Yale® HOISTS

GLOBAL KING™

ELECTRIC WIRE ROPE HOISTS

- MONORAIL
- TOP-RUNNING DECK MOUNTS
- FAST SHIPPING
- LONGER LIFTS
- VARIABLE FREQUENCY DRIVES
- HAZARDOUS ENVIRONMENTS

COLUMBUS McKINNON CORPORATION

GLOBAL KING™ & WORLD SERIES™

ELECTRIC WIRE ROPE HOISTS

Yale® Global King™ and Shaw-Box® World Series™ wire rope hoists are built for the world market. Manufactured in Wadesboro, North Carolina, these best-in-class hoists combine more than 139 years of experience with the latest in manufacturing and materials technology, rigid design standards and the highest quality components.

The Global King hoists are some of the most competitive wire rope hoists on the market today. With industry-leading safety features, flexible configurations and a variety of options, including longer lifts, fast shipping, special control options and features for hazardous environments, these hoists are designed for ease of use and long life in even the most heavy-duty applications.

Since their introduction almost 10 years ago, Global King hoists continue to exceed user expectations and are some of the lowest total-cost-of-ownership wire rope hoists in the industry.

The Global King deliver the performance and reliability customers have come to rely on and are backed by one of the best warranties in the industry.

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MONORAIL

ELECTRIC WIRE ROPE HOISTS

Yale Global King monorail wire rope hoists provide long life in heavy service applications that require faster lifting speeds and precise positioning control. These heavy-duty wire rope monorail hoists are metric rated, low headroom and built to meet or exceed either FEM 2m or 3m duty (similar to AMSE H4 or H4+ duty).

CAPACITIES 1 to 15 TONS

Frame Size	4 Part Reeved Models							2 Part Reeved Models							Features			
	Capacity (Metric Tons)	Available Lifts (ft.)	Standard Lifting Speeds (fpm)	Standard Hoist HP	Standard Traverse (fpm)	Standard Trolley HP	Beam Flange Range (in.)	Capacity (Metric Tons)	Available Lifts (ft.)	Standard Lifting Speeds (fpm)	Standard Hoist HP	Standard Traverse (fpm)	Standard Trolley HP	Beam Flange Range (in.)	Hoist VFD Control	Trolley VFD Control	Explosion-Proof Control	Spark & Corrosion-Resistance
A	2 & 3	20 40 60	20 / 5	5 / 1.25	55 / 18	.5 / .17	4-5/8 to 14	1	40	24 / 6	3.0 / .75	55 / 18	.5 / .17	4-5/8 to 14	Optional	Optional	Not Available	Not Available
B	5	25 40 60	20 / 5	7.5 / 1-.875	55 / 18	.5 / .17	4-5/8 to 20	2-1/2	80	40 / 10	7.5 / 1.875	55 / 18	.5 / .17	4-5/8 to 18	Optional	Optional	Optional	Optional
C	7.5 & 10	25 40 60	20 / 5	15 / 3.75	50 / 17	.75 / .25	6 to 26	3-3/4 & 5	80	40 / 10	15 / 3.75	50 / 17	.75 / .25	4-5/8 to 24	Optional	Optional	Optional	Optional
D	15	25 40 60	18 / 4.5	20 / 5	50 / 17	1 / .33	8 to 20	7-1/2	80	36 / 9	20 / 5	50 / 17	1 / .33	8 to 18	Optional	Optional	Optional	Optional

HOIST FEATURES:

1 WIRE ROPE DRUM
Machined from quality steel and deep grooved with a rope guide to help ensure the rope stays in the grooves. Wire rope is secured to the drum with three heavy ductile iron clamps and designed to have three extra wraps of wire rope on the drum with the rope at full extension (low hook).

2 HEAVY-DUTY DC DISC BRAKES
Rated at 200% torque. Provide quick positive stops and load holding.

3 HOIST MOTOR
Two-speed motor with a 4:1 ratio provides a low speed for precise load handling and a high speed for fast throughput. Designed and manufactured specifically for hoisting service.

