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Columbus McKinnon Entertainment Technology (CM-ET), the industry leader in providing quality lifting and positioning equipment for riggers around the globe, presents the new Lodestar Electric Chain Hoist. Generations of users have relied on the Lodestar "Motor" for consistent operation and long-life for years, and now exciting new features have been added to widen the appeal of the Lodestar to the next generation of rigging professionals.

In addition to a product line recognized in venues throughout the world, CM-ET has established a network of distributors that provide the highest level of customer service to users in the industry. Wherever the show takes place, a knowledgeable CM-ET distributor is available to offer assistance with parts, service, or accessories.

When searching for products or services to ensure that your event shines, turn to the company with more than 130 years of experience in meeting the needs of our customers – Columbus McKinnon.



MEX (55) 53 63 23 31 MTY (81) 83 54 10 18 QRO (442) 1 95 72 60 ventas@industrialmagza.com



## The Rigger's Choice

We've received the best reviews, heard "Bravo" countless times and, like all the greats, we're recognized in every venue around the world.

So how do we make the legendary Lodestar electric chain hoist even better? By incorporating new features that provide steady operation for any application in the entertainment industry.

From today's top-selling musical performers to international sporting competitions, organizers rely on the Lodestar for consistent performance event after event. Professional riggers have trusted the Lodestar for unsurpassed reliability for decades, and now you can experience the quietest, smoothest-running Lodestar ever. What an Encore!

# 1/8 to 2 TON LIFT 60 feet standard (other lifts available) SPEEDS 5 to 100 feet/min

**CAPACITIES** 

**VOLTAGES** 

1-phase & 3-phase available

# **NEW FEATURES**ON THIS NEXT GENERATION OF LODESTAR

5 POCKET LIFTWHEEL

IMPROVED CHAIN WEAR & SMOOTH LIFTING

**CLUTCH OUTSIDE GEAR TRAIN**MEETS INTERNATIONAL STANDARDS.

PRECISION HELICAL GEARING FOR QUIETER OPERATION

REDESIGNED CONTROL PANEL FOR EASIER ACCESS & FUSE INSTALLATION

#### **STANDARD** FEATURES

#### AC ELECTRO-MECHANICAL BRAKE

Field tested and proven in over 1 million Lodestars worldwide

#### **LOW VOLTAGE CONTROL**

110 Volt for long cable runs without voltage drop 24 & 48 Volt optional. (Low Voltage Unit Only)

## DURABLE & LIGHTWEIGHT HOUSING Cast aluminum. Black powder

coated finish for low visibility.

#### **GEARING**

Helical design for long wear life and smooth operation

#### LOAD CHAIN

Designed and manufactured by Columbus McKinnon. Zinc plated to protect against corrosion. Optional black finish available.

#### **DUTY CYCLE**

H-4 duty rated for heavy duty application. 2M FEM class. 50% Duty Cycle or 300 on/off per hour.

## DIRECT CONTROL UNITS AVAILABLE

#### **ELECTRICAL**

Finger safe wiring meets all electrical codes. Quick change plugs allow for voltages 208 thru 460. Prevents improper voltage connections which can cause hoist damage. (Low Voltage Unit Only)

#### **ADJUSTABLE LIMIT SWITCH**

Adjustable screw limit switch that will automatically stop the hook at any predetermined point when either lifting or lowering, preventing overtravel. (Low Voltage Unit Only)

#### **OVERLOAD PROTECTOR**

Designed to prevent lifting of excessive overloads. Helps prevent lifting of dangerous overloads.

#### **METRIC RATED**

#### **MEETS REQUIREMENTS**

Meets or exceeds world standards.

#### **ROAD READY**

Easy to stow and travel.

#### LIFETIME WARRANTY

The industry's best

#### **OPTIONAL** FEATURES

#### **DOUBLE BRAKE**

Two independent acting DC brakes for redundant braking. Field installation kit available.

