

GLOBAL MAX

HOISTS



HIGH-CAPACITY WIRE ROPE HOISTS
FOR APPLICATIONS IN ANY INDUSTRY

PERFORMANCE THROUGH EVOLUTION & INNOVATION

“To achieve the highest possible levels of performance and reliability
it is necessary to continuously learn from experience...



...Invest in R&D and pay attention to
even the smallest possibility for
improvement. Only then can new
bench marks for efficient performance
and operating reliability be set.
Only then can a technology be said
to be truly proven.”



GLOBAL MAX HC HOIST: the next generation.

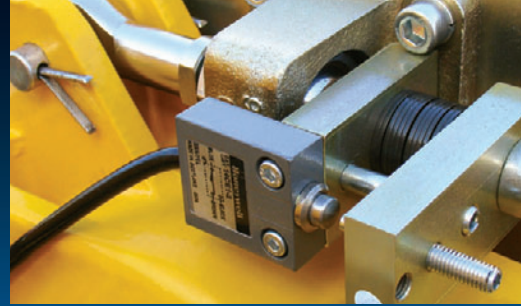
The Global Max HC Hoist is designed with maximum performance and superior levels of functionality in mind. The parallel configuration of the motor and drum is one of the series of innovations that set the benchmarks for the crane industry. Every component of the HC Hoist has been optimized using the latest finite element design techniques. A comprehensive commitment to detail during each stage of development and manufacturing results in a user-friendly, high-endurance hoist for increasing productivity in a vast array of industries.

Available in capacities from 25 to 50 tons, the HC Hoist incorporates state-of-the-art technology to provide unsurpassed benefits to users. From the external hoist motor that optimizes cooling while providing maximum accessibility to the hoist brake that acts on a gearbox shaft for enhanced security, the HC Hoist contains a multitude of features that outdistance the competition.

Available through a comprehensive network of Columbus McKinnon cranebuilders and distributors, the HC Hoist provides unbeatable value to users in any environment.

Yale[®]
HOISTS

GLOBAL MAX HC HOIST: UNSURPASSED OPERATING FEATURES:



Torque arm load-limiting cut-out device prevents the operator inadvertently overloading the hoist and crane structure.

- Protects the operator and the machine .
- Measures all the load that the hoist mechanism is transmitting (not just the load on one or two ropes).
- Can be easily adjusted to the required capacity.
- Does not reduce available height of lift.
- Activated directly by the load, does not rely on measuring electrical current.



HC



Precision engineered hoist gearbox with all gears oil immersed in a cast aluminum gearbox case.

- Gears permanently immersed in oil for reliability year after year.
- The hollow shaft gearbox directly drives the hoist drum shaft, avoiding the need for final reduction by an overhung pinion and barrel spur arrangement outside the gearbox.
- Gears are case hardened and precision ground with special tip relief and crowning for smooth running and high reliability.
- Gear train can be viewed through a removable hoist gearbox inspection cover.

Heavy duty rope guide ensures positive rope scrolling and prevents damage in 'slack-rope' conditions.

- Robust functional design - the product of decades of experience.
- Specially selected oil impregnated nylon material, highly resistant to breaking or permanent distortion. The material properties include self-lubrication and a good elastic memory range.
- Spring loaded inner clamping band to prevent rope build up from damaging the rope guide if the operator lowers the hook block onto an object and causes slack in the ropes.
- Rope guide reduces wear on the hoist rope and drum.
- Easy to install.

Designed for improved ventilation and easy access to key components.

- External hoist motor to optimize cooling and maximize accessibility.
- Remote mounting of the hoist motor and brake prevents heat transfer in either direction.
- Heavy duty two speed hoist motor with built in protection against over-heating.
- Cylindrical rotor fan cooled design.
- Close coupled hoist motor mounting with vibration damping coupling prolongs motor and gearbox life.
- Overheating protection in the motor winding is standard.
- Class "F" insulation.
- I.P 55 (NEMA 3R) protection against ingress of dust particles and water.

H O I S T



Superior Load Security.

