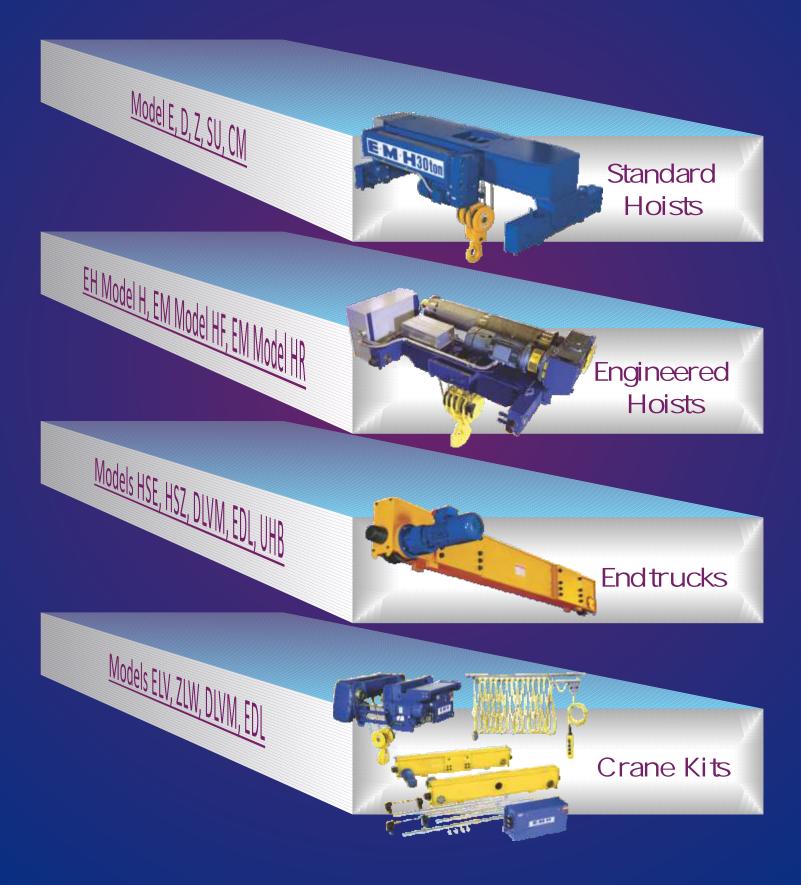


# Components for Overhead Cranes



# EMH Sets the Standard for Wire Rope Hoists

Trolley Endtrucks feature direct drive with rotating axle, articulating endtruck, sealed lifetime lubricated bearings, and forged steel.

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

Trolley drive consists of single speed squirrel-cage gear motors. Integral disc brakes are specially designed for crane service. Standard Variable Frequency trollev control provides smooth acceleration and deceleration without excessive load swing.

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

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

Standard equipment on all panels includes:

- 2-speed magnetic mechanically interlocked contactor hoist control with VFD trolley control.
- Fused protection, thermal overloads and optional control transformer housed in a hinged NEMA 12 enclosure.

Readily accessible sheave with sealed bearings.

Forged steel hook with steel sheaves, sealed bearings and safety latch.



Our pole-changing squirrel cage hoist motors are designed and built for operations that require frequent inching and spotting. They are totally enclosed and fan cooled and designed exclusively for crane and hoist duty. These 60 minute TEFC Class "F" insulated motors efficiently dissipate heat.

Large braking surface ensures fast, precise stopping of load under all load conditions.

The location of the motor provides easy access for inspection and maintenance

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.

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.

Easily adjustable 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.

We also provide, as standard, a secondary upper limit that does not rely on drum turns.

Pre-tested, multi-pin for fast, safe, mistake-

**Electrical Control Panel** 



quick disconnect plugs and socket connections proof electrical assembly.



# Why Use EMH Wire Rope Hoists?

- Serial production with uniform quality.
- Modular construction with optimally matched components.

- Lifetime lubricated bearings and
- DC rectified brakes with a minimum of one million maintenance-free operations.
- Upper and lower limit switches.
- 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.