#### **ENCODERS AVAILABLE**

Incremental & Absolute

#### **CHAIN BAGS**

Cloth type bags easy-to-mount

### VARIABLE SPEED UNITS AVAILABLE

#### **ALLOY LATCHLOK HOOKS**

Remains locked until released by the operator, even if chain goes slack.

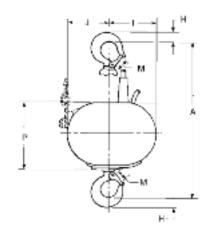


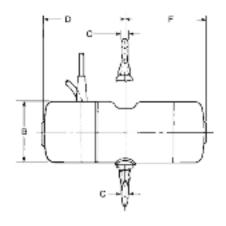


## Specifications, Dimensions & Key Components

#### **DIMENSIONS**

DRAWING		ESTAR MOD	ELS	
LEGEND	A, AA, B, C, E, F, H	J, JJ, L, LL	R, RR	
A	16.20"	18.5625"	24.125"	
В	6.08"	7.62"	7.62"	
С	.67"	.875"	1.125"	
D	11.80"	10.03"	10.03"	
F	8.94"	13.01"	13.01"	
Н	1"	1.1875"	1.5"	
1	4.46"	6.93"	5.57"	
J	4.22"	5.69"	7.05"	
М	1"	1.125"	1.3125"	
P	6.62"	8.22"	8.22"	





#### **SPECIFICATIONS** D8

·· - · · ·	10/11/011										
MODEL	RATED LOAD TON	LIFTING SPEED (FPM)	MOTOR HP	OPERATING VOLTAGE	FULL LOAD AMPS	WORK HMI	RATING FEM	REEVING	PROTECTION CLASS	NOISE LEVEL	LIFT (FEET) ***
A	1/8	32	1/4	230/460-3-60	1.8/1.1	H4	2M	1	IP54	73 dB	60
AA	1/8	60	1/2	230/460-3-60	2.2/1.3	H4	2M	1	IP54	73 dB	60
В	1/4	16	1/4	230/460-3-60	1.8/1.1	H4	2M	1	IP54	73 dB	60
С	1/4	32	1/2	230/460-3-60	2.2/1.3	H4	2M	1	IP54	73 dB	60
E	1/2	8	1/4	230/460-3-60	1.8/1.1	H4	2M	2	IP54	73 dB	60
F	1/2	16	1/2	230/460-3-60	2.2/1.3	H4	2M	1	IP54	73 dB	60
н	1	8	1/2	230/460-3-60	2.2/1.3	H4	2M	2	IP54	73 dB	60
J	1/2	32	1	230/460-3-60	3.7/2.2	H4	2M	1	IP54	73 dB	60
JJ	1/2	64	2	230/460-3-60	7.9/5.0	H4	2M	1	IP54	73 dB	60
L	1	16	1	230/460-3-60	3.7/2.2	H4	2M	1	IP54	73 dB	60
LL	1	32	2	230/460-3-60	7.9/5.0	H4	2M	1	IP54	73 dB	60
R	2	8	1	230/460-3-60	3.7/2.2	H4	2M	2	IP54	73 dB	60
RR	2	16	2	230/460-3-60	7.9/5.0	H4	2M	2	IP54	73 dB	60



#### **LOAD CHAIN**

Sizes available from 1/4 in. to 5/16 in. Meets or exceeds many national and international standards. Zinc plated supplied as standard. Black phosphate finish available.100% proof tested.



<sup>\*</sup> Metric Tons
\*\* Single Phase Models available

<sup>\*\*\*</sup> Lifts other than 60ft available (Standard Units shipped less chain unless specified)



## **LODESTAR** D8+

**CAPACITIES** 70 to 1500 KG

**LIFT** 60 feet standard

**SPEEDS** 5 to 64 feet/minute

**VOLTAGES**3-phase available

The Lodestar D8+ meets all Standard SR2.0 requirements. It's clutch, outside the load path, acts as a precise overload device; and design factor is 10:1 with a double brake installed. The Lodestar D8+ is in accordance with the VPLT Code of Practice.