- A unique hoist brake, motor and gearbox configuration ensures enhanced load safety compared to traditional hoists.
- Hoist brake acts on a gearbox shaft - not on the motor shaft.
- When the hoist brake is applied the load will remain secure, even if the motor is removed or if for any reason the motor connection or motor shaft is damaged or broken.
- Automatic braking in the event of a power failure.

Protection against the environment.

- Temperature protection can be specified for ambient temperatures up to either 40°C (104°F) or 50°C (122°F). Special models are available for ambient temperatures above 50°C.
- Corrosion protection on all exposed components on the hoist mechanism is provided by either powder coating or zinc passivation.
- Suitable for normal indoor or outdoor environments (none saline).

Bottom Block.

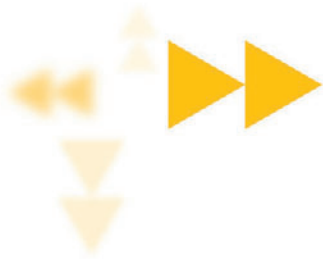
- Ergonomic design for improved load handling.
- "Sealed for life" maintenance-free bearings fitted in all sheaves.
- Robust cast aluminum sheave covers.
- Spring loaded safety latch fitted as standard.

High-strength galvanized wire ropes.

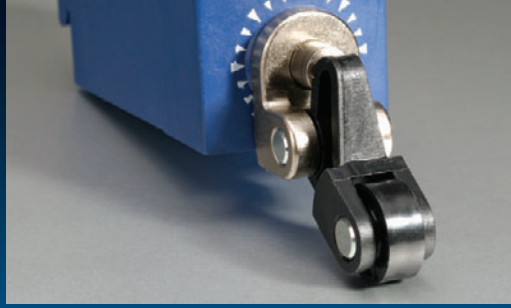
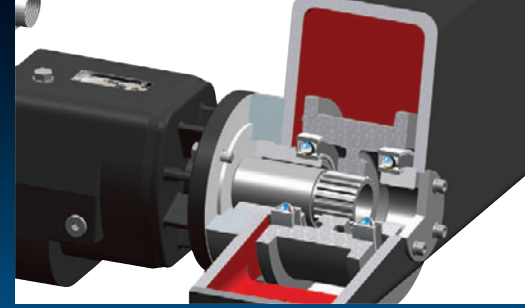
- Compact strand structure with superior tensile strength.
- Substantial fatigue strength for durability under cyclic bending.
- Galvanized steel rope strands for maximum corrosion protection.

Long Life Hoist Brake.

- Low maintenance DC disc brake.
- Hand-release mechanism fitted as standard.
- Health and safety compliant asbestos free brake linings.
- Hoist brake completely accessible.



HIG



Heavy Duty Fan Cooled Trolley Motor.

Upper & Lower Adjustable Limit Switches.

IP 55 Steel Electrical Control Enclosure.

- Fan cooled with cast aluminum cooling fins for enhanced thermal capacity.
- Traverse motors are fitted with D. C. disk brakes rated for the designated duty classification as well as for emergency stop.

- Standard Upper and Lower Limit Switches are activated by the rope guide as it travels along the drum and the cut-out positions can be adjusted to suit the application.

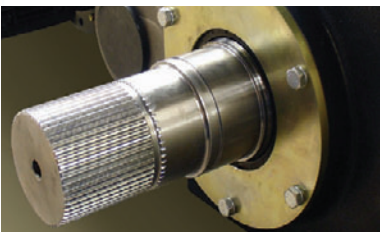
- Functional design with hinged door makes all components accessible.
- Quick release heavy duty plug and socket connections.
- Hours in service meter records the total time the hoist motor is energized.
- A phase failure relay prevents movement of the hoist if either the phase sequence is incorrect or one or more phases of the electrical supply fails. The relay provides further protection by preventing movement of the hoist in the event of connection to under or over voltage.
- Mechanical over-speed switch on the second gearbox reduction (optional) which de-energizes the hoist if the gearbox shaft is running more than 10% over normal speed. The operation of this device is not dependent on software or a micro-processor.
- Better heat dissipation by the finned aluminum heat-sink to transfer heat out of the control enclosure when inverters are used on traverse.
- Panel wiring is ferruled and fully identified to the connection terminal.