# Single Girder Models



- Capacities: 2 to 25 tons
- Reeving: 2/1, 4/1, 4/2 and 8/2
- Standard Lifts: 20, 33 and 50 feet
- 2-Speed Hoisting
- VFD Trolley Control Standard

### Model SU Monorail Hoist with Swivel Trolley For Curved Girders



### Model E Standard Monorail Hoist

# Model D Standard Double Girder Hoist

**Standard Packaged** 

Wire Rope Hoists

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	40,66,99	32/5
	4/2	2	13,26,33	32/5
	8/2	3,5	16,27,33	16/2.6
2000E	4/1	3,5,7.5	20,33,50	16/2.6
	2/1	3,5	40,66,99	34/5.6
	4/2	3	23,44,70	36/6
	8/2	5,7.5	20,33	16/2.6
3000E	4/1	5,7.5	20,33,50	16/2.6
		10,13.75,15		
	2/1	5,7.5	40,66,99	32/5.2
	4/2	5,7.5	17,34,55	32/5.6
	4/2	7.5	20,36,58	32/5.6
	8/2	8,10	13,23,33	16/2.6
	8/2	13.75	15,23,33	16/2.6
5000E	4/1	10,15,20	20,33,50	16/2.6
	2/1	8,10	40,66,99	32/5.2
	4/2	5,8,10	26,46,65	32/5.3
	8/2	10,15	15,26,33	16/2.6

Model CM
<b>Cross Mounted Monorail Hoist</b>
for Increased Side Approach,
True Vertical Lift



Hoist Model	Reeving	Capacities (tons)	Lifts (feet)	Lifting Speed (fpm)
800D	4/1	3	20,33,50	16/2.6
1000D	4/1	5	20,33,50	16/2.6
	8/2	5	16,27,33	16/2.6
2000D	4/1	5,7.5	20,33,50	16/2.6
	8/2	5,7.5	18,31	16/2.6
	6/1	5,7.5,10	22,33	12/2
3000D	4/1	7.5, 10	20,33,50	16/2.6
	4/1	13.75	20,33,50	16/2.6
	2/1	5,7.5	40,66,99	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	13,23,33	16/2.6
	8/2	13.75	15,26,33	16/2.6
	6/1	10	13,22,33	14/2.3
	6/1	15,20	13,22,33	13.1/2
5000D	4/1	10,15,20	20,33,50	16/2.6
	2/1	5,7.5,10	40,66,99	32/5.2
	4/2	5,7.5.10	20,36,58	32/5.3
	8/2	10,15,20	15,27,33	16/2.6
	6/1	15,20	13,22,33	11/1.8
	6/1	25,30	13,22,33	11/1.8
6000D	4/1	15,20,25	20,33,50	14/2.3
	4/2	7.5,10	15,33,56	27/4
		13.75		
	8/2	15,20,25	11,23,33	13.4/2
	6/1	15,20,25	13,22,33	9.0/1/5
		30,35,40		
7000D	4/1	25,30	20,33,50	14/2.3
	6/1	25,30	22,33	14/3.5
		35,40	22,33	11/2.7

- 8/2 and 4/2 Reeving for True Vertical Lift
- Hoist Overload Device  $\bullet$
- **Trolley Travel Limit Switches**
- 4-, 6-, or 8-Pushbutton Pendant Assembly
- **Conical Wheels for E (Single Girder) Trolley.**
- **VFD Trolley Control**  $\bullet$
- **Radio Control**  $\bullet$
- Trolley Tow Arm.  $\bullet$





- Capacities: 3 to 50 tons
- Reeving: 2/1, 4/1, and 6/1
- (True Vertical Lift available on request)
- Standard Lifts: 20, 33 and 50 feet
- 2-Speed Hoisting
- VFD Trolley Control Standard

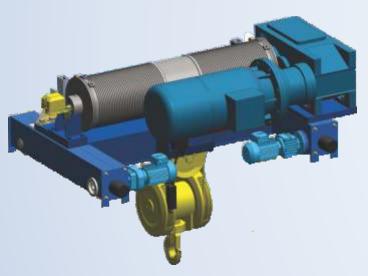
# **EMH Wire Rope Hoist Options**

- 208, 230 or 575 Volt Hoist Trolley Controls
- Mainline Contactor and Transformer
- **Transformer for Monorail Hoist**
- Flux Vector Closed Loop Variable Frequency Hoist Drive
- Special Paint
- **Special Control Enclosures**
- Outdoor Use Features
- Longer Lifts and Higher Capacities available

