E·M·H

Engineered Material Handling

Certified to ISO 9001:2000 Standards

Standard Wire Rope Hoists

EMH sets the sta

Monorail
"E" Models
Capacities to 15 tons

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Standard Hoist Designs Include:

Model "E"
Monorail for single girder cranes

Model "D"
Top running for double girder cranes

Model "Z"
Top running, double girder with dual motors, capacities to 50 tons

Model "SU"
Monorail hoist for single girder cranes, with swivel trolley for curved track

Double Girder
"D" Models
Capacities to 40 tons

andard for wire rope

Easily adjustable dual upper and lower **gear type limit switches** bring the load hook to a positive stop at any desired position in both the hoisting and lowering directions.

Trolley drive consists of pole changing squirrel-cage gear motor. Integral disc brakes are specially designed for crane service. Low torque, high inertia drives provide smooth acceleration and deceleration without excessive load swing.

Travel motors are provided with DC disc brakes, quick disconnect plugs, and class F insulation.

Hoist motor and gear train are designed and built to meet the most severe demands of hoisting service requiring frequent reversal and high starting torque. The motor is work rated, with Class F insulation, and meets CSA requirements.

The gear train consists of hardened and polished helical gears and pinions. Compact design with low weight/output ratio provides a highly efficient, quiet, and long lasting operation.

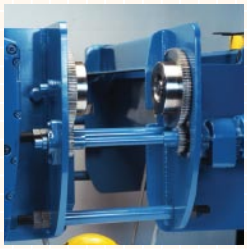
Adjustable **tow arm** and **trolley travel limit switch** available as standard options.

Rope Guide prevents rope from being unbraided, overlapped, or cut. Protects operator from injury.

Maintains the rope in contact with the drum grooves even under slack rope conditions.

A DC rectified magnet actuated **disc motor brake** is automatically applied in the event of power failure. These self-adjusting and virtually maintenance free brakes are provided with asbestos-free, non-polluting brake linings. An expected service life of one million operations before requiring the first adjustment.

Pre-tested, multi-pin **quick disconnect plugs** and socket connections for fast, safe, mistake-proof electrical assembly.



Large diameter, machine tool steel quality wheels and drive pinions. Available for most any flange width or beam style.

(Applies to Monorail "E" models only).

Heavy duty **clamp bumpers** permit easy, on-site adjustment of trolley stop locations for safe hoist movement.

Our hoists' electrical control panels, with standard components and spacious design, make service more convenient than competitive brands.

Standard equipment on all panels includes:
Hoist manual motor starter breaker and overload; hoist two-speed reversing contactors; trolley manual motor starter breaker and overload, trolley two-speed reversing contactors (monorail models), trolley VFD and dynamic braking resistor (top running models), and NEMA 12 enclosure.

e hoists!

Top Running Double Girder Trolley Features:

- **Drive wheels** are forged steel or spheroidal castings.

  A **splined drive axle** directly engages the output shaft of the reducer.

- Our **drive wheel assembly** is like no other in the industry. It allows quick and easy wheel removal without special tools. The **tapered power lock system** eliminates the need for press fit and a keyway on the axle.

- **Polyamid bumpers** at both ends absorb energy and meet OSHA requirements.

- Our standard **drive motors** are of single speed squirrel cage design with VFD (inverter) controls. **Inverters** provide infinitely variable speeds and reduce starting current for extended motor life.

  EMH endtrucks use a **direct drive system**, eliminating the need to lubricate open gears, pinions and couplings.

  Our motors have **Class F insulation**. Large surface cooling fins are used for excellent heat dissipation. Quick disconnect plugs used for convenient installation and service.

- A DC rectified **disc brake** is automatically applied in the event of power failure. The brake is self-adjusting, and virtually maintenance free.

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Wire Rope Hoists

Options:

- "SU" Monorail Hoists for curved track applications
- 8/2 and 4/2 Reeving for True Vertical Lift (TVL)
- Hoist Overload Device
- Trolley Travel Limit Switches
- 4-, 6-, or 8-Pushbutton Pendant Assembly
- Tapered Trolley Wheels for "S" beams
- Patented Track Operation
- Faster Trolley Speeds
- Trolley Tow Arm
- 208 or 230 Volt Hoist Trolley Controls
- Mainline Contactor and Transformer
- Transformer for Monorail Hoist
- Flux Vector Closed Loop Variable Frequency Hoist Drive
- Trolley VFD

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Wire Rope Hoists Standard Features

EMH hoists are available in monorail and top running double girder models to provide a price to performance ratio that compares favorably with the best the industry has to offer.

