



Overhead
Bridge and Gantry
Cranes

# **Custom Engineered Crane Systems**



EMH gantry cranes at a West Coast ship building yard.

#### **Gantry Cranes**

EMH builds a complete range of gantry cranes including single girder, double girder, double leg, single leg and cantilever styles for indoor or outdoor service. Capacities, spans and heights are almost unlimited.



A 25 ton, 120 foot gantry (above) positions architectural concrete panels from production to storage..

A rotating "hammerhead" hoist (inset) with 360 degree rotation allows smooth rotation of panels from inventory storage to truck loading.

The double leg, double girder gantry (right) has a pass-through cantilever that allows hoist movement beyond the wall on the left. All crane functions are operated by a fully enclosed cab with joystick controllers.





A 130/25/15 ton, 105 foot span, double girder gantry crane installs and services turbines at an overseas power plant. The crane uses three EMH engineered hoists.

## Custom Engineered Crane Systems

## **Custom Engineered Bridge Cranes**

EMH is expert at combining complete, high quality standard products with experienced engineering to solve custom problems. We also readily and efficiently modify these standards to fit your particular application. We can assist you at any stage of your project with planning, design, specifications and drawings.



EMH is experienced in building cranes for the concrete industry. The crane above is in a high production concrete pipe facility.



A 250/50 ton engineered crane undergoes load testing at a power plant.



A double leg gantry with torsion box girder construction services roll stands in a continuous casting facility.

## Wall Traveling Jibs & Special Applications

If your overhead material handling requirements are out of the ordinary, don't hesitate to give EMH a call. We have the design and engineering skills to provide solutions for unusual applications.



Above: Wall traveling jib crane.

#### **Standard Double Girder Cranes**



Two 30 ton cranes at a Midwestern manufacturer of compressors.

Double girder cranes can be utilized at any capacity where extremely high hook lift is required because the hook can be pulled up between the girders. Double girder cranes are also ideal where high speeds and heavy service are required. They are well suited for cranes that require walkways, crane lights, cabs, magnet cable reels or other special equipment.

The double girder crane style allows a high hook lift by pulling the hook up between the girders. EMH fully assembles and tests each crane before shipment.



Four large capacity double girder cranes are used at this Midwestern die manufacturing plant.



30-ton cranes with walkways are used in the production process at a Pennsylvania manufacturer of mobile cranes.







Certified to ISO 9001:2008 Standards

### **Standard Single Girder Cranes**

Single girder cranes are the most cost effective purchase fo capacities up to 10 tons and 60 foot spans. By utilizing our box girder technology, EMH can also provide this version up to 20 tons and 120 foot spans. Reduced wheel loads, combined with very low headroom standard hoists, provide outstanding value.



Four single girder cranes in a mold pattern shop.



Monobox construction allows a 95 foot span on these 10 ton single girder cranes. Spans up to 120 feet are possible.



Multiple standard single girder cranes with capacities from 3 to 10 tons provide convenient access to lifting at a Midwestern machine shop.



## **Selecting the Proper Crane Configuration**

The structure of an overhead crane is determined by many factors, including the height to which it must be lifted, the distance it must be moved, and the strength and structure of the building in which it will be operated.

The advantages of the various structural designs are outlined on these pages, showing examples of common designs along with basic specifications. In addition, our Sales and Technical Staffs can assist you in selecting the most appropriate and economical crane for your application.

## Under Running Cranes

EMH offers a complete range of single and double girder under running cranes. Standard capacities to 10 tons; special configurations up to 25 tons and over 90 foot spans. Underhung cranes offer excellent side approaches, close headroom and can be supported on runways hung from existing building members if adequate.

# Custom Freestanding Bridge Cranes & Turnkey Installations

# At by H15 tm

A 15 ton double girder free standing system at a plastic injection mold plant in Northeastern Ohio.

#### Turnkey Overhead Material Handling Systems

EMH is expert at combining complete, high quality standard products with experienced engineering to solve custom problems. We also readily and efficiently modify these standards to fit your particular application. We can assist you with planning at any stage of your project.



This freestanding 40/20 ton double girder crane handles protective concrete casings for telecommunication equipment.



this double box girder crane reatures a so ton main hook and 20 ton auxiliary hook to lift and maneuver large molds at a Midwestern automotive plastics facility. The crane is supported by a 350 foot runway, completely designed, manufactured and installed by EMH. The crane and runway are completely free standing because the original building structure could not support an overhead crane.



A modified NOMAD with one side tied back to the building structure.

# NONAD

# **Modular Free Standing Bridge Crane Systems**



A 7.5 ton NOMAD system at a Western manufacturer of ducting.



A NOMAD System at a Midwestern manufacturer of industrial containers was installed on a 182 foot freestanding runway located between concrete building supports.

The NOMAD's low profile allows the crane to fit under the low ceiling and still provide enough lift to clear machinery and change dies. A radio control facilitates operation in tight spaces.



A NOMAD Free Standing Crane system is used outdoors at this Western water treatment plant. The crane lifts and changes filters.



Capacities to 10 tons
Standard Widths: 20, 25, 30, 35 and 40 feet
Single and Multiple Cell Runway Systems

## **NOMAD** sin:

#### **Precast Concrete Buildings**

The NOMAD can often be installed without footers, eliminating the need for digging through and damaging existing floors.

#### **Leased Buildings**

All of the NOMAD's connections are bolted for easy disassembly and relocation. If you think you may move sometime in the future, you easily can take the NOMAD to a new site.

## Buildings not designed specifically for overhead cranes.

The NOMAD's free standing structure supports loads your building's steel might not handle. And the low overhead design allows it to fit into sites where headroom might otherwise be a problem.

Think again if you've ruled out an overhead crane. NOMAD can give you the material handling you need at a price you'll like. Call EMH today for details.

#### **Each system includes:**

Standard EMH Wire Rope Hoist with 20 ft. Lift
EMH Top Running Endtrucks
Bridge Control Panel
Standard Hand-Held Radio Control
Free Standing Runway Frame
Instructions for Bridge Construction & Assembly
Maintenance Manual

#### **Complete Cranes**

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





#### Certified to ISO 9001:2008 Standards







Overhead Bridge Cranes

**Gantry Cranes** 

AL Systems™ Aluminum Cranes

#### **Crane Components**

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





Standard Wire Rope Hoists



Endtrucks

System 2000 Crane Kits

#### Service & Installation

**Engineered Hoists** 

Installation ■ Field Service & Repair ■ Crane Modernization Spare Parts ■ OSHA Inspections ■ Safety Upgrades

Load Tests ■ Training

EMH overhead cranes and components are distributed by:

