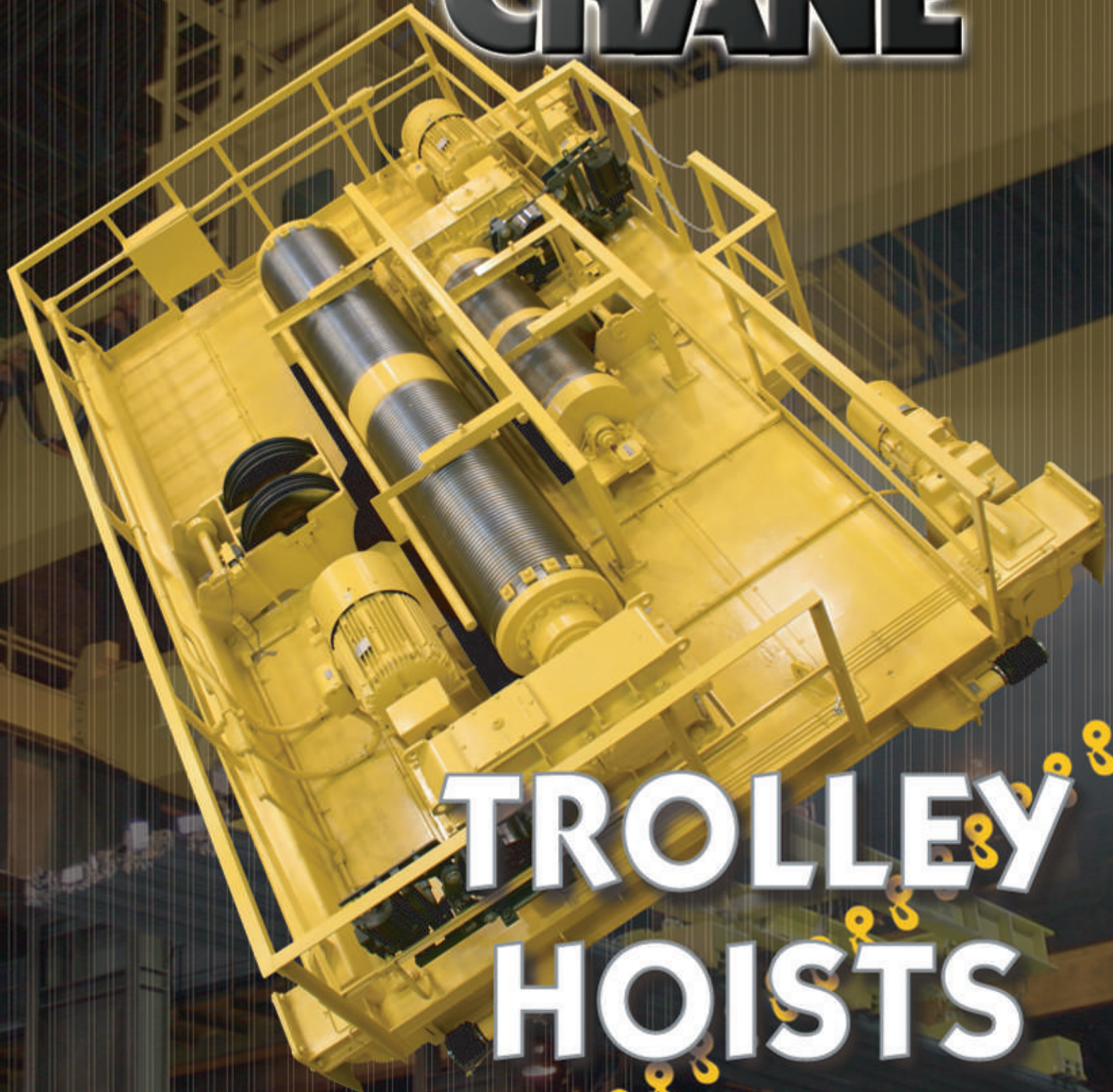


# VIRGINIA CRANE



# TROLLEY HOISTS

[www.virginiacrane.com](http://www.virginiacrane.com)



# STANDARD DESIGN FEATURES

**Trolley Frame:** One-piece welded structure with load girls heavily ribbed and gusseted to resist vertical, lateral and torsional stresses. Deck plate is provided across the top of the trolley to carry hoisting machinery. Equipment is readily accessible from this upper deck. Lifting lugs are also provided.