#### **KEY** FEATURES

## ELECTRO-MECHANICAL DOUBLE BRAKES

#### 5 POCKET LIFT WHEEL

For quiet & smooth operation

#### 68 dB OPERATIONAL NOISE

A result of the Double Brake System

#### **GEARING**

Precision machined gears heat treated for strength and durability

#### **INTERNAL CHAIN GUIDE**

PVC black coated for quieter operation

#### **LOW VOLTAGE CONTROL**

110 Volt for long cable runs without voltage drop. 24 & 48 Volt optional.

#### **DUTY CYCLE**

H-4 duty rated for heavy duty application. 2M FEM class. 50% Duty Cycle or 300 on/off per hour.

## 10:1 MECHANICAL DESIGN FACTOR

#### **STANDARD** FEATURES

#### **OVERLOAD PROTECTION**

Rated operational range between 125 and 150/160%. Clutch is outside the load path when disconnected from power.

## DURABLE & LIGHTWEIGHT HOUSING

Cast aluminum. Black powder coated finish for low visibility.

#### **METRIC RATED**

#### **LOAD CHAIN**

Designed and manufactured by Columbus McKinnon. Zinc plated to protect against corrosion. Black phosphate finish optional.

## THE INDUSTRY'S BEST LIFETIME WARRANTY

## MEETS OR EXCEEDS WORLD STANDARDS

Meets German Code of Practice VPLT SR2.0

#### **OPTIONAL FEATURES**

#### **CHAIN BAG**

Easy-to-Mount Cloth Type Bags

#### **CHAIN STOP**

Mounted on load chain to prevent overtravel. Standard on Direct Control.



#### **SPECIFICATIONS** D8+

MODEL	RATED LOAD (KG)	LIFTING SPEED (FPM)	MOTOR HP	OPERATING VOLTAGE	FULL LOAD AMPS	WORK HMI	RATING FEM	REEVING	PROTECTION CLASS	NOISE LEVEL	LIFT (FEET) *
A	70	32	1/4	230/460-3-60	1.8/1.1	H4	2M	1	IP54	68 dB	60
AA	70	60	1/2	230/460-3-60	2.2/1.3	H4	2M	1	IP54	68 dB	60
В	125	16	1/4	230/460-3-60	1.8/1.1	H4	2M	1	IP54	68 dB	60
С	125	32	1/2	230/460-3-60	2.2/1.3	H4	2M	1	IP54	68 dB	60
E	250	8	1/4	230/460-3-60	1.8/1.1	H4	2M	2	IP54	68 dB	60
F	250	16	1/2	230/460-3-60	2.2/1.3	H4	2M	1	IP54	68 dB	60
н	500	8	1/2	230/460-3-60	2.2/1.3	H4	2M	2	IP54	68 dB	60
J	250	32	1	230/460-3-60	3.7/2.2	H4	2M	1	IP54	68 dB	60
JJ	500	64	2	230/460-3-60	7.9/5.0	H4	2M	1	IP54	68 dB	60
L	500	16	1	230/460-3-60	3.7/2.2	H4	2M	1	IP54	68 dB	60
LL	650	32	2	230/460-3-60	7.9/5.0	H4	2M	1	IP54	68 dB	60
R	1000	8	1	230/460-3-60	3.7/2.2	H4	2M	2	IP54	68 dB	60
RR	1300	16	2	230/460-3-60	7.9/5.0	H4	2M	2	IP54	68 dB	60
RT	1500	5	1	230/460-3-60	3.7/2.2	H4	2M	3	IP54	68 dB	60

<sup>\*</sup> Lifts other than 60ft available (Standard Units shipped less chain unless specified)





## **BGV-C1** SERIES

CAPACITIES 250 to 1300 KG **LIFT** 60 feet standard

SPEEDS 16 to 100 feet/minute **VOLTAGES**3-phase available

The Lodestar BGV-C1 Series meets the BGV-C1 German regulation for entertainment rigging. Available with fixed or variable speed, the Lodestar BGV-C1 can be adapted to reach a System Integrity Level 3 (SIL3).\*

#### **KEY FEATURES**

## ELECTRO-MECHANICAL DOUBLE BRAKES

#### 5 POCKET LIFT WHEEL

For quiet & smooth operation.

