

C R A N E   C O M P O N E N T S

天車配件



Crane  
Source™

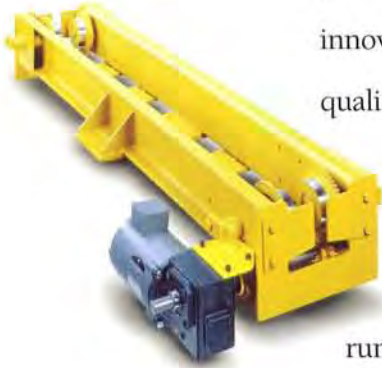
具有天車來源配件-適合您的工作

# THERE'S A CRANE SOURCE™ COMPONENT FOR EVERY JOB.

CraneSource™ crane bridge components have been recognized as the best in the industry for over 115 years. Each component is designed with greater innovation and manufactured with higher quality than all the competition. This is why they remain the best value in the industry...year after year.

CraneSource™ under-running and top-running crane components are available in a wide range of capacities with many electrical and accessory options available, making it easy to fit the specific needs of nearly any application. With industry demands changing continually, CraneSource™ is committed to developing advanced solutions to overhead material handling needs.

Whether it's facility improvements, improved training programs, or advancements in engineering, this unwavering devotion to become better is what makes CraneSource™ products what they are today...simply the best.

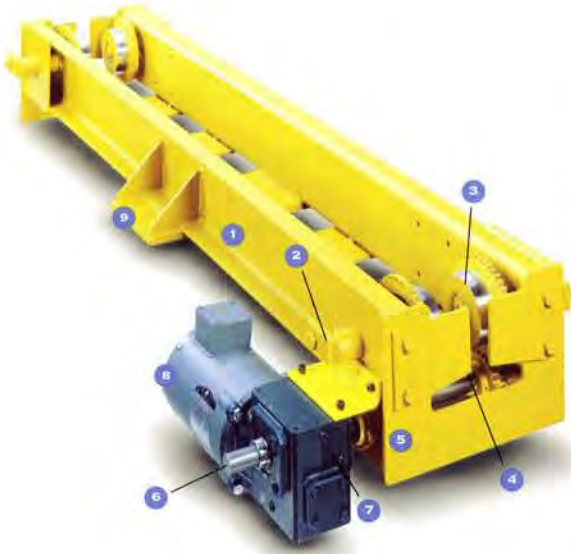


Crane Components

# 單軌倒吊式天車配件

## SINGLE GIRDER UNDER-RUNNING COMPONENTS

FOR CAPACITIES TO 5 TONS, AND SPANS TO 36 FEET



- 1 Frame is robot welded from specially formed steel channels for true alignment and rigidity.
  - 2 Axles adjust easily to fit a wide range of beam flange widths.
  - 3 Forged steel wheels are hardened to 300 BHN for long life. Double contour tread allows for operation on either I-beam or wide flange runways. Bronze spark resistant wheels are available.
  - 4 Pinions are machined from alloy steel and heat treated for long life.
  - 5 Alloy steel end plates form a rigid box structure truck frame for true tracking and also serve as rail sweeps and drop lugs as required by CMAA.
  - 6 Pinion shaft is 1-inch diameter alloy steel for easy connection to standard size line shafting.
  - 7 Long life worm gear drive reducer provides smooth acceleration and deceleration and eliminates the need for motor brake.
  - 8 Drive motors are NEMA design 30-minute rated TENV with Class "F" insulation provided with thermal overload protection as standard.
  - 9 Girder pads allow for easy welded or bolted connection to the bridge girder.
- All bearings (not shown) are precision ball, lifetime lubricated to withstand high radial and thrust loads.

### UNDER-RUNNING PUSH-TYPE END TRUCK

For cranes with capacities to 5 tons, and spans to 36 feet. Available with steel wheels for I-beam, wide flange or 3/4" patented track runways. Also available with bronze wheels for spark-resistant applications.



### UNDER-RUNNING SINGLE DRIVE KIT

For cranes with capacities to 5 tons, and spans to 36 feet. Available with steel wheels for I-beam, wide flange or 3/4" patented track runways. The kit contains 2 end trucks, 1 motor, 1 reducer, fused disconnect switch, controls, cross shaft supports and shaft couplings (quantity dependent on span). Kit numbers are based upon span length.



### UNDER-RUNNING HAND-GEARED KIT

For cranes with capacities to 5 tons, and spans to 36 feet. Available with steel wheels for I-beam, wide flange or 3/4" patented track runways. The kit contains 2 end trucks, hand-chain wheel, 36 feet of hand chain, cross shaft supports and cross shaft couplings (quantity dependent on span). Kit numbers are based upon span length. Bronze wheels are available for spark-resistant applications.



### UNDER-RUNNING DUAL DRIVE KIT

For cranes with capacities to 5 tons, and spans to 36 feet. Available with steel wheels for I-beam, wide flange or 3/4" patented track runways. The kit contains 2 end trucks, 2 motors, 2 reducers, fused disconnect switch, and controls.



## 單軌倒吊式天車配件

# SINGLE GIRDER UNDER-RUNNING COMPONENTS

FOR CAPACITIES TO 3 TONS, AND SPANS TO 30 FEET



### UNDER-RUNNING ANGLE-TYPE END TRUCK

Economically priced push-type bridge kit for capacities to 2 tons, and spans to 30 feet. End trucks are constructed out of heavy steel angles with pressed steel or forged steel wheels. The trucks come in two halves so that one set of end trucks can accommodate a variety of runway lower flange widths. Bolted steel safety lugs are standard as required by CMAA. Kit consists of one pair of end trucks and the required hardware for attaching truck frames to the bridge beam.



### UNDER-RUNNING CARRIAGE-TYPE END TRUCK

Push-type bridge kit with a heavy-duty steel carriage fabricated to accommodate two 4 wheel push trolleys on each end of the carriage. The 16 wheel bridge crane gives the crane twice as much surface contact with the lower runway flange than the conventional 8 wheel cranes. The trolleys float in the eye of the carriage, so misaligned runway beams will not bind the crane up. Capacities are available up to 3 tons with spans to 30 feet. The end trucks have slotted mounting holes that fit various beam sizes. These kits consist of four plain wheel trolley assemblies, two truck frames, and the necessary hardware to attach the trucks to the bridge beam.



### UNDER-RUNNING CLEVIS-TYPE

Exceptionally low cost push-type underhung crane bridges up to 1 metric ton capacity, and spans to 25 feet can be built with this kit. This kit consists of two I-beam trolleys, two special shackles and pins, two pairs of beam end plates, and the required hardware to attach the bridge beam to the trolleys.

# 單軌倒吊式天車配件

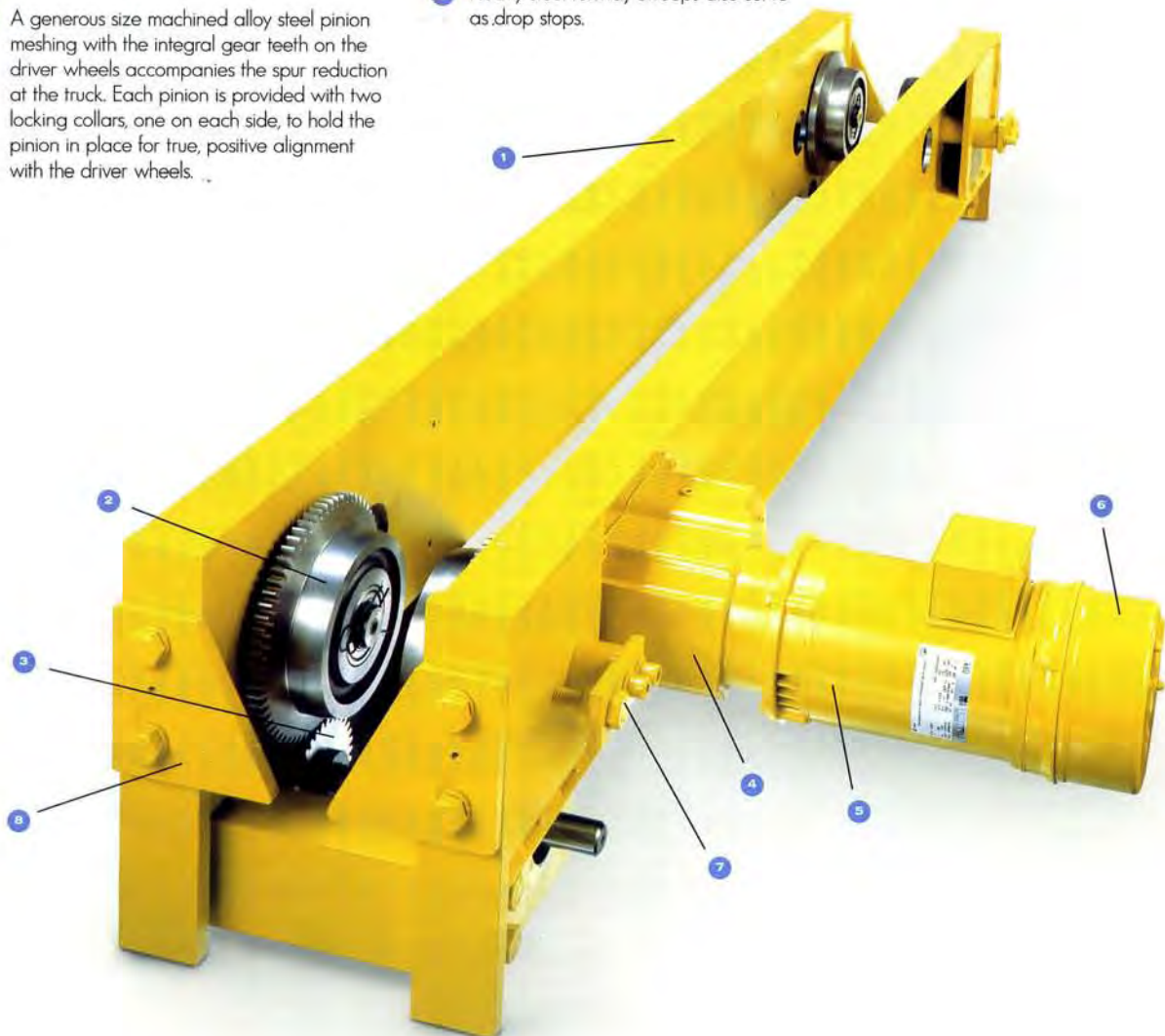
## SINGLE GIRDER UNDER-RUNNING COMPONENTS

FOR CAPACITIES TO 10 METRIC TONS, AND SPANS TO 60 FEET

CraneSource™ under-running components can build cranes up to 10-metric-ton capacity, and 60-foot spans with speeds to 135 fpm. Available in individual, or hand-gearred drives, the CraneSource™ line of under-running crane components offers the best in quality, value, ease of

operation and maintainability in the industry. Available with a wide variety of motors and controls, CraneSource™ makes it easy to build a crane to fit the specific needs of any application.

- 1 End truck frame is constructed from heavy steel shapes and plates reinforced at the wheels and other key locations to provide rugged, rigid, true-tracking.
- 2 Machined, solid forged-steel wheels, each rotating on two sealed lifetime-lubricated ball bearings. Wheels are single flanged with a compound tread as standard that will run on either American Standard or wide flange beams.
- 3 A generous size machined alloy steel pinion meshing with the integral gear teeth on the driver wheels accompanies the spur reduction at the truck. Each pinion is provided with two locking collars, one on each side, to hold the pinion in place for true, positive alignment with the driver wheels.
- 4 Bridge gearing is totally enclosed oil-bath lubricated for minimal maintenance and long life.
- 5 Drive motors are 30-minute rated TENV with Class "F" insulation and provided with thermal overload protection as standard.
- 6 Adjustable torque AC disc brakes are standard.
- 7 Easy adjustment of wheel spacing.
- 8 Heavy steel runway sweeps also serve as drop stops.



# 單軌上走式天車配件

## SINGLE GIRDER TOP-RUNNING COMPONENTS

FOR CAPACITIES TO 5 TONS, AND SPANS TO 36 FEET

- 1 Frame is robot welded from specially formed steel channels for true alignment and rigidity.
- 2 High strength ductile iron wheels are hardened to 220 BHN for long life.
- 3 Alloy steel end plates form a rigid box structure truck frame for true tracking and also serve as rail sweeps and drop lugs as required by CMAA.
- 4 Pinion shaft is 1-inch diameter alloy steel for easy connection to standard size line shafting.
- 5 Long life worm gear drive reducer provides smooth acceleration and deceleration and eliminates the need for motor brake.
- 6 Drive motors are NEMA design 30-minute rated TENV with Class "F" insulation provided with thermal overload protection as standard.

Pinion (not shown) is machined from alloy steel and heat treated for long life.

All bearings (not shown) are precision ball, lifetime lubricated to withstand high radial and thrust loads.



### TOP-RUNNING PUSH-TYPE END TRUCK

For crane capacities to 5 tons, and spans to 36 feet. Available with a double flange cylindrical tread wheel designed for a maximum runway rail of 40 lbs. ASCE. Also available with bronze wheels for spark-resistant applications.



### TOP-RUNNING SINGLE DRIVE KIT

For crane capacities to 5 tons, and spans to 36 feet. Available with a double flange cylindrical tread wheel designed for a maximum runway rail of 40 lbs. ASCE. The kit contains 2 end trucks, 1 motor, 1 reducer, fused disconnect switch, controls, cross shaft supports and shaft couplings (quantity dependent on span). Kit numbers are based upon span length.



### TOP-RUNNING HAND-GEARED KIT

For crane capacities to 5 tons, and spans to 36 feet. Available with a double flange cylindrical tread wheel designed for a maximum runway rail of 40 lbs. ASCE. The kit contains 2 end trucks, hand chain wheel, 36 feet of hand chain, cross shaft supports and cross shaft couplings (quantity dependent on span). Kit numbers are based upon span length. Also available with bronze wheels for spark-resistant applications.



### TOP-RUNNING DUAL DRIVE KIT

For crane capacities to 5 tons, and spans to 36 feet. Available with a double flange cylindrical tread wheel designed for a maximum runway rail of 40 lbs. ASCE. The kit contains 2 end trucks, 2 motors, 2 reducers, fused disconnect switch and controls.



# 單軌、雙軌上走式天車配件

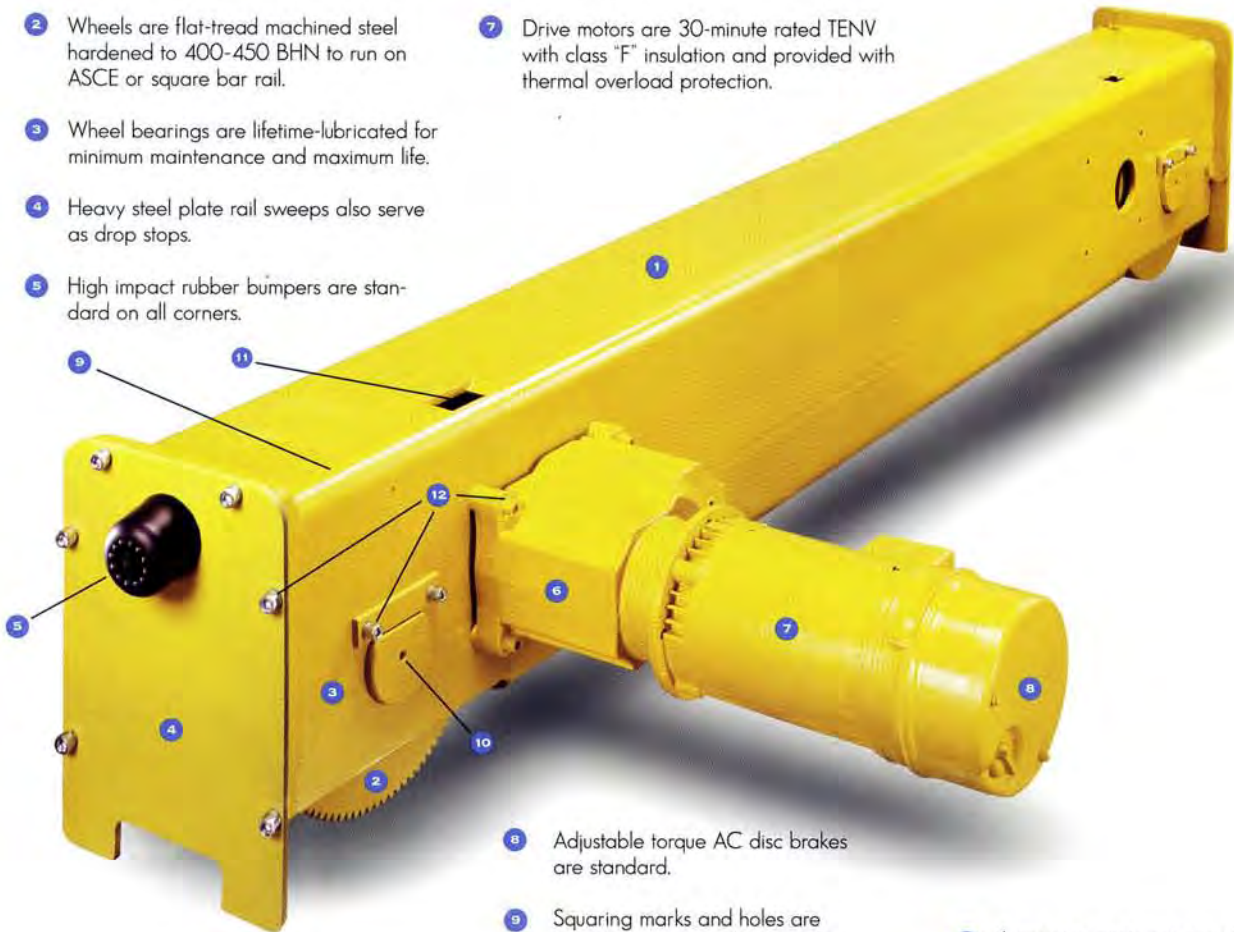
## SINGLE/DOUBLE GIRDER TOP-RUNNING COMPONENTS

SINGLE GIRDER CAPACITIES TO 15 METRIC TONS, AND SPANS TO 60 FEET  
DOUBLE GIRDER CAPACITIES TO 20 METRIC TONS, AND SPANS TO 60 FEET

The best cranes start with the best components. CraneSource™ top-running crane components are designed with greater innovation, higher quality, and more features than all the competition, making them the best available today. With over 115 years of experience, it's no wonder CraneSource™ is the leading designer and manufacturer of hoists and components. CraneSource™ top-running components can build

cranes in capacities of 1 to 15 tons in single girder versions and to 20 tons in double girder versions. The CraneSource™ line of top-running crane components offers the best in quality, value, ease of operation and maintainability in the industry. Available with a wide variety of motors and controls, CraneSource™ components make it easy to build a crane to fit the specific needs of any application.

- 1 Frames are constructed from thick-walled steel tube for maximum strength.
- 2 Wheels are flat-tread machined steel hardened to 400-450 BHN to run on ASCE or square bar rail.
- 3 Wheel bearings are lifetime-lubricated for minimum maintenance and maximum life.
- 4 Heavy steel plate rail sweeps also serve as drop stops.
- 5 High impact rubber bumpers are standard on all corners.
- 6 Bridge drive gearing is totally enclosed, oil-bath lubricated.
- 7 Drive motors are 30-minute rated TENV with class "F" insulation and provided with thermal overload protection.



- 8 Adjustable torque AC disc brakes are standard.
- 9 Squaring marks and holes are provided on the truck frames for easier alignment.
- 10 Axle is provided with a drilled and tapped hole that permits insertion of either a keeper plate or rail sweep bolt to assist in easier removal.
- 11 Inspection ports are provided over the drive wheels.
- 12 All end truck bolts are 5/16" capheads. All that's needed for removal are an allen and adjustable wrench.

# 單軌、雙軌上走式天車配件

## DOUBLE GIRDER TOP-RUNNING CRANE COMPONENTS

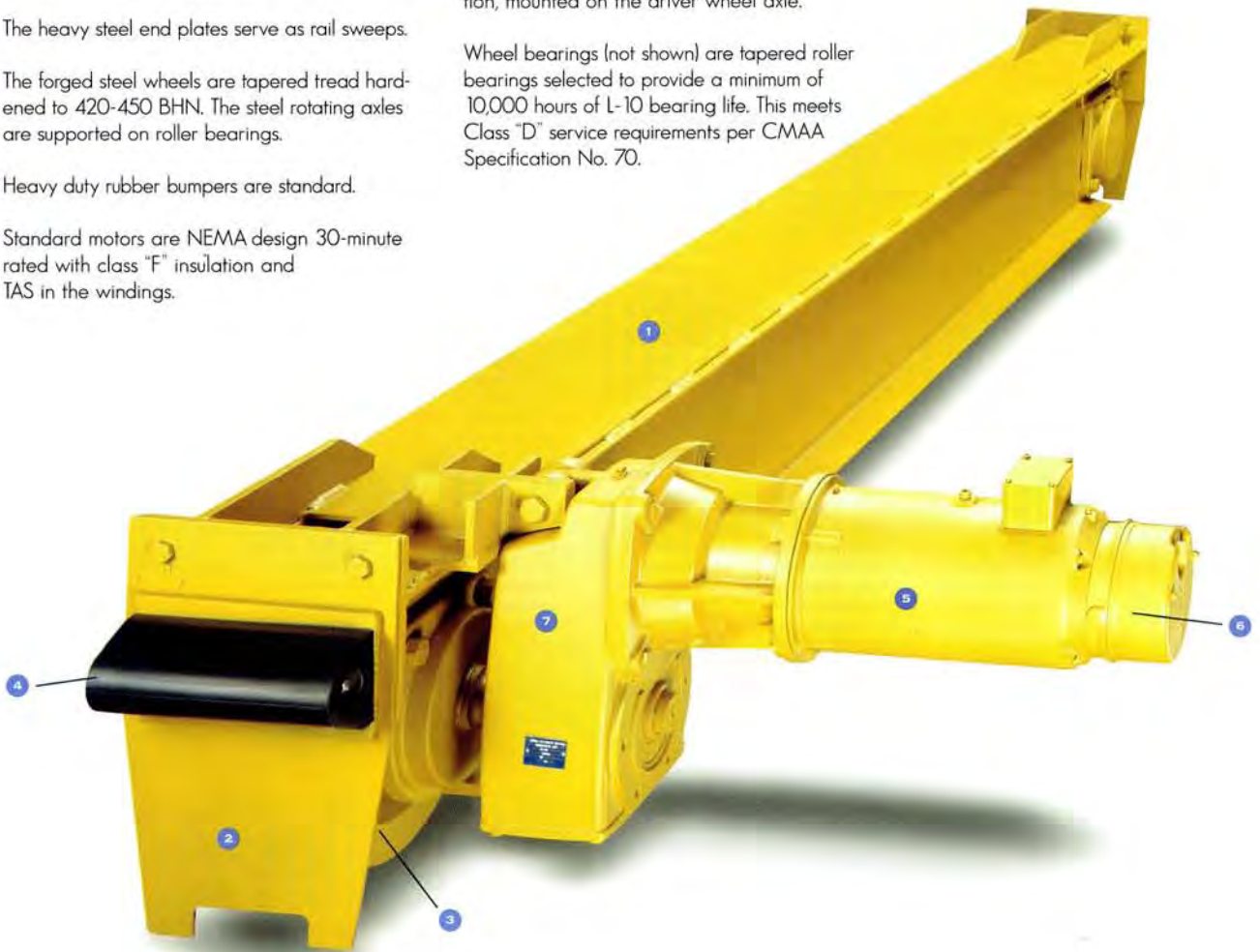
FOR CAPACITIES TO 100 METRIC TONS, AND SPANS TO 120 FEET

CraneSource™ top-running, double girder crane components are designed and fabricated with the highest quality, greatest innovation and offer more features than anyone else in the industry. CraneSource™ components can be used to build cranes up to 100-metric-ton capacity and above, 120-foot span and beyond with speeds to

300 fpm and beyond. The CraneSource™ lines of top-running crane components offer the best in quality, value, ease of operation and maintainability. CraneSource™ components make it easy to build a crane to fit the specific needs of any application.

- 1 Truck frame is a welded steel channel box section with top and bottom cover plates, internal diaphragms and reinforced at the wheel axles to form a strong rigid section.
- 2 The heavy steel end plates serve as rail sweeps.
- 3 The forged steel wheels are tapered tread hardened to 420-450 BHN. The steel rotating axles are supported on roller bearings.
- 4 Heavy duty rubber bumpers are standard.
- 5 Standard motors are NEMA design 30-minute rated with class "F" insulation and TAS in the windings.
- 6 Adjustable AC disc brakes are standard.
- 7 Gear reducers are totally enclosed oil-bath lubricated, helical, hollow-shaft, triple reduction, mounted on the driver wheel axle.

Wheel bearings (not shown) are tapered roller bearings selected to provide a minimum of 10,000 hours of L-10 bearing life. This meets Class "D" service requirements per CMAA Specification No. 70.





## 天車配件標準特性

## STANDARD FEATURES



### MOTORS

All motors are NEMA design TENV, 30-minute rated, C-face mounted, designed for crane duty. As standard, all motors are provided with class "F" insulation and thermal overload protection.



### SHORT SPAN DRIVE MOTOR AND REDUCER

A wide selection of voltages and speeds are available with standard motors and reducers. The same motors and reducers can be used on either the top-running or under-running geared end trucks.



### DOOR MOUNTED DISCONNECT

As an option to a separate power disconnect panel, a bridge panel disconnect with door mounted on-off switch is available. Switch prevents panel door from opening until power is disconnected.

*Standard with NEMA 4/12 panels.*



### STANDARD BRIDGE BRAKE

All bridge drives provided with AC disc brakes as standard will have single C-faced brakes. Brakes are provided with a manual release and are torque adjustable.

*For all long span components.*



### GEAR REDUCERS

Gearing is precision machined steel supported on anti-friction bearings in a machined heavy cast aluminum gearcase. The gearing is oil-bath lubricated for long life.

*For long span top-running and under-running fixed axle components only.*



### RAIL SWEEPS

End trucks are fitted at both ends with heavy steel rail sweeps, which also serve as drop stops and are required by code in some areas.

*For all long span top-running components. Pictured is the sweep on the fixed axle, tube type, top-running trucks.*



## STANDARD FEATURES

### 天車配件標準特性



#### TOP-RUNNING FIXED AXLE TUBE TRUCK BUMPERS

End trucks are provided with high impact rubber bumpers which are required by many codes.

*Standard on long span, top-running single or double girder fixed axle components.*



#### NEMA 1 CONTROL PANELS

NEMA 1 for single- or two-speed models with a separate disconnect panel are available as a cost effective alternative.

*All controls include mainline contactor, reversing contactors, fusing and transformer.*



#### NEMA 4/12 CONTROL PANELS

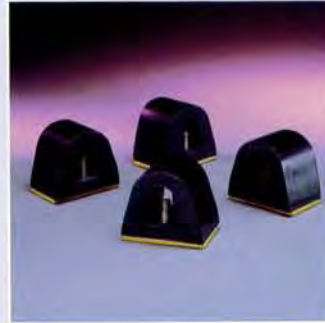
Controls are available in single- or two-speed and variable frequency versions. Control enclosures can be NEMA 4/12,\* NEMA 1 or even NEMA 7 or 9 for hazardous locations.

*Pictured is a 2-speed control in a NEMA 4/12 enclosure.*

*\*NEMA 4/12 is standard on double girder components only.*

## 選用特性

## OPTIONAL FEATURES



#### RUBBER BUMPERS

Heavy duty rubber bumpers help cushion bridge end stop impact. Rubber bumpers are recommended for all powered bridge kits. Used on all components except the fixed axle long-span top- and under-running trucks.



#### TRACK SUSPENDED FESTOONING

An efficient economical way to electrify longer span, heavier duty crane bridges.

*Also available for festoon pendant control systems.*



#### SHORT SPAN OPTIONAL BRIDGE BRAKE

A double C-face AC disc bridge brake is available as an option. The bridge's standard drive reducer is a worm that will stop the crane within the CMAA and OSHA requirements. The bridge brake is designed to be used with the standard motor and reducer, so retrofits in the field can be easily accomplished.

*For all short span powered components.*

# 選用特性



**ELECTRONIC ACCELERATION CONTROL**  
A solid state device for controlling the torque and time of acceleration of the bridge crane. The electronic acceleration control provides a more controlled acceleration and is less load-sensitive than conventional ballast resistors.



**SPACE VECTOR™ VARIABLE FREQUENCY DRIVES**  
Variable frequency drives provide smooth ramped acceleration and deceleration and precise spotting of the bridge crane while lessening impact on the drive train and allowing the motor to run cooler. Available on all powered bridge kits with 230 or 460 voltages. Standard panel is a NEMA 4/12.



**CURRENT COLLECTORS**  
Slide type collectors are used for shielded figure “8” conductor bar systems. Collector arrangements typically consist of a collector pole and mounting plate with one collector shoe for each conductor in the conductor system.



**OPTIONAL END CONNECTIONS**  
Utilizing bolted or welded fittings, CraneSource™ end connections provide rigid support that eliminates the need for diagonal bracing. For fixed axle tube truck, long span top-running components.



**SHIELDED BAR CONDUCTORS**  
Shielded figure “8” bar conductor systems are designed to meet average conductor requirements for cross conductor and runway systems up to 300 feet long without engineering or layout expense.



**AIR DRIVES**  
Air motor drive packages are available in capacities up to 5 tons, and spans to 36 feet. They can be mounted on to our channel type end trucks that have geared wheels and drive pinions. Only one drive is required. The package includes air motor, gear reducer, control head with pendant throttle and hose assembly with an 8-foot drop. Variable traverse speeds from 0-70 fpm. Filter, lubricator and regulator are recommended options.

*For short span components only.*