



Abell-Howe Cranes
801 West Center
Eureka, Illinois 61530
Office: 309-467-6262
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Motorized Rotation Base Mounted Jib Cranes:

With our Abell-Howe Jib Cranes we feature:

- ✓ **Fast Delivery:** We stock components ready for assembly.
- ✓ **Proven Designs:** Over 100 years of experience building Abell-Howe™ Cranes & Jib Cranes – we were founded in 1917. We are members of the CMAA.
- ✓ **In-House Engineering:** All our Jib Cranes are Engineered for Durability and for Industrial applications – With in-house Engineering – Specialty Jib Cranes can be designed quickly.
- ✓ **Competitive Pricing:** With the large quantity of jib cranes we produce, we offer competitive pricing to our customers.

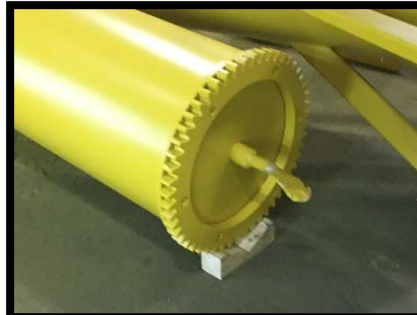


Abell-Howe Motorized Rotation Jib Cranes:

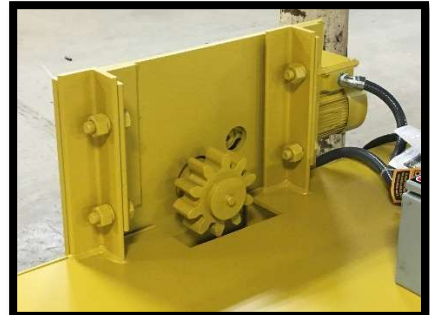
- Type: J-904B – Heavy Duty Base Mounted Pillar Jib Crane
- Capacity: ¼ Ton to 5 Tons are Standard
- Span: 8 Ft to 20 Ft are Standard
- Height Under Boom (HUB): 8 Ft to 20 Ft are Standard
- Finish: Standard - One Coat Yellow Enamel with SSPC SP2 & 3 Surface Preparation
- Service: Indoor or Outdoor



Rotation Motor, Brake & Box



Ring Gear on Mast



Rotation Drive Pinion



Motorized Rotation Includes:

- ❖ Rotation Speed: ½ RPM Nominal Speed
- ❖ Rotation Control: VFD Control in NEMA 4/12 Enclosure by Magnetek
- ❖ Mainline Contactor: Included – Magnetic – Momentary Type
- ❖ Overload Protection: Included
- ❖ Thermal Overload: Included
- ❖ Voltage: 230 or 460 or 575 V with 110 Volt for Control
- ❖ Rotation HP: 1/2 Hp Motor meeting NEMA and IEC Standards
- ❖ Rotation Brake: Included
- ❖ Gearing: Helical Enclosed Gearing – final reduction from a heat-treated drive pinion to a hardened ring gear fastened to top side of jib mast
- ❖ Festoon: Messenger Wire with Power & Control Cable
- ❖ Control Pendant: As Standard furnished with the hoist – 8 Button recommended.
- ❖ Rotation: 360 Degree Continuous Rotation Available
- ❖ Rotation Limit Switch: Optional for Rotation – Square D 2-Pole Type L Limit Switch designed for severe duty mill applications. Limit switch is UL Listed and comes under IP67 rated degree of protection. Voltage Rating of 600 Volts and current rating of 20 amps
- ❖ Collector System: Optional - Top or Bottom Entry for Continuous Rotation

Specifications & Description:

- **Mast** - Fabricated from heavy wall structural steel pipe with wall thickness sized to minimize deflection.
- **Boom** - W-beam section designed to minimize deflection.
- **Head section** - Rigid steel plate box type with welded construction for minimum deflection between boom and mast.
- 360 Degree Rotation available on a Tapered Roller bearing providing full capacity vertical and radial thrust loading.
- Lower section of the head revolves around the pillar on a pair of steel rollers equipped with self-aligning roller bearings.
- Large diameter base plate is reinforced with heavy steel gussets for continuous alignment and rigidity with options for Foundation or Foundation Sleeve Mount.
- Anti-Lift-off Device.
- Bottom roller assembly can be shimmed for boom leveling.
- End stops at both ends of the boom to limit trolley travel.



CRANE EQUIPMENT & SERVICE, INC.