# **Engineered Wire Rope Hoists** for Applications with Special Requirements

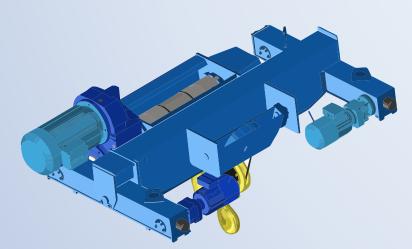
When your application requires capabilities beyond those of standard packaged hoists, EMH offers a wide line of Engineered Hoists for the following situations:

- Loads over 50 tons
- Long lifts
- True Vertical Lift
- Class D and E duty ratings
- Harsh environments
- Class 1 Div. 2 Group C and D Hoists
- Steel Service Centers, Heavy Steel Fabricators, **Precast Concrete Facilities**



# EH Model H

- Capacities to 300 tons
- Double reeving (4/2, 8/2, 12/2, 16/2) for **True Vertical Lift**
- Rotating axle trolley endtrucks



## EM Model HF

- Capacities to 100 tons
- Double reeving 8/2, 12/2) for True Vertical Lift
- Rotating axle trolley endtrucks

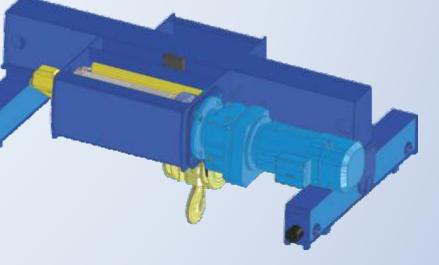
## EM Model HR

- Capacities to 50 tons
- Single reeving (4/1, 6/1)
- Rotating axle trolley endtrucks



#### All EMH Engineered Hoists offer the following features:

- Half-depth drum grooves to eliminate the need for rope guides.
- DC Disc Brakes.
- Easy access to upper sheaves for maintenance. •
- Class F Motor Insulation.
- Three-position geared limit switch (lower and upper operational, upper security) with addition of upper weight operated limit.
- Standard closed Loop Flux Vector VFD hoist control.
- Standard VFD trolley control.
- Rugged, durable motors and gearboxes with the added benefit of utilizing standard components such as drums, brakes sheaves and wheels.
- High quality, efficient, quiet AGMA Class 11 gearing.



# EMH Endtrucks - Reliable Transportation for Overhead Cranes



#### Model HSE Single Girder Top Running

Wheel Diameters (in): 4, 5, 6.5, 8, 10, 12 Wheel Bases: from 3' to 12'6" Wheel Loads (lbs.): from 16,400 to 87,000 Moving Mass (lbs.): up to 140,000 lbs.

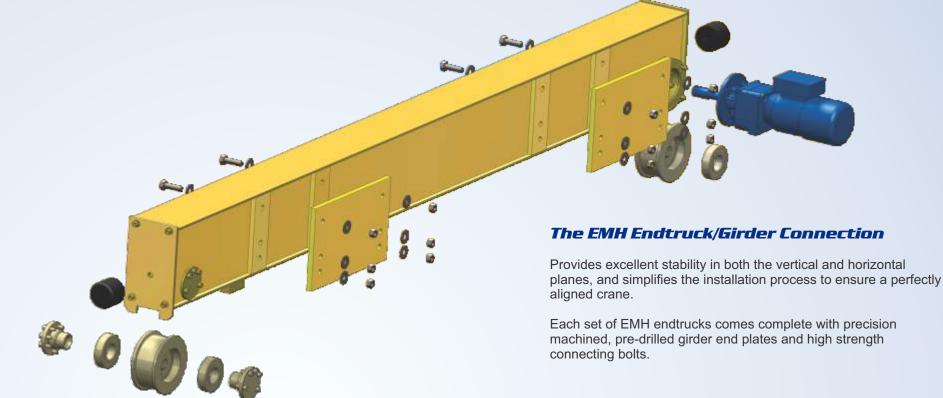


### Model HSZ **Double Girder Top Running** (Standard Model)

Wheel Diameters (in): 5, 6.5, 8, 10, 12, 16, 20 Wheel Bases: from 8'10" to 15'0" Wheel Loads (lbs.): from 9,100 to 76,430 Moving Mass (Ibs.): up to 290,000 lbs.