**Hoist Reducer:** High quality cast iron gearcase is foot mounted and horizontally split. Helical gears are alloy steel, carburized to 60Rc then finished ground to meet AGMA class 12 standards. Shafting is heat treated, high-alloy steel mounted on spherical roller bearings. Splash lubricated and provided with dual-lip oil seals. Other features include oil level dipstick, inspection access cover, air breather, magnetic drain plug and lifting lugs.

**Hoist Motor:** Standard motor is foot-mounted Vector motor, blower cooled for continuous duty rating with class "H" insulation, thermostats and encoder. Fully flexible geared coupling used at motor output shaft. Lifting eye and easily accessible junction box are also provided. Wound rotor and DC motors are available.

**Hoist Brake:** Shoe brake is a foot mounted AC thruster designed for 150% full motor torque. Brake shoes are made from non-asbestos materials and are self aligning. DC and AISE are also available.

**Hoist Drum:** Welded steel construction. Machined right and left hand grooving for true vertical lift. Drums are sized for a minimum 20:1 cable ratio and provided with half-depth grooving for improved wire rope life.

**Upper Sheaves:** Located above trolley deck for easy access with drop-in feature. Equipped with anti-friction bearings. Running sheaves offer a minimum 20:1 cable ratio. Idler sheave ratio is a minimum 12:1.

**Wire Rope:** 6 x 37 IWRC extra improved plow steel designed for hoisting service. Sized for a minimum 5:1 safety factor.

**Lower Block:** Heavy, one-piece steel weldment. Sheaves are enclosed and fully guarded for added operator safety. Forged alloy or carbon steel hook is mounted on a roller thrust bearing for 360 degree rotation. A spring-loaded safety latch is also provided.

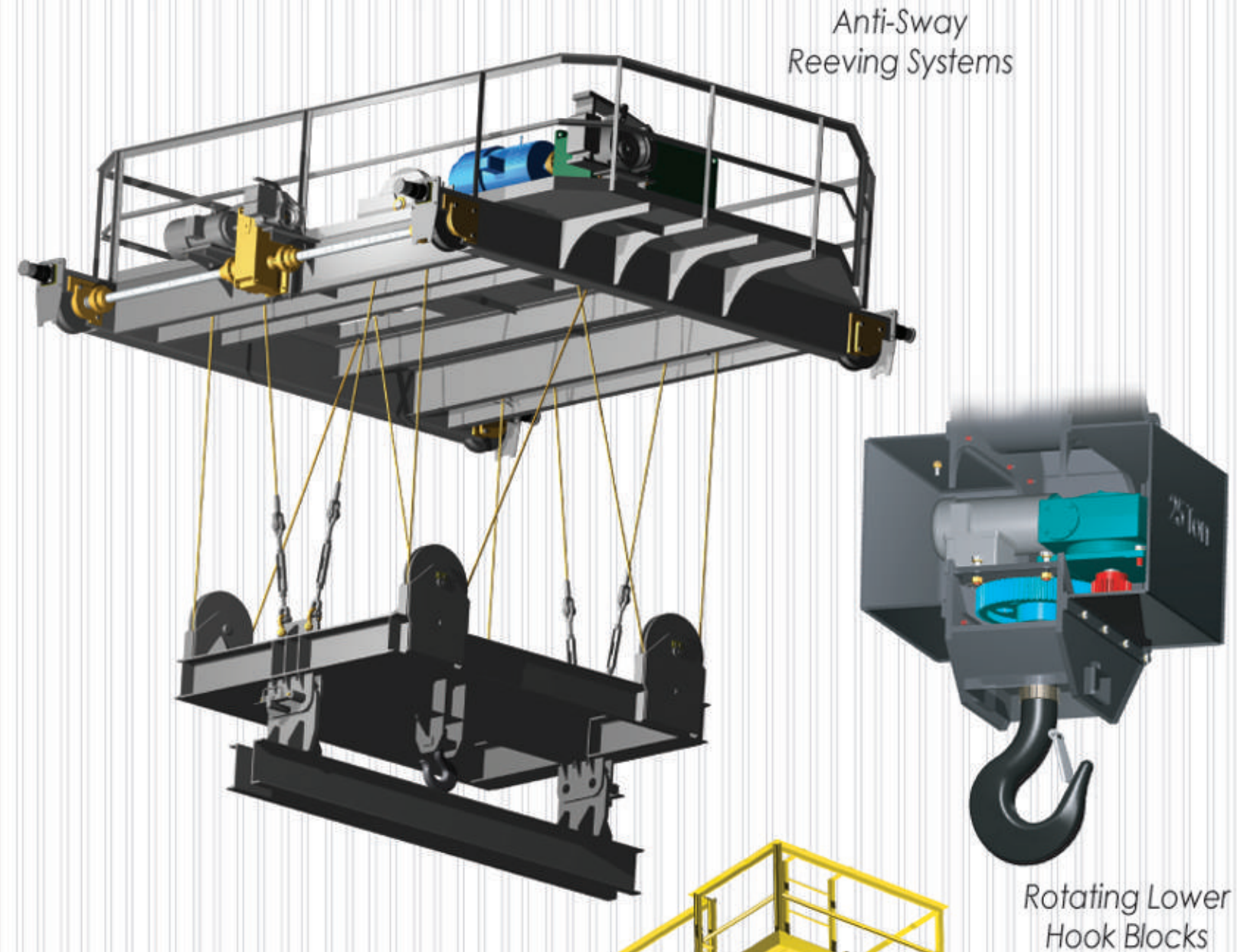
**Limit Switches:** Each hoist is provided with a weight operated upper limit switch and a rotary upper and lower geared limit switch. Overload protection is standard on all Flux Vector applications.