GLOBAL MAX HC HOIST: Unsurpassed operating features

HOIST

double girder



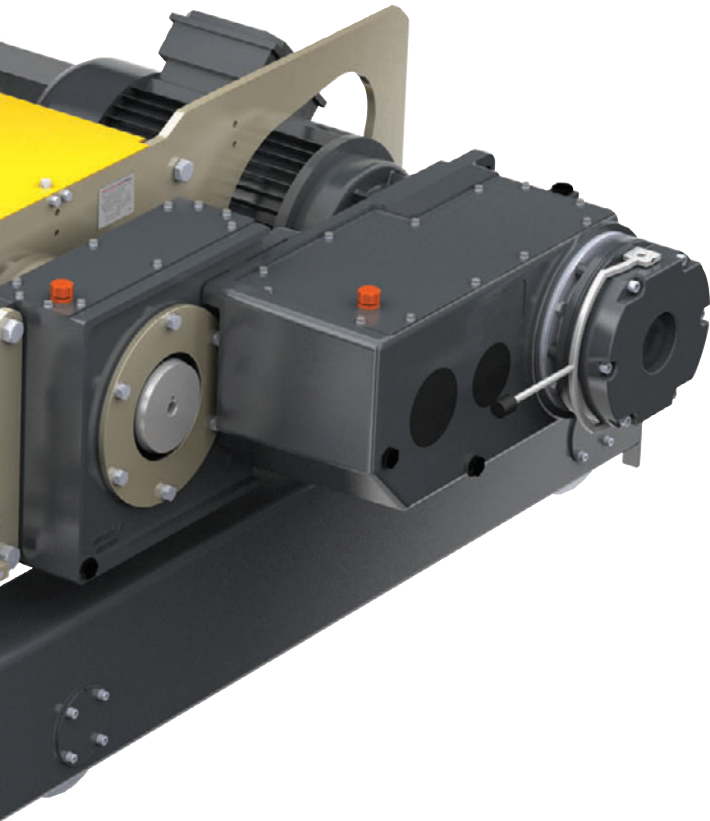
This new generation of hoists sets a bench mark for lifting and material handling in the 21st century.

The design concept of a single reeved hoist drum provides the most efficient and cost effective solution for double girder and base mount applications in capacities up to 35 tons.

Optional features include a double reeved hoist drum to achieve genuine true vertical lift for enhanced safety and precision handling.

GLOBAL MAX HC SINGLE REEVED DOUBLE GIRDER HOISTS

capacities up to 35 tons

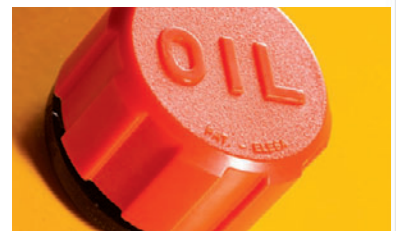


The unique low profile design of this range of double girder hoists is achieved by off-setting the rope diverter to allow a higher top hook position.