Manufacturer of Abell-Howe Cranes
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- **Rotation Mechanical Drive Features:** – The heart of the motorized rotation drive is a superior Sumitomo Cyclo Bevel BuddyBox 4 Series Speed Reducer. This motor, brake & gearbox includes:
 - Lapped steel spiral bevel pinions and gears heat treated and hardened to 58-62 Rockwell C.
 - High performance steel spiral bevel gearing delivers up to 94% efficiency.
 - Shock Capacity: 500% momentary, intermittent shock load capacity for the input stage and 200% momentary intermittent shock load capacity for the spiral bevel output stage.
 - Gearbox mounted to a substantial frame on the Jib Rotation Head assembly.
 - Two (2) year Warranty on gearbox, motor and brake.

Delivery: Typically 4 to 5 weeks after receipt of order with complete information.

Notes:

- Foundation requirements recommended are based on soil pressure of 2,500# per sq. ft.
- Capacity rating is based on live load plus 15% for capacity of hoist weight.
- Base Mounted Pillar Jib Crane with Motorized rotation needs to include either:
 - Top or Bottom Entry Collector System for 360 Degree Continuous Rotation
 - Rotational Limit Switch to prevent the power cord from over twisting.



Optional Items:

- Set of Anchor Bolts
- Base Plate Paper or Steel Template
- Festoon Conductor System – Tagline or C-Track Type
- Interface – Testing of hoist and pendant control at our factory with the hoist & pendant.





Cyclo® Bevel BuddyBox® 4 Series

Right Angle Spiral Bevel Speed Reducers
with Cyclo® or Planetary Reducer Inputs

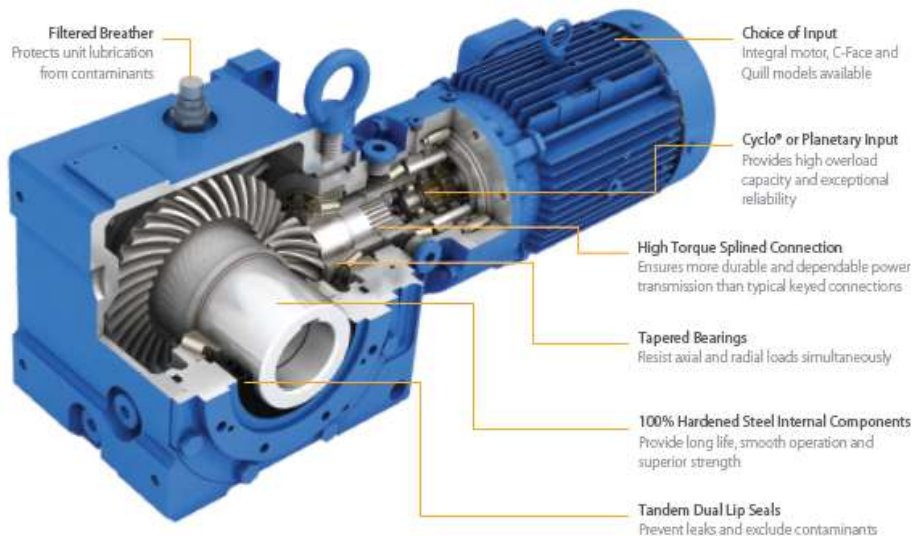
The Cyclo® Bevel BuddyBox® 4 Series (Cyclo® BBB4) built by Sumitomo is a robust, state-of-the-art, mid-sized family of speed reducers and gearmotors. The Cyclo® BBB4 is a unique combination of features that result in a highly reliable, efficient and durable gearbox: the all-steel internal construction, Cyclo® or planetary gear inputs, and the ductile iron housing, provide unmatched ruggedness.

Features for the Cyclo® Bevel BuddyBox® 4 Series

- ▶ **Ductile Iron Housing**
Ductile iron housing is twice as strong as cast iron, making it one of the most rugged bevel gearboxes available
- ▶ **Optional Taconite Sealing System**
Heavy-duty, fortified, grease purgeable system withstands the most demanding applications
- ▶ **Increased Overhung Load Capacity**
Cyclo® BBB4 has over 37.5% more overhung load capacity than previous models
- ▶ **Increased Ratings**
The newly redesigned Cyclo® BBB4 series has been optimized for increased power ratings over the previous generations
- ▶ **New Larger Frame Size**
New F Size yields higher torque and can accommodate larger shaft diameters
- ▶ **New Ratios Available**
46 standard and 87 optional ratios added

Specifications Summary

Sizes:	6 frame sizes, 105 to 2329 lbs (48 to 1059 kg)
Torque Capacity:	Up to 159,983 lb-in (17,400 Nm)
HP Rating:	1/8 to 100 HP (0.10 to 60 kW)
Ratio Range:	11:1 to 26,000:1 and greater
Mounting:	Hollow Shaft, Foot, Flange, Face
Motor Standards:	NEMA, IEC, JIS, UL, CSA, CE

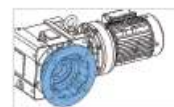


Multiple Mounting Options

Foot, Flange and U Face mount are available options for the Cyclo® BBB4 Series.



Foot



Flange



U Face