**Trolley Trucks:** Rotating axle wheels are supported by double row spherical roller bearings mounted in modified MCB type housings. Fabricated from structural tubing or welded box sections and accurately machined for trouble free operation. Double flanged wheels are made from C1045 steel and flame hardened to 425 BHN. Lubrication fittings, rail sweeps and bumpers are provided.

**Trolley Drive:** The drive consists of an integral brakemotor mounted to a helical reducer. The drive unit is shaft mounted on the drive axes and is splash lubricated in an oil-tight gearcase. Standard features include continuous duty, class "F" insulation, motor thermostats and DC disc brake.

**Options & Accessories:** Auxiliary hoists, flame hardened drums and sheaves, centralized lube systems, outdoor and hazardous locations, weigh systems, power limit switches, base-mount design, stainless wire rope, rotating lower blocks, anti-sway reeving, operator cabs, mill duty brakes, hook rotation locks, hydraulic bumpers, custom forged hooks, hand railings, coupling guards and below hook devices such as grabs, buckets, spreaders and magnets.

# CUSTOM FEATURES

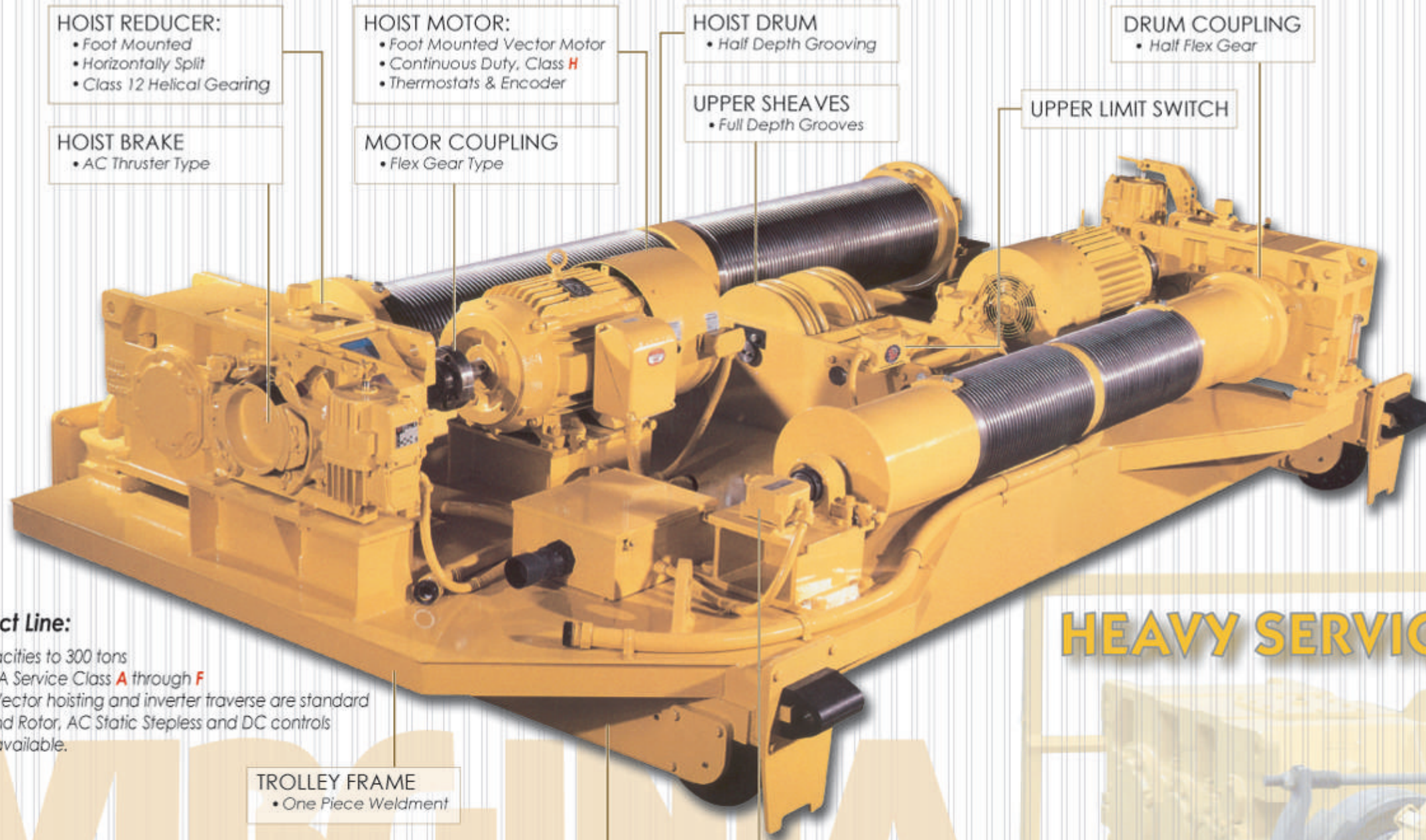


Custom Cab Applications





# STANDARD TROLLEY HOISTS



**HOIST REDUCER:**

- Foot Mounted