#### **68 dB OPERATIONAL NOISE**

A result of the Double Brake System

#### **GEARING**

Precision machined gears heat treated for strength and durability.

#### **INTERNAL CHAIN GUIDE**

PVC black coated for quieter operation

#### **LOW VOLTAGE CONTROL**

110 Volt for long cable runs without voltage drop. 24 & 48 Volt optional.

#### **DUTY CYCLE**

H-4 duty rated for heavy duty application. 2M FEM class. 50% Duty Cycle or 300 on/off per hour

## 10:1 MECHANICAL DESIGN FACTOR

#### **UNDERLOAD PROTECTION**

with load cell installed

## MODULAR MULTI-PIN CONNECTOR

with multi-wire shielded cable

#### **4 POSITION LIMIT SWITCH**

with active spring micro-switch

#### **BUILT-IN PLC**

For safety function monitoring, Brake and Limit Switch integrity, Load Cell reading, Overload and Underload settings

#### **STANDARD** FEATURES

#### **OVERLOAD PROTECTION**

Rated operational range between 125 and 150/160%. Clutch is outside the load path when disconnected from power.

## **DURABLE & LIGHTWEIGHT HOUSING**

Cast aluminum. Black powder coated finish for low visibility.

#### **METRIC RATED**

#### **LOAD CHAIN**

Designed and manufactured by Columbus McKinnon. Zinc plated to protect against corrosion. Black phosphate finish optional.

## THE INDUSTRY'S BEST LIFETIME WARRANTY

## MEETS OR EXCEEDS WORLD STANDARDS

Meets German Regulation BGV-C1

#### **OPTIONAL** FEATURES

#### **CHAIN BAG**

Easy-to-Mount Cloth Type Bags

#### **CHAIN STOP**

Mounted on load chain to prevent overtravel.

#### LOAD CELL

Built in on the suspension hook

\* SIL3 requires a BGV-C1 SIL3 certified controller not included.



#### **SPECIFICATIONS** BGV-C1

<u> </u>	10/11101		• • •						
MODEL	RATED LOAD (KG)	LIFTING SPEED (FPM)	MOTOR HP	OPERATING VOLTAGE	FULL LOAD AMPS	REEVING	PROTECTION CLASS	NOISE LEVEL	LIFT (FEET) *
F	250	16	1/2	230/460-3-60	2.2/1.3	1	IP54	68 dB	60
J	250	32	1	230/460-3-60	3.7/2.2	1	IP54	68 dB	60
JJ	500	64	2	230/460-3-60	7.9/5.0	1	IP54	68 dB	60
L	500	16	1	230/460-3-60	3.7/2.2	1	IP54	68 dB	60
LL	650	32	2	230/460-3-60	7.9/5.0	1	IP54	68 dB	60
RR	1300	16	2	230/460-3-60	7.9/5.0	2	IP54	68 dB	60
VARISTAR	500	100	3 1/2	230/460-3-60	10.4/6.2	1	IP54	68 dB	60

<sup>\*</sup> Lifts other than 60ft available (Standard Units shipped less chain unless specified)

See dimensions for BGV-C1 on Page 2





**CAPACITIES** 300 to 1000 LBS

**LIFT** 60 feet standard

**SPEEDS** 8 to 40 feet/minute

**VOLTAGES**Single & 3-phase available

Lightweight, quiet and portable, the CM Prostar is designed and built for the unique rigging needs encountered at small venues. Featuring an overload device that protects the hoist, operator and structure from damaging overloads.