4 GEARING
Triple reduction hoist gearing is oil bath lubricated, operating in an oil-tight, cast aluminum gear case.

5 FRAME
Heavy steel frame provides a solid foundation and positive alignment of key components.

6 LOW HEADROOM
Reeved to a low-headroom design lower block for minimum headroom and maximum lift.

7 LIMIT SWITCHES
Standard upper/lower geared control circuit hoist motion limit switch. An additional block-operated upper control circuit limit switch is optional. Hoist overcapacity limit switch prevents lifting excessive overloads.

TROLLEY FEATURES:

8 TRUNNION-STYLE BLOCK & HOOK
Bearing-mounted trunnion hook that rotates 360° and swings back and forth 180° for easier load adjustment.

9 ELECTRONIC HOIST MONITORING CARD
Hoist comes standard with Pulse™ Monitor Card that records key information that can simplify troubleshooting and help reduce maintenance costs. Requires Pulse Monitor computer interface kit (sold separately) to read the data.

10 TROLLEY
Monorail trolley is easily adjustable to handle a wide range of beam flange widths. Trolley drop stops furnished as standard equipment. Rubber bumpers optional.

11 HOIST & TROLLEY CONTROLS
Housed in a common NEMA 4/12 enclosure with hoist motion monitor, motor thermal overloads, overcapacity limit switch and more. Easily accessible electrical components. Two-speed hoist and trolley control for smooth acceleration and precise load positioning.

12 WHEELS
Steel compound tread wheels for long life and use on either wide-flange or “S” beams. One wheel on each side of trolley driven for positive tracking.

TOP-RUNNING & DECK-MOUNT

ELECTRIC WIRE ROPE HOISTS

The Yale Global King top-running, deck-mount wire rope hoists feature a low-headroom, heavy-duty design ideal for heavy service applications. Featuring a double-girder trolley, these hoists are designed to provide long life in applications that require higher lifting speeds and precise positioning control. Built to meet or exceed either FEM 2m or 3m duty (similar to AMSE H4 or H4+ duty).

CAPACITIES 1 to 20 TONS

Frame Size	4 Part Reeved Models						Features			
	Capacity (Metric Tons)	Available Lifts (ft.)	Standard Lifting Speeds (fpm)	Standard Hoist HP	Standard Traverse (fpm)	Standard Trolley HP	Hoist VFD Control	Trolley VFD Control	Explosion-Proof Control	Spark & Corrosion-Resistance
B	5	25 40 60	20 / 5	7.5 / 1.875	50	.5	Optional	Standard Equipment	Optional	Optional
C	7.5 & 10	25 40 60	20 / 5	15 / 3.75	50	.5 (2)	Optional	Standard Equipment	Optional	Optional
D	15	25 40 60	18 / 4.5	20 / 5	75	1 (2)	Optional	Standard Equipment	Deck Mount Only	Optional
	20*	16'-8" 26'-8" 40	12 / 3	20 / 5	75	1.5 (2)	Optional	Standard Equipment	Deck Mount Only	Optional

* 20 Metric Ton D Frame is modified from 4-part reeving to 6-part reeving.

HOIST FEATURES:

1 WIRE ROPE DRUM
Machined from quality steel and deep grooved with a rope guide to help ensure the rope stays in the grooves. Wire rope is secured to the drum with three heavy ductile iron clamps and designed to have three extra wraps of wire rope on the drum with the rope at full extension (low hook).

2 HEAVY-DUTY DC DISC BRAKES
Rated at 200% torque. Provide quick positive stops and load holding.

3 HOIST MOTOR
Two-speed motor with a 4:1 ratio provides a low speed for precise load handling and a high speed for fast throughput. Designed and manufactured specifically for hoisting service.

4 GEARING
Triple reduction hoist gearing is oil bath lubricated, operating in an oil-tight, cast aluminum gear case.

5 LOW HEADROOM
Low headroom design provides maximum hook travel.

6 LIMIT SWITCHES (NOT PICTURED)
Standard upper/lower geared control circuit hoist motion limit switch. An additional block-operated upper control circuit limit switch is optional. Hoist overcapacity limit switch prevents lifting excessive overloads.

7 TRUNNION-STYLE BLOCK & HOOK
5 through 15 Metric Ton units come with a bearing-mounted trunnion hook that rotates 360° and swings back and forth 180° for easy load adjustment.