- Horizontally Split
- Class 12 Helical Gearing

**HOIST MOTOR:**

- Foot Mounted Vector Motor
- Continuous Duty, Class **H**
- Thermostats & Encoder

**HOIST DRUM**

- Half Depth Grooving

**DRUM COUPLING**

- Half Flex Gear

**HOIST BRAKE**

- AC Thruster Type

**MOTOR COUPLING**

- Flex Gear Type

**UPPER SHEAVES**

- Full Depth Grooves

**UPPER LIMIT SWITCH**

**Product Line:**

- ✓ Capacities to 300 tons
- ✓ CMAA Service Class **A** through **F**
- ✓ Flux Vector hoisting and inverter traverse are standard
- ✓ Wound Rotor, AC Static Stepless and DC controls also available.

**TROLLEY FRAME**

- One Piece Weldment

**TROLLEY TRUCKS:**

- Modified MCB Bearing Assembly
- 425 BHN Wheels

**GEARED LIMIT SWITCH**

- Upper & Lower Positions

**Virginia Crane** built-up hoists are designed for heavy service applications. Our company size and structure, including in-house machining capabilities, allow us to respond to your material handling needs.

Working closely with you, our team of specialists will propose design solutions to satisfy your project requirements.

Some of our specialty applications have included sludge handling, scrap handling, coil handling, and remote-controlled nuclear waste handling cranes.