#### **KEY FEATURES**

## DC ELECTRO-MECHANICAL DOUBLE BRAKES

Non-adjusting for low maintenance and quite operation.

#### GEARING

Precision machined gears heat treated for strength and durability.

#### **CHAIN GUIDE**

One piece jam free for smooth operation.

#### HOUSING

Lightweight, cast aluminum, durable and strong black powder coated finish for low visibility.

#### **LIFT WHEEL**

CM patented 10 pocket oblique lift wheel for quiet and smooth operation.

#### **LOW VOLTAGE CONTROL**

110 Volt for long cable runs without voltage drop. 24 and 48 Volt optional.

#### **DUTY CYCLE**

H-4 duty rated, designed for heavy duty application.

#### **STANDARD** FEATURES

#### **OVERLOAD PROTECTION**

Helps prevent lifting of dangerous overloads.

#### **CHAIN STOP**

Mounted on Load Chain prevents over-travel.

#### **METRIC RATED**

#### **LOAD CHAIN**

Designed and manufactured by Columbus McKinnon. Zinc plated to protect against corrosion. Black phosphate finish optional.

## THE INDUSTRY'S BEST LIFETIME WARRANTY

MEETS OR EXCEEDS WORLD STANDARDS

#### **OPTIONAL FEATURES**

#### **CHAIN BAG**

Easy-to-Mount Cloth Type Bags

#### **DOUBLE BRAKE**

**ENCODER** 

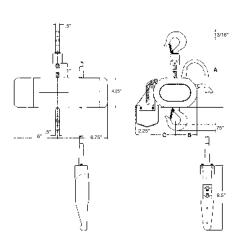
#### SPECIFICATIONS PROSTAR

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CAPACITY	NUMBER OF CHAINS	MOTOR (HP)	LIFT SPEED (FPM)	WT. LESS LESS CHAIN (LBS)	WEIGHT 1FT OF CHAIN (LBS)	FULL LOA	AD AMPS 3-PHASE				
300	1	1/6	16	28	.35	3.6	.6* / 1.2°				
300	1	1/6	16	28	.35		.6* / 1.1°				
500	1	1/6	16	28	.35		.7* / 1.2°				
500	1	1/6	12	28	.35	4	-				
600	2	1/6	8	36	.7	3.6	.6* / 1.1°				
600	2	1/6	8	36	.7	3.6	.6* / 1.1°				
1000	2	1/6	8	36	.7		.7* / 1.2				
	300 300 500 500 600	CAPACITY         NUMBER OF CHAINS           300         1           300         1           500         1           500         1           600         2           600         2	CAPACITY         NUMBER OF CHAINS         MOTOR (HP)           300         1         1/6           300         1         1/6           500         1         1/6           500         1         1/6           600         2         1/6           600         2         1/6	CAPACITY         NUMBER OF CHAINS         MOTOR (HP)         LIFT SPEED (FPM)           300         1         1/6         16           300         1         1/6         16           500         1         1/6         16           500         1         1/6         16           500         1         1/6         12           600         2         1/6         8           600         2         1/6         8	CAPACITY         NUMBER OF CHAINS         MOTOR (HP)         LIFT SPEED (FPM)         WT. LESS LESS CHAIN (LBS)           300         1         1/6         16         28           300         1         1/6         16         28           500         1         1/6         16         28           500         1         1/6         16         28           500         1         1/6         12         28           600         2         1/6         8         36           600         2         1/6         8         36	CAPACITY         NUMBER OF CHAINS         MOTOR (HP)         LIFT SPEED (FPM)         WT. LESS LESS CHAIN (LBS)         WEIGHT 1FT OF CHAIN (LBS)           300         1         1/6         16         28         .35           300         1         1/6         16         28         .35           500         1         1/6         16         28         .35           500         1         1/6         12         28         .35           500         1         1/6         12         28         .35           600         2         1/6         8         36         .7           600         2         1/6         8         36         .7	CAPACITY         NUMBER OF CHAINS         MOTOR (HP)         LIFT SPEED (FPM)         WT. LESS LESS CHAIN (LBS)         WEIGHT 1FT OF CHAIN (LBS)         FULL LOAD 1-PHASE           300         1         1/6         16         28         .35         3.6           300         1         1/6         16         28         .35         3.6           500         1         1/6         16         28         .35         5           500         1         1/6         12         28         .35         4           600         2         1/6         8         36         .7         3.6           600         2         1/6         8         36         .7         3.6				