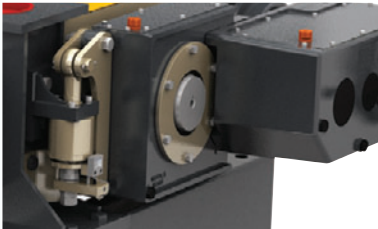
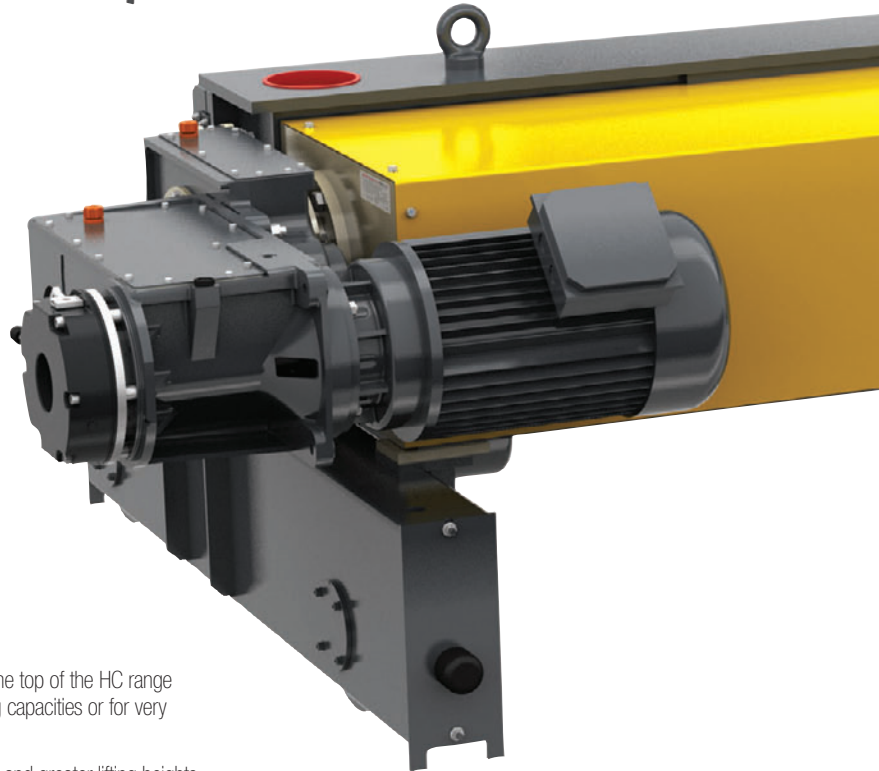
Multiple gearbox ratios, motor powers and hoist drum lengths provide standard HC Hoist solutions for an exceptionally wide range of customer requirements.

Most hoist versions are available with the hoist drum parallel or perpendicular to the crane beams allowing side hook approaches to be optimized to best suit the application.

To ensure high performance and long-life, all travelling machinery incorporates direct drive technology with power transmission through a spline or shaft connection.



double girder



These hoists sit at the top of the HC range for the highest lifting capacities or for very heavy duty ratings.

Faster lifting speeds and greater lifting heights at lesser capacities are also available.

Key features include double reeved hoist drum to achieve genuine true vertical lift for enhanced safety and precision handling.

Zero lateral hook movement over the full lifting height results in equal trolley wheel loads. This, in-turn, allows the crane designer to optimize the dimensions and weight of the crane structure generally resulting in savings in the building structure or supporting steelwork.

GLOBAL MAX HC DOUBLE REEVED DOUBLE GIRDER HOISTS

capacities up to 50 tons



This range of hoists is available in a robust heavy duty open winch format with drum flanges instead of rope guides.

As an optional enhancement, true vertical lift models of HC hoists are available with separate ropes in the left and right hand grooves with a compensating bar rather than a sheave.





Additional Products in the Global Line

GLOBAL MAX HC Service & Maintenance

HC hoists have an open layout making servicing and maintenance easier.

Both the hoist brake and the hoist motor are external on HC hoists.

The hoist gearbox has a large inspection cover and the trolley wheels are easily changed.

The standard HC hoist employs conventional and reliable electrical systems.

GLOBAL KING TOP RUNNING HOISTS

capacities up to 20 tons



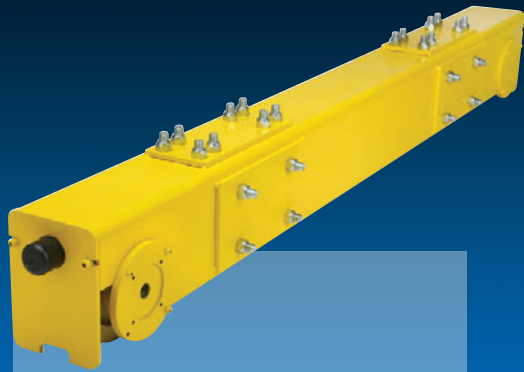
The Global King Top Running Trolley Deck and Hoist is a low headroom, heavy-duty hoist built to provide long life in heavy applications with the higher lifting speeds and precise positioning control.

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

The motor is two-speed with a 4:1 ratio from high to low speed; giving a low speed for precise load handling and a high speed for fast throughput.

The wire rope drum is machined from quality steel, deep-grooved with a rope guide to help ensure the rope stays in the grooves.