## HEAVY SERVICE APPLICATIONS

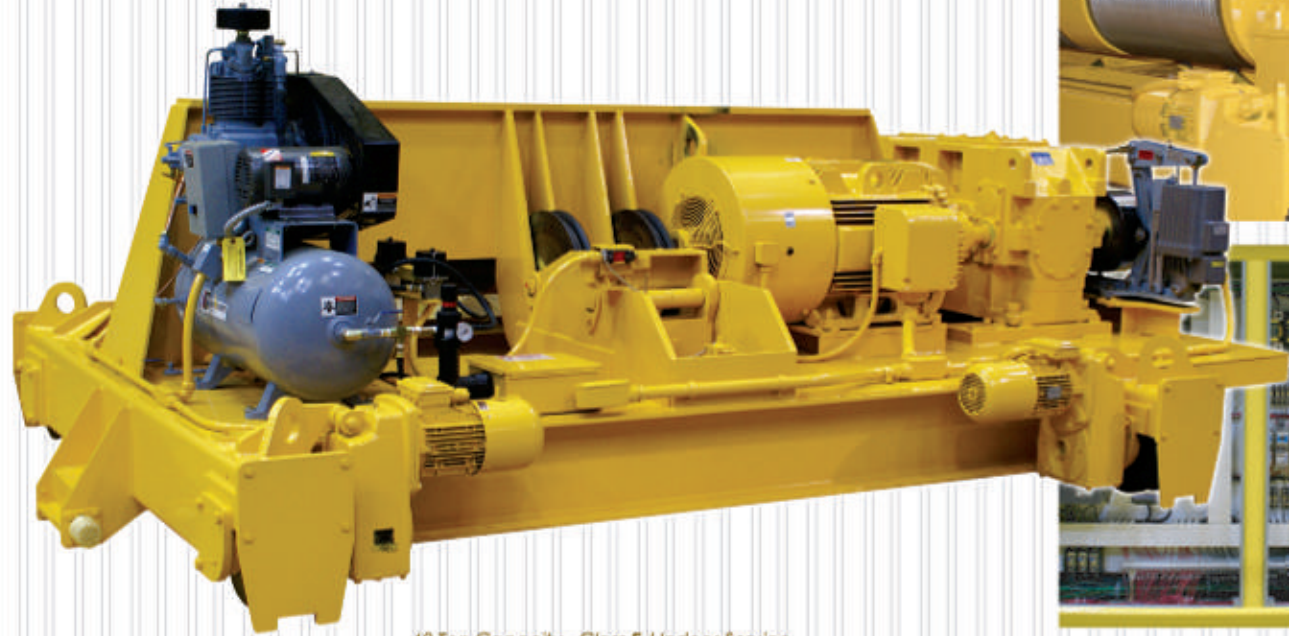


**VIRGINIA CRANE**

**VIRGINIA CRANE**

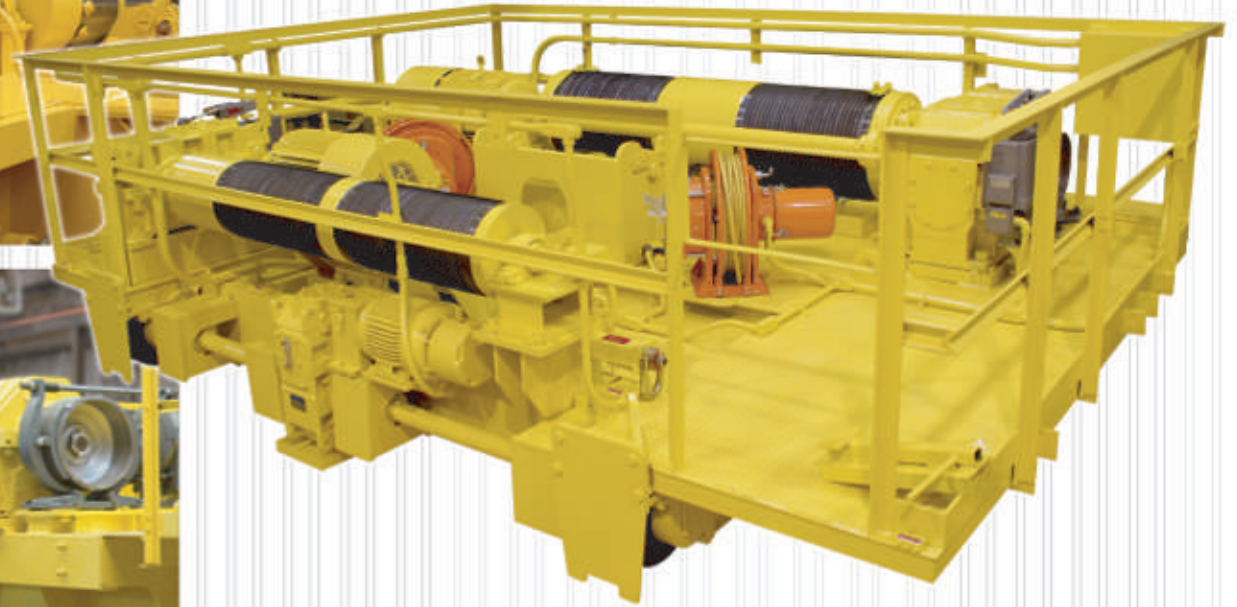


# CUSTOM DESIGNS



40 Ton Capacity - Class E / Indoor Service

Concrete Specialty Products Production - High Hook Design with Top Load Girt - Shown with Trolley Mounted Compressor.