20 Metric Ton units have a fully enclosed hook block with load hook that rotates a full 360°

Top-Running Unit Shown Above

TROLLEY FEATURES:

8 ELECTRONIC HOIST MONITORING CARD
Hoist comes standard with Pulse™ Monitor Card that records key information that can simplify troubleshooting and help reduce maintenance costs. Requires Pulse Monitor computer interface kit (sold separately) to read the data.

9 TROLLEY
Trolley trucks are a heavy-duty steel weldment fabricated from structural steel shapes for maximum positive alignment of components. High-impact rubber bumpers are standard on all four corners.

10 HOIST & TROLLEY CONTROLS
Housed in a common NEMA 4/12 enclosure with hoist motion monitor, motor thermal overloads, overcapacity limit switch and more. Easily accessible electrical components. Two-speed hoist with trolley VFD control for smooth acceleration and precise load positioning.

11 WHEELS
Flat-tread hardened steel wheels to run on ASCE or square bar rail. One wheel on each side of trolley driven for positive tracking. 5-ton capacity trolleys drive both wheels through single motor and gear reducer. All other capacities have dual drives.

LONGER LIFTS

ELECTRIC WIRE ROPE HOISTS

Reach new heights with our industry-leading wire rope hoists. Yale Global King wire rope hoists are more flexible and versatile than ever before. Meeting industry demand, we have added more models to our offering that provide longer lifts.

60 FT. LIFT UNITS

Lift: 60 ft.

Capacities: Up to 15 Tons

Lifting Speeds: 20/5 FPM on most models

Trolley: Available as monorail or top-running units.
2-speed trolley control is standard on monorail hoist.
VFD trolley standard on top-running units.
(See trolley details on pages 5 and 7.)

80 FT. LIFT 2-PART REEVED UNITS

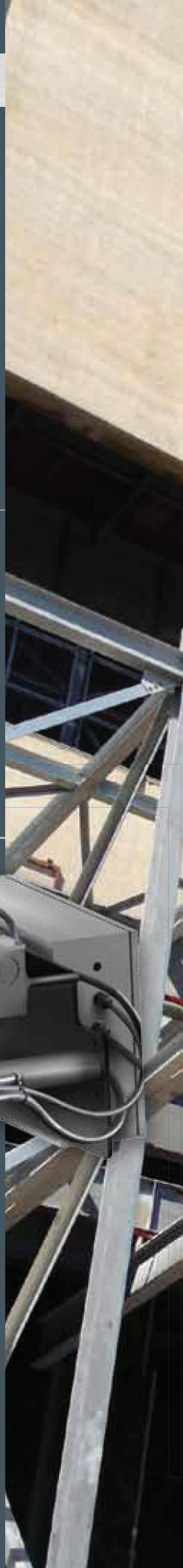
DOUBLE THE AVAILABLE LIFT AT TWO TIMES THE LIFTING SPEED OF 4-PART REEVED MODELS

Lift: 80 ft.

Capacities: Up to 7-1/2 Tons

Lifting Speeds: 40/10 FPM on most models

Trolley: Available as monorail units.
2-speed trolley control standard.
(See trolley details on pg. 5.)



VARIABLE FREQUENCY DRIVES

FOR ELECTRIC WIRE ROPE HOISTS

Yale Global King electric wire rope hoists are available with Magnetek variable frequency drives – one of the industry's premier variable frequency drives. These VFD units allow for greater speed adjustment, improved load control, higher duty cycles and increased hoist life. Magnetek variable frequency drives feature a modern design and provide reliable, user-friendly controls. Keypad with data readout allows for easy programming and on-the-spot troubleshooting.

BENEFITS & FEATURES

PRECISE LOAD CONTROL
20:1 speed ratio allows for a wide range of hoist lifting speeds while decreasing load bounce. Modified open-loop vector control with gearbox-mounted speed sensor protects against over-speed and speed deviation. Quick-stop feature allows the hoist to stop within 3" at high speeds.

LONGER HOIST, BRAKE & MOTOR SERVICE LIFE
Frequency drive offers built-in thermal overload and overcurrent protection for the hoist motor. Ramp-down-to-stop feature decreases load bounce and increases brake life.