The hoist is reeved to a low-headroom design lower block for minimum headroom and maximum lift.



SINGLE & DOUBLE GIRDER END TRUCKS

Complete with Connection Plates, Rail Sweeps and Bumpers.

- Fitted with 2 removable (not welded) Rail Sweeps for easier inspection of the wheels.
- Heavy Duty Rubber Bumpers come standard.
- 2 oversized Hand Holes allow for easy access to connection plate bolts.
- Rotating Axle Driver and Trailer Wheels – No exposed gearing.
- Wheels are flat tread machined and hardened to 300-320 BHN – the industries hardest – and can run on ASCE or Square Bar Rail.
- Top and Side Girder Connection Plates come standard.
- Girder Connection Plates are bolted, not welded, to allow the girder to be removed for shipping.
- Readily Available Standard Configurations range from 1 to 20 Tons, Wheel Sizes from 4.5" to 10.2" with Wheel Bases from 54" to 120".
- Constructed from Heavy Wall ASTM Structural Tube to handle a broader range of capacities.



HOIST & TROLLEY

For Single & Double Girders

The Yale® Global King Hoists & Trolleys provide long life in heavy service applications with capacities from 1 to 20 tons.

- Built to meet and exceed either FEM 2m or 3m duty (similar to ASME H4 or H4+ duty).
- Low headroom design provides maximum hook travel.
- 200% torque DC hoist motor brake.
- All Controls housed in NEMA 4/12 enclosure with easily accessible components.
- Triple reduction, helical, oil-bath lubricated hoist gearing in a cast aluminum gear case.
- Standard Hoists and Trolleys are CSA approved.



BRIDGE MOTORS

Complete with Plug & Play Cables

- Motor, Reducer and DC Rectified Brake are fully assembled for easy installation.
- Shipped ready to install on End Truck with 4 bolt connection.
- Quick-Connect Power Cable to Control Panel.
- Motors are sized to provide more torque and cooler operation for superior performance and longer life.
- Direct-Spline connection to the drive wheel.
- Motor built for use with industry standard variable frequency controls to provide a wide range of travel speed capacity.
- Totally enclosed oil-bath helical gear bridge reducers.
- Power 230/460, 200 & 575; HP: 3/4, 1, 1.5, 2 & 3.
- Motors are provided with TAS as standard. CSA & CE Approved



CRANES



CONTROL PANEL
With Plug & Play Connectors

- Plug & Play cables connect to bridge motors, hoist & trolley, power and pendant control for easy assembly.
- Standard Variable Frequency Control provides controlled acceleration and deceleration for smoother operation, reduced load swing, and extends the life of the drive train.
- NEMA 4/12 Enclosure. Meets NEC.
- Fusing, Manual Disconnect & Mainline Contactor.
- Control Panel Components are CSA approved.



PENDANT CONTROL
Plug & Play Feature

- Plug & Play connection make installation and maintenance quick and easy, eliminating the need of an electrician and minimizing downtime.
- Simplified 8 button operation for all movement.
- UL Listed and CSA approved.



FESTOON SYSTEM
With Plug & Play Connections

- Easy quick connect plugs requires no special tools or skills to “wire up” a bridge crane.
- Connection housings are durable metal with spring loaded snap connections. No plastic housings to break or long screws or loose gaskets to contend with.
- Flat cables and plugs are CSA approved.

ONLINE ESTIMATING SOFTWARE & Component Manuals

- Our easy to use web based estimating software allows our Yale® Shaw-Box® Authorized Distributors the ability to easily prepare an estimate and generate clearance drawings.
- Clearance diagrams automatically calculated and provided in PDF or a variety of AutoCAD, E-Drawing or Solid Works formats.



CRANE KIT: Virtually Everything Required to Build a Crane





Extensive Product Line & Expert Training Programs

From powered hoists and rigging to jib cranes and below-the-hook attachments, Columbus McKinnon provides the most extensive product line in the industry. We are dedicated to promoting the safe and proper use of all our products through intensive hands-on Rigging and Hoist Training programs.

For 135 years, Columbus McKinnon has meant durability and reliability for generations of users; and is now the single source for all your material handling needs. Visit us online to view our entire line of brands, products and services.

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