- Series production with uniform quality
- Modular construction with optimally matched components
- Space saving, future oriented design
- Two lifting speeds with 6:1 speed ratio
- Two trolley speeds with 4:1 speed ratio
- TEFC motors designed for smooth crane service
- Class “F” motor insulation
- Lifetime lubricated bearings and gear reducers
- Modern helical gear trolley drive
- DC rectified brakes with a minimum of one million maintenance-free operations
- Two position upper and one lower precision limit switch
- Lang-lay, pre-formed high strength wire rope with steel core
- Heavy duty, wear resistant rope guide
- All controls mounted in NEMA 12 enclosure with overload protection
- Heavy duty bottom block with safety latch and hardened sheaves

Standard EMH Hoist Models

Single Girder

Hoist Model	Reeving	Capacities (tons)	Lifts (feet)	Lifting Speed (fpm*)
800E	4/1	2,3	20,33,50	16/2.6
1000E	4/1	3,5	20,33,50	16/2.6
	2/1	2	40,66,100	32/5.2
	4/2 **	2	18,36,59	32/5.2
	8/2 **	3,5	7,16,27,33	16/2.6
2000E	4/1	3,5,7.5	20,33,50	18/3
	2/1	2,3	40,66,100	34/5.6
	4/2 **	2,3	23,44,70	36/6
	8/2 **	5,7.5	7,18,31	18/3
3000E	4/1	5,7.5 10,13.75	20,33,50	16/2.6
	2/1	5	40,66,100	32/5.2
	4/2 **	5	17,34,55	32/5.6
	4/2 **	7.5	20,36,58	32/5.6
	8/2 **	7.5,10	5,13,23,33	16/2.6
	8/2 **	13.75	6,15,26,33	16/2.6
5000E	4/1	10,15	20,33,50	16/2.6
	2/1	5,7.5,10	40,66,100	32/5.2
	4/2 **	5,7.5,10	20,36,58	32/5.3
	8/2 **	10,15	6,15,27,33	16/2.6

Double Girder

Hoist Model	Reeving	Capacities (tons)	Lifts (feet)	Lifting Speed (fpm*)
1000D	4/1	5	20,33,50	16/2.6
	8/2 **	5	7,16,27,33	16/2.6
2000D	4/1	5,7.5	20,33,50	18/3
	8/2 **	5,7.5	7,18,31	18/3
3000D	4/1	7.5,10 13.75	20,33,50	16/2.6
	2/1	5,7.5	40,66,100	32/5.2
	4/2 **	5	17,34,55	32/5.3
	4/2 **	7.5	20,36,58	32/5.3
	8/2 **	7.5,10	5,13,23,33	16/2.6
	8/2 **	13.75	6,15,26,33	16/2.6
	6/1	10	13,22,33	11/1.8
	6/1	15,20	13,22,33	10.5/1.6
5000D	4/1	10,15,20	20,33,50	16/2.6
	2/1	5,7.5,10	40,66,100	32/5.2
	4/2 **	5,7.5,10	20,36,58	32/5.3
	8/2 **	10,15,20	6,15,27,33	16/2.6
	6/1	15,20	13,22,33	10.5/1.6
	6/1	25,30	13,22,33	9.0/1.5
6000D	4/1	15,20,25	20,33,50	14/2.3
	4/2 **	7.5,10 13.75	15,33,56	27/4
	8/2 **	15,20,25	11,23,33	13.4/2
	6/1	15,20,25 30,35,40	13,22,33	9.0/1.5

*** Standard speeds. Consult EMH for higher speeds.**
**** Double Reeved.**

EMH Headquarters

Valley City, OH is the site of the EMH corporate headquarters and manufacturing plant. Our modern facility provides us with plenty of production space and room for expansion, making EMH readily adaptable to the needs of 21st century industry.

EMH is certified to ISO 9001:2000 Standards for the design, manufacturing, installation and servicing of overhead cranes, and is a member of Material Handling Industry of America (MHIA) and Crane Manufacturers Association of America (CMAA).

CMAA® CRANE MANUFACTURERS ASSOCIATION OF AMERICA, INC.

MATERIAL HANDLING INDUSTRY OF AMERICA® MEMBER COMPANY

Complete Cranes

Capacities up to 300 tons ■ Spans up to 160 feet
Single & Double Girder ■ Top & Under Running
Gantries ■ Flexible Crane Systems • Free Standing Systems

Overhead Cranes

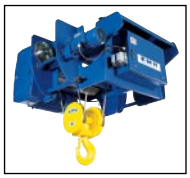
Gantry Cranes

NOMAD Free Standing Systems

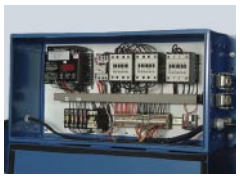
NOMAD AL Aluminum Rail and Lifting Devices

Crane Components

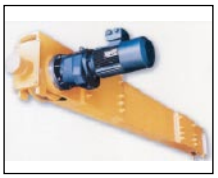
Standard Wire Rope & Chain Hoists
Custom Engineered Hoists for Class "D" & "E" Applications
Single & Double Girder, Top & Under Running Endtrucks ■ "System 2000" Crane Kits



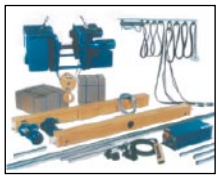
Wire Rope Hoists



Controls



Endtrucks & Wheel Blocks



System 2000 Crane Kits

EMH cranes and components are sold and serviced by:

E·M·H Engineered Material Handling

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