\*415 Volt operation ~ 220 Volt operation

MODELS (LBS)	LIFT SPEED (FPM)	SINGLE	OPERATING PHASE		PHASE
300	16	115-1-50/60	220-1-50/60	220-3-50/60	415-3-50/60
300	24	-	-	220-3-50/60	415-3-50/60
300	40	-	-	220-3-50/60	415-3-50/60
500	12	115-1-50/60	220-1-50/60	-	-
500	16	-	-	220-3-50/60	415-3-50/60
500	20	-	-	220-3-50/60	415-3-50/60
600	8	115-1-50/60	220-1-50/60	-	-
600	12	-	-	220-3-50/60	415-3-50/60
1000	6	115-1-50/60	220-1-50/60	-	-
1000	8	-	-	220-3-50/60	415-3-50/60
1000	12	-	-	220-3-50/60	415-3-50/60





#### **DIMENSIONS**

DRAWING	REE	/ING		
LEGEND	SINGLE	DOUBLE		
A	11"	12 1/8"		
В	2 15/16"	3 1/2"		
С	2 7/8"	2 3/8"		







## MANUAL HOISTS

### Hand Chain & Cable Lever Hoists



#### **HURRICANE CHAIN HOIST**

- Capacities from 1/2 to 10 tons
- Standard Load Limiter for simple, automatic overload protection.
- Improved braking system is exceptionally quiet, and improves operational safety and serviceability.
- Powder coated finish for corrosion protection.
- All internal gears and pinions are heat treated steel for high strength and long life.

- Chain Guide and Stripper assures load chain alignment.
- Precision 4-Pocket Liftwheel is fully machined for better chain fit and reduced wear allowing for accurate movement of the load chain.
- Alloy steel load chain assures high strength and long wear life.
- Minimal maintenance, easily disassembled, requiring no special tools.
- Metric rated

#### **SERIES 622 HAND CHAIN HOIST**

- Capacities from 1,000 lbs. to 10 tons
- Simple, efficient, economical design.
- Compact design, low headroom and lightweight steel construction for easy installation, even in confined spaces.
- Weston-type load brake requires no lubrication.
- Hand wheel cover with guide slots minimizes jamming and slipping.

- Forged swivel hooks with latches reduce twisting of chain and unintentional unhooking of load when chain is slack.
- Standard hand chain drop is 2 feet less than lift (example: 8 ft. lift hoist has 6 ft. hand chain drop).
- One-year warranty
- Metric rated



#### **SERIES 653 LEVER OPERATED HOIST**

- Capacities from 3/4 to 6 tons.
- Hardened steel load sharing gears.
- Double pawl arrangement for assured load control.
- Two chain guide rollers for positive chain engagement.
- Weston type braking system for positive load control and positioning.
- Simple one-handed, free chaining for fast load attachment.

- Hardened steel chain for strength and long wear life.
- Forged upper and lower hooks with heavy cast steel latches.
- 5-year warranty against defects in materials and workmanship.
- Meets ASME B30.21 Manually Lever Operated Hoist Standard and European CE Standard.
- Metric rated







#### **SERIES 602/603 HAND CHAIN HOISTS**

- Capacities: 500 lbs. & 1000 lbs.
- Plated load chain is standard.
- Weston-type load brake.
- Rubber hand grip for better comfort and security.
- Lightweight design for ease of portability. Use in confined conditions with one-hand operation.
- Forged upper and lower hooks with latches standard.