INDUSTRY-LEADING SAFETY FEATURES

EASY TROUBLESHOOTING
VFD control features keypad and easy-to-read screen for on-the-spot safety readouts. Recorded fault history aids in troubleshooting process.

OVERLOAD & OVER-SPEED PROTECTION
Load Check II™ feature, preset to 100% of load, monitors capacity and prevents overloading if capacity is exceeded. Modified open-loop vector control with gearbox-mounted speed sensor protects against over-speed and speed deviation.

HIGHER DUTY CYCLES
External brake resistor allows for maximum heat dissipation and uninterrupted drive service at high-duty cycles. Hoists are not equipped with load brakes, reducing heat generation in high-duty-cycle applications.

FLEXIBLE CONFIGURATIONS
Standard 2-step infinitely variable control with acceleration and deceleration control. Optional 3-step infinitely variable control as well as 2 and 3 speed multi-step controls. Multiple power supply options also available. Drive is equipped with 115V interface card for compatibility with 115V control bridge and crane systems.

KEY FEATURES:

1 WIRE ROPE DRUM
Machined from quality steel, deep grooved with a rope guide to help ensure the rope stays in the grooves. Wire rope is secured to the drum with three heavy-duty clamps and designed to have three extra wraps of wire rope on the drum with the rope at full extension (low hook).

2 HEAVY-DUTY DC DISC BRAKES
Rated at 200% torque. Provide quick positive stops and load holding.

3 MOTORS
Features inverter-duty hoist motor for use with variable frequency drives. Designed and manufactured specifically for hoisting service.

4 GEARING
Triple reduction hoist gearing is oil bath lubricated, operating in an oil-tight, cast aluminum gear case.

5 FRAME
Heavy steel frame provides a solid foundation and positive alignment of key components.

6 LOW HEADROOM
The hoist is reeved to a low-headroom design lower block for minimum headroom and maximum lift (not shown).

7 LIMIT SWITCHES
The hoist is provided with an upper/lower geared control circuit hoist motion limit switch. An additional block-operated upper control circuit limit switch is available as an option. A hoist overcapacity limit switch prevents overloading. Drive equipped with Load Check II™ feature that monitors capacity and prevents overloading if capacity is exceeded.

CAPACITIES 1 to 20 METRIC TONS

AVAILABLE ON MONORAIL, TOP-RUNNING & DECK-MOUNTED HOISTS

8 TRUNNION-STYLE BLOCK & HOOK
Each hoist comes with a bearing-mounted trunnion hook that rotates 360° and swings back and forth 180° for easier load adjustment.

9 ELECTRONIC HOIST MONITORING CARD
Hoist comes standard with Pulse™ Monitor Card that records key information that can simplify troubleshooting and help reduce maintenance costs. Requires Pulse Monitor computer interface kit (sold separately) to read the data.

10 TROLLEY
Available as monorail or top-running units. (See trolley details on pages 5 and 7)

11 HOIST & TROLLEY CONTROLS
Housed in a common NEMA 4/12 enclosure with hoist motion monitor, motor thermal overloads, overcapacity limit switch and more. Easily accessible electrical components. VFD hoist and trolley control for smooth acceleration and precise load positioning.

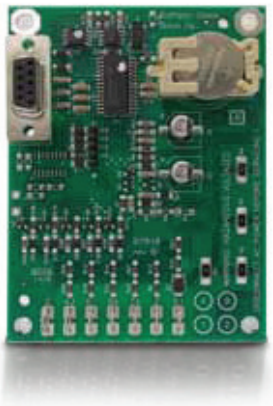
12 WHEELS
Steel compound tread wheels for long life and use on either wide-flange or “S” beams. One wheel on each side of trolley driven for positive tracking.

PULSE™ MONITOR

ELECTRONIC HOIST DATA INTERFACE

The proper use and maintenance of your Columbus McKinnon powered hoists can help ensure a long service life, as well as operator safety.

Pulse Monitor is an electronic monitoring system that records key performance data for your hoist during normal operation. The captured data can be read with the Pulse computer interface kit* to assist you in troubleshooting and determining preventative maintenance solutions. A more accurate diagnosis can help reduce maintenance costs and minimize downtime.