50/20 Ton Capacity - Class E / Indoor Service

Heavy Machine Shop Application. Class F Features - 90° MCB Bearings - Hardened Drum - Central Lubrication - Trolley Mounted Reels.

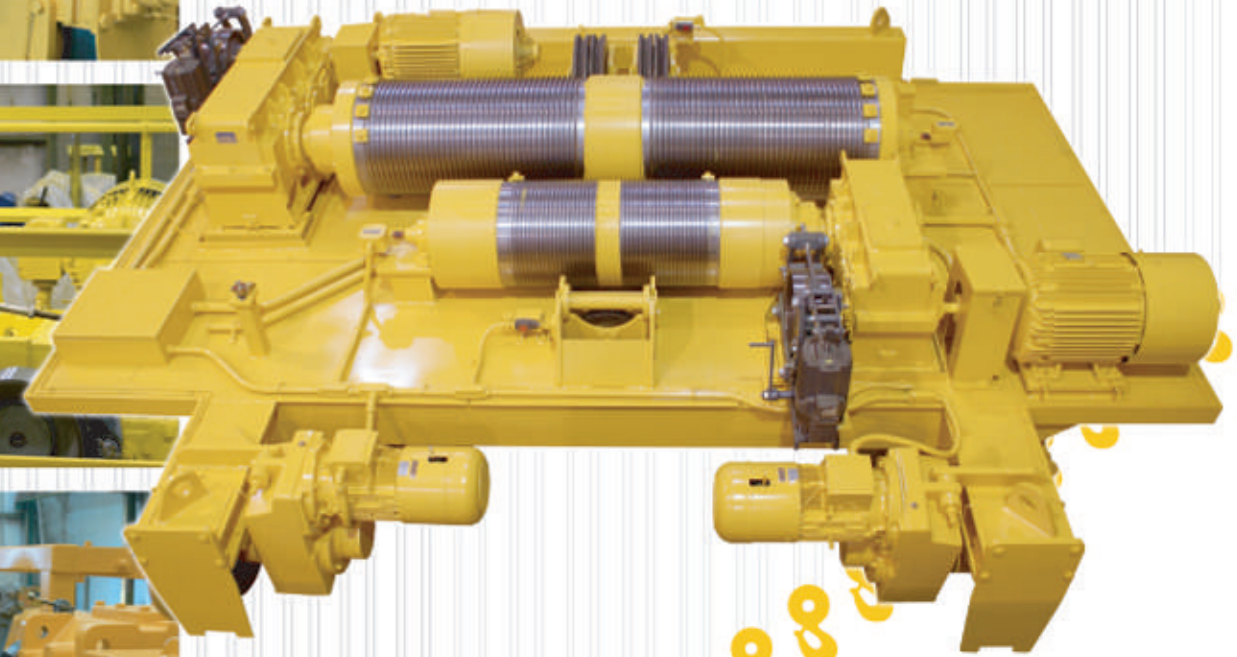
50/10 Ton Capacity - Class E / Indoor Service

Shipyard Application Handling Ship Segments. Class F Features - 90° MCB Bearings - Hardened Drum.



60 Ton Capacity Twin Hook - Class E / Outdoor Service

Steel Mill Service - Coil Handling. Class F Features - 90° MCB Bearings - Hardened Drum - Shown with Trolley Mounted Hydraulic System with Hose Reels - Trolley Mounted Controls.





## Our VIRGINIA CRANE PRODUCTS:

### ⚙️ CRANES

Overhead  
Gantry  
Stacker

### ⚙️ HOISTS

### ⚙️ ENGINEERED SYSTEMS

### ⚙️ CRANETROL

### ⚙️ CRANETRUX

### ⚙️ BELOW HOOK DEVICES



*Virginia Crane has built its reputation serving steel mills, railroads, shipyards and power companies.*



*Other customers include foundries, paper mills, steel distribution centers, aerospace and defense contractors, municipalities and general manufacturing companies.*

# VIRGINIA CRANE

A registered trademark of:

**Foley Material Handling Co., Inc.**

P. O. Box 289 - 11327 Virginia Crane Drive - Ashland, VA 23005

[www.virginiacrane.com](http://www.virginiacrane.com) / E-mail: [info@virginiacrane.com](mailto:info@virginiacrane.com)

(804) 798 1343 - Fax (804) 798 7843