- Impact resistant, all-steel frame, gear case and cover.
- Hardened link-type alloy steel load chain for strength and long wear.
- Free wheeling feature serves to quickly attach the load.
- Metric rated



#### **CABLE LEVER OPERATED HOIST**

- Capacities: 500 lbs. to 2 tons.
- Handle design for overload protection - bends to prevent overload.
- Hooks with safety latches 3600 swiveling hooks equipped with safety latches for positive load engagement.
- Lightweight and rugged special cast aluminum alloy housings.
- Corrosion resistant all stainless steel springs and shafts.
- Easy load positioning utilize a double interlocking pawl system for precise load adjustment.
- Open construction allows for easy cleaning and inspection.
- Self-storage cable drum provides compact operation.







## **TROLLEYS & CLAMPS**

## Full Complement to our Hoists



#### **PLAIN & GEARED TROLLEYS**

- Capacities Rated loads from 500 lbs to 5 tons in plain and geared models.
- Economical Excellent low cost choice for manual and powered hoists.
- Rugged Designed to provide superior performance and long, efficient service.
- Low Rolling Effort Geared models have standard 6 ft. hand chain drop. Other hand chain drops available.
- Universal Hanging Clevis Accepts most hook mounted hoists.
- Adjustable Trolley easily adjusts to fit any beam flange within range of adjustment, up to an 8.7" flange width.
- Wrap-Around Side Plates Lugs provide additional security to increase operator safety and act as bumpers to protect wheels.
- Dual Tread Wheels Will fit either tapered or flat beam flange within range of adjustment. Wheels include permanently lubricated, shielded ball bearings for long life and low maintenance.
- Lifetime warranty



- Capacities: Rated loads from 500 lbs. to 3 tons
- Negotiates radius curves as tight as 7" to 10".
- Made of highest quality rolled steel.
- Unique double row, ball bearing wheel design for greater wear capacity.
- Larger V-bars available for wider flange adjustment.
- For low headroom applications.
- Permanently lubricated bearings.
- Exclusive Dial-Fit collar quickly adapts trolley to wide range of beams and patented rails.
- Dust covers shield and protect bearings.
- Trolleys available for larger beams, rails or tracks
- Cast iron trolley guards available (except for 3 ton).
- Lifetime warranty









#### SERIES 633 WIDE RANGE TROLLEY

- Capacities: 1/2 to 5 tons
- Rugged steel side plates formed to include bumpers and trolley guards for added security.
- Hardened wheels and axles for added strength and durability.
- Permanently lubricated bearings.
- Fits wide range of beam applications.
- Frames connected by steel equalizer pin, secured by two nuts on each side.



## **SERIES 635 MOTORIZED TROLLEY**

- Capacities: 250 lbs. to 3 Tons
- Speeds: 30 FPM 75 FPM
- Hardened cast iron wheels with universal design can be used on tapered or flat flanged beams.
- Rugged steel side plates for added strength and durability.



#### **CM BEAM CLAMP**

- Working load limit up to 10 tons.
- Suitable for use with powered hoists and chain blocks.
- Load pin incorporated for load suspension with reduced headroom.
- Designed to fit flanges of most structural beams.
- All CM Screwlok girder clamps are factory proof tested and a certification is shipped with each product.



## STAC Chain, Shackles & Accessories



## CM SCREW PIN ANCHOR SHACKLES

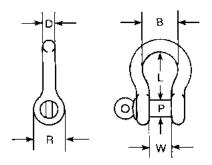
- Work Load Limits: 1/2 to 43 tons.
- Size Diameter: 3/16" to 2".
- Surface Finish Self colored, painted or galvanized per ASTM.
- Strength and Abrasion Features -All shackle bodies and pins are forged from special steel, heat treated and tempered to give greater strength and abrasion resistance.
- Positive and Easy I.D. All shackles are marked with size (mm and in.) and working load limit in tons.
- Strength Plus Ultimate strength equals 5 times working load limit. Proof load equals 2.2 times working load limit.
- CE Marked