Standard on our popular Yale Global King wire rope hoists, Pulse technology is also available in kits for adaptation to other Columbus McKinnon hoists.

WHAT INFORMATION DOES THE PULSE MONITOR RECORD?

The Pulse Monitor electronically captures key information with a time and date stamp every time the hoist's motor is powered on, including:

MOTOR STARTS
A motor start is recognized by energization of either the slow or fast motor winding for 300ms or more.

CUMULATIVE RUN TIME
Every time the motor is energized, the Pulse Monitor records how long it runs and adds to the cumulative total run time.

PLUG EVENT (EXCESSIVE PLUGGING)
A plug event is recorded when the directional contactor (node 0A or 1A) is energized four times within any two second period of operation.

OVERCAPACITY EVENT
An overcapacity trip will be recorded when the monitor card terminals K1 and K2 measure 115 volts** and terminal 0A is at 0 volts. The overcapacity event is recorded based on absence of a voltage at the normally closed contact from the overload limit switch relay. It is not measuring load on the motor, but rather the state of the overload limit switch.

MOTOR TRIP EVENT
A motor trip event will be recorded when the monitor card terminal K1 measures 115 volts** and terminal K2 is at 0 volts.

VOLTAGE MEASUREMENT
For every motor event, the voltage will be measured.

Pulse Monitor Interface Kit with USB Adaptor

TOTAL COST OF OWNERSHIP

The long-term expense of maintenance, service fees and replacement parts can add up over the full service life of a hoist. All of these after-sale costs contribute to the total cost of ownership – which is an important factor to consider when making a purchasing decision.

The Pulse Monitor can help provide an even lower total cost of ownership for your CMCO hoist, by allowing for:

BETTER MAINTENANCE TIMING
Consistently monitors motor starts, hoist run time and cumulative run time for preventative maintenance planning.

REDUCED DOWNTIME DUE TO IMPROPER HOIST USE
Monitors excessive hoist use, excessive plugging, motor trip events and overcapacity events.

VERIFICATION OF CLEAN LINE VOLTAGE
Measures voltages for every motor event to ensure hoist is running on adequate line voltage.

LONGER HOIST LIFE
Allows operator to schedule maintenance at regular intervals and monitor hoist abuse.

PULSE MONITOR KIT OFFERING

The Pulse Monitor is available in four different kit varieties to accommodate individual needs.

PULSE MONITOR INTERFACE KIT WITH USB ADAPTOR
Catalog #: **PINTERFACEUSB**

Use with Yale Global King & Shaw-Box World Series hoists equipped with a Pulse Monitor Card. Kit includes:

- (1) Pulse Monitor Computer Interface (9V battery not included)
- (1) Serial Extension Cable (6 ft.)
- (1) Pulse Monitor Software Disk
- (1) StarTech.com USB Adaptor Software Disk
- (1) Serial Port to USB Adaptor Cable (3 ft.)

Note: Kit also includes a DB9 to DB25 pin adapter for 25-pin RS232 serial communication, which will not be needed in most cases.

PULSE MONITOR INDIVIDUAL CARD KITS
Catalog #: **PCARDKIT1** (Use with 115V control)
Catalog #: **PCARDKIT2** (Use with 24V control)

Use kits to install Pulse Monitor Card on CMCO hoists that do not include card as standard equipment. To read data on the card, a computer interface kit, sold separately, is also required. Kit includes:

- (1) Pulse Monitor Card
- (1) Card Mounting Bracket
- (1) Pulse Monitor Software Disk
- (6) Pan Head Phillips Screw Self Tap #6-32 X 5/8" (includes 2 extra)
- (3) Pan Head Phillips Screw Self Tap #10-24 X 1/4" (includes 1 extra)
- (10) Terminal Wire Insulated Female Quick Connector Panduit Part no. DNR14-188F1B-C (tab size 0.187 X 0.020) (includes 3 extra)
- (1) 16# Insulated Wire (15 ft.)