### Model HS **Double Girder Top Running** with Spherical Rotor Bearing

Wheel Diameters (in): 10, 12, 16, 20, 24.75, 28, 31.5 Wheel Bases: from 8'10" to 15'0" Wheel Loads (Ibs.): from 38,850 to 76,000 Moving Mass (lbs.): up to 180,000 lbs.

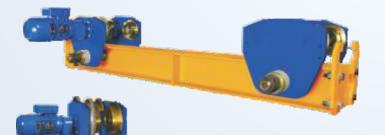


#### **EMH Endtruck Features**

**Forged Steel Wheels** Splined Drive Axle **Polyamid Bumpers Direct Drive System** Motors with Class F Insulation **DC Recitified Disc Brakes** 







### Model DLVM Single Girder Under Running Standard Headroom

Wheel Diameters (in): 4, 5, 6.25 Wheel Bases: from 5' to 7'6" Wheel Loads (Ibs.): from 4,800 to 15,000 Moving Mass (Ibs.): up to 36,000 lbs.

Also available in Low Headroom Model EDL. Flat tread wheels standard; S-beam wheels available on request.







Wheel Diameters (in): 10, 12, 16, 20,24.75, 28, 31.5 Wheel Bases: from 11'10.5" to 14'10.5" F Loads (Ibs.): from 58,750 to 321,460

Custom designed bogies also available. Consult EMH for more details.

# System 2000 Crane Kits

### The System 2000 Kit Product Line includes:

- ZLW Double Girder Top Running Cranes
- ELV Single Girder Top Running Cranes
- DLVM Single Girder Under Running Cranes
- EDL Single Girder Low Headroom Under Running Cranes.
- Optional lifts and speeds available.
- Special kits available on request.
- Note: Components are based on 460-3-60 power supply. 208, 230 and 575V are available.

**Detailed Engineering** for bridge construction and crane assembly, including two sets of the maintenance manual.

Standard EMH Wire Rope Hoist with 20 feet of lift and 2-speed lifting at 16/2.6 fpm with variable frequency trolley control.



**VFD Bridge Control Panel** with lockable fused mainline disconnect, mainline fuse, mechanical and electrical interlocking contactors and motor protection.

Most power and control connections are pre-wired through terminal strips to quick disconnect plugs.

Controls are mounted in NEMA-12 enclosures.

Model "ZLW" Double Girder Top Running

EMH

E.M.H

**Clamp bumpers** permit easy, on-site adjustment of trolley stop locations.

Bridge Conductor Cables prewired to Quick Disconnect Plugs at the panel. Model "ELV" Single Girder Top Running

# EMH Makes It Easy to Assemble Your Crane!

**Standard EMH Endtrucks** with a travel speed of 120 FPM (VFD) complete with mounting plates, bolts and bumpers. (Consult EMH for special speeds.)

Machine tool quality **Plug Assembly** makes the push button station easily removable for storage or maintenance.

**Complete trolley and sliding push button Festoon System** with all required mounting hardware. Cables are pre-wired to quick disconnect plugs. Festoon trolleys are already attached to cables.

### EMH can also supply you with these popular Crane Accessories:



Load Cells



Crane Cabs



Radio Controls



Rotating Hook Blocks

PF-25C-0414

## <u>Plus: many other products</u> as your requirements demand:

- Air Conditioning
- Anti-Collision Devices
- Epoxy Coating
- Full and Partial Outdoor Use
- Hoist Inverters
- Hoist Overload Devices
- Hoist Scales
- I-Beam Festoon Systems
- LED Lighting
- NEMA 4 Enclosures
- Rotating Red Light
- Shot Blasting
- Special Control Requirements
- Travel Limit Switches
- Warning Bell, Horn and Siren
- Weight Operated Limit Switches
- Wind Speed Monitor

### EMH overhead cranes and components are sold by:





Certified to ISO 9001:2008 Standards



