in compression rather than shear, which results in exceptionally rugged and **shock resistant** performance.

The Cyclo® technology coupled with innovative product options and accessories offer the most extensive range of application solutions available.

OPTIONS



Overhead Drive



Mixer Drive

SPECS



HP RATING
Up to 235 HP
(175 kW)



DIAMETER
1/2in to 7in
(Solid Shaft)



TORQUE
Up to 603,000 lb-in
(68,130 N·m)



RATIO RANGE
3:1 up to 658,503:1

Let us find the perfect product for you.

Avoid catastrophic failure, minimize risk, and increase machine uptime.

Belt Drive upgrade to Direct Drive

Sumitomo would be happy to come onsite to collect this data.

Motor: _____ hp
Motor: _____ rpm
NEMA Frame: _____
Existing Reducer: _____
Existing Reducer Ratio: ____:1
Driver Sheave (Motor): _____"
Driven Sheave (Reducer): _____"
Head Pulley Shaft Diameter: _____"
Usable Shaft Length: _____"
Backstop Desired: Yes No (will eventually need rotation)
Motor Orientation: Motor vertical up Motor horizontal

Let us help figure your ROI

Maintenance cost per hour \$ _____
Belt changes/adjustments _____ per day - week - month
Cost of belts and sheaves \$ _____ per week - month - year
Inventory of belts and sheaves \$ _____
Reducer changes _____ per week - month - year
Reducer repairs \$ _____ per week - month - year
Average # reducers leaking - being monitored or adding oil _____
(sorbents, oil \$, maint time, downtime, inventory)
MSHA citations for reducer guarding \$ _____ per month - year



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

WE THINK!

Our team of factory-trained technicians have centuries worth of experience.

Connecting you to the Service you need.

Experts in Service

Global Support, Local Service

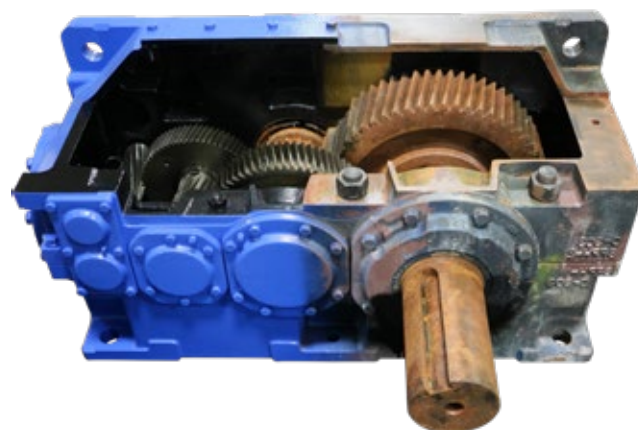
Our personnel are the industry's most versed gearbox problem solvers. We provide both standard and tailored services, for maximum gearbox life.



With a vast network of engineers and gearing experts, there is no problem we can't handle.

In addition to our extensive network, LUFTEX Gears Manufacturing and Services provide unmatched capabilities and expertise in the area of custom gearbox repair and service. With a **60-ton crane capacity and 41 ft hook height, no gearbox is too big for us to handle.**

Whether custom gear manufacturing or on-site gearbox repair, let our team at LUFTEX keep your operation running.



Repairs

Scheduled & Emergency Repair

Repair services for all your related gearbox needs and 24-72 hour turnaround to the original factory specifications and warranty using Sumitomo-manufactured parts.

Extended warranty programs are available upon request.

Root Cause Investigation

Product Support

We'll apply a wide range of approaches, tools, and techniques to uncover the causes of your problems.

Field Services

For Your Convenience

Most of the services offered and customized training can be performed on location.

Custom Solutions

Our gearing engineers can design upgrade options for existing units to increase performance or design complete custom drop-in replacement units that fit into an existing footprint and envelope.

On-Site Solutions

Our team of experienced technicians and engineers can travel to your location to complete your requested repairs and maintenance. These solutions can minimize downtime and get your operation back up and running.

Flexible Solutions for Your Business Needs

SERVICE SOLUTIONS

- Engineering Design and Analysis
- Reverse Engineering of Customer Components
- Design Upgrade Recommendations
- Disassembly and Evaluation of Gear Units
- NDT Inspections
- Manufacturing of Gear Components
- Full-Service Machine Shop
- On-Site Technical Support for Customer Repairs
- Field Service Rebuilds and Repairs
- Commissioning and Start-Up Services
- Root Cause Investigations
- Condition Monitoring

Repair and Rebuild Solutions

Scheduled or emergency repairs can be completed on time and within budget by our Aftermarket team. Utilizing OEM parts and in-house machining and manufacturing capabilities allows us to meet your needs for a quality and timely repair.



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

Our factory capabilities support all of your gearbox needs.

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.



Glendale Heights, IL

Gearmotor Assembly and Support

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



Lufkin, TX

Manufacturing and Services

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



Corona, CA

Gearmotor Assembly and Support

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