PULSE MONITOR INTERFACE KIT
Catalog #: **PINTERFACEKIT**

Use with Yale Global King & Shaw-Box World Series hoists equipped with a Pulse Monitor Card. Kit includes:

- (1) Pulse Monitor Computer Interface (9V battery not included)
- (2) Serial Extension Cable (6 ft.)
- (1) Pulse Monitor Software Disk

PULSE MONITOR COMPLETE CARD & INTERFACE KITS
Catalog #: **PCOMPLETEKIT1** (Use with 115V control)
Catalog #: **PCOMPLETEKIT2** (Use with 24V control)

Use to install Pulse Monitor Card on CMCO hoists that do not include the Pulse Monitor Card as standard equipment. Kit also includes computer interface kits required to read card data. (Requires 3" X 5-1/4" X 2-1/2" envelope in control enclosure.) Kit includes:

- (1) Pulse Monitor Card
- (1) Card Mounting Bracket
- (1) Pulse Monitor Computer Interface (9V battery not included)
- (2) Serial Extension Cable (6 ft.)
- (1) Pulse Monitor Software Disk
- (1) StarTech.com USB Adaptor Software Disk
- (1) Serial Port to USB Adaptor Cable (3 ft.)
- (6) Pan Head Phillips Screw Self Tap #6-32 X 5/8" (includes 2 extra)
- (3) Pan Head Phillips Screw Self Tap #10-24 X 1/4" (includes 1 extra)
- (10) Terminal Wire Insulated Female Quick Connector Panduit Part no. DNR14-188F1B-C (tab size 0.187 X 0.020) (includes 3 extra)
- (1) 16# Insulated Wire (15 ft.)

Note: Kit also includes a DB9 to DB25 pin adapter for 25-pin RS232 serial communication, which will not be needed in most cases.

* Computer interface kit (sold separately) is required to read Pulse Monitor Card data.

** While the Pulse Monitor itself is capable of +/-5% voltage measurement accuracy, two additional factors may further decrease accuracy. Motor voltage is calculated using the control voltage powering the Pulse Monitor. This calculation is based on the ideal ratio of the control transformer (primary voltage to secondary voltage). Any variation in the control transformer ratio will consistently skew the motor voltage data. Additionally, this voltage measurement is made at the point where the Pulse Monitor is connected. If this point is significantly removed from the motor being monitored, a noticeable voltage drop may exist. The user is cautioned to consider both these contributing factors while interpreting the stored voltage data.

THE POWER OF INTELLIGENT LIFTING

Columbus McKinnon is one of the most respected and well-known names in the material handling industry. We combine two different yet complimentary areas of expertise – rigging products and hoists – to develop complete floor-to-ceiling lifting systems for even the most unique material handling applications.

Columbus McKinnon designs and manufactures a large portfolio of durable and reliable products for a variety of industries. Our portfolio includes powered and manual hoists, rigging products, below-the-hook attachments, cranes, enclosed track systems and specially engineered products.

KNOW HOW. KNOW WHY. BE SAFE. GET TRAINED.

CMCO TRAINING™
COLUMBUS McKINNON CORPORATION

Not only is Columbus McKinnon a leader in material handling products, we are also a global leader in providing expertise and training on the proper use and inspection of rigging and overhead lifting equipment. With a range of comprehensive programs and seminars conducted at venues throughout North America, including our hands-on training centers and private companies, our courses include:

- **Hoist Maintenance**
- **Crane & Hoist Inspection**
- **Mobile Crane Operator**
- **Crane Operator Training**
- **Safe Hoisting**
- **Load Securement**
- **Rigging**
- **Rigging Gear Inspection**

One of our newest programs, **CMCO University**™, is a three-day course designed to give attendees an intimate knowledge of our products, the information they'll need to select the right product for the application, and the tools to win in the marketplace.

Classes are available at our state-of-the-art, hands-on training centers, including the **Niagara Training Center** and the **Hoist & Rigging Training Center of Excellence in the Center for Occupational Health and Automobile Manufacturing (COHAM) lab at The Ohio State University**.

Rely on Columbus McKinnon for the products and expertise you need to keep your workforce productive and safe.

CMCO COLUMBUS McKINNON CORPORATION

CM · COFFING HOISTS · BUDGIT Hoists · CHESTER HOIST · Yale HOISTS · SHAW-BOX · ABELL-HOWE · UNIFIED

Stock # YGKB-1214
EP 3000 BB