## THEATRICAL SHACKLES - BLACK DIMENSIONS (INCHES)



WORKING LOAD LIMIT (TONS)	D	P	w	L	В	R
3	1/2"	5/8"	13/16"	1 15/16"	1 3/8"	1 3/8"
3 1/4	5/8"	3/4"	1 1/16"	2 3/8"	1 5/8"	1 5/8"
6 1/2	3/4"	7/8"	1 1/4"	2 7/8"	1 3/4"	2 1/8"

Screw pin standard, round pin and bolt and nut type also available. 100% Proof tested at 2.2 times the working load limit. Ultimate strength equals 6 times the working load limit



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## ANCHOR SHACKLES, SCREW PIN - CARBON STEEL DIMENSIONS (INCHES)

WORKING LOAD LIMIT (TONS)	D	P	w	L	В	R
3	1/2"	5/8"	13/16"	1 15/16"	1 3/8"	1 3/8"
3 1/4	5/8"	3/4"	1 1/16"	2 3/8"	1 5/8"	1 5/8"
6 1/2	3/4"	7/8"	1 1/4"	2 7/8"	1 3/4"	2 1/8"

Available in diameters from 3/16" to 2". Available unpainted, black, or galvanized.

## ANCHOR SHACKLES, SCREW PIN - ALLOY STEEL DIMENSIONS (INCHES)



WORKING LOAD LIMIT (TONS)	D	Р	w	L	В	R
3 1/3	1/2"	5/8"	13/16"	1 15/16"	1 3/8"	1 3/8"
5	5/8"	3/4"	1 1/16"	2 3/8"	1 5/8"	1 5/8"
7	3/4"	7/8"	1 1/4"	2 7/8"	1 3/4"	2 1/8"

Available in diameters from 3/16" to 2". Available unpainted, black, or galvanized.





#### THE CM SPECIAL **THEATRICAL ALLOY CHAIN (STAC)**

For theatrical rigging applications where bridle adjustability is required.

#### **SUPER STRENGTH**

With working limits of 6 tons 1/2" diameter grade 80 alloy material.

#### **HEAT TREATED**

Alloy steel provides long life.

#### **FIRE & ABRASION RESISTANT**

#### **4:1 DESIGN FACTOR**

Meets or exceeds worldwide standards.

#### **PROOF TESTED**

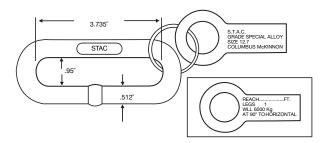
Each link proof tested to assure weld and material integrity.

#### **POSITIVE AND EASY ID**

Chain embossed with STAC and CM for easy identification as CM alloy. Also tagged with size, grade, reach and working load limit.

#### **VERSATILITY**

Link accepts up to 3/4" shackle for adjustability.



#### **WIRE ROPE CLIPS**

Wire rope clips are used to secure the end of wire rope when forming a loop, i.e, for wire rope turn back. Available in mid-grip (double saddle) and single saddle.

Mid-grip clips are available in a drop forged carbon steel material and single saddle clips are available in malleable iron or drop forged carbon steel. Available in sizes up to 1 1/2".





**LAP LINKS** 

A quick permanent way to repair general purpose chains. Chain link and attachments are threaded onto the lap link and the link flattened. Available in a variety of sizes with stock diameters from 1/8" thru 5/8" chain. Not to be used for overhead lifting and prohibited for all load securement applications by CVSA.



#### **QUICK LINKS**

Afford quick and easy chain repair and/or attachment of fittings. Easy closing by threading nut onto threaded end. Reusable. Available in stock diameters ranging from 1/8" to 1/2". Not to be used for overhead lifting, and prohibited for all load securement applications by CVSA.



#### **SHOULDER EYE BOLTS**

- Forged steel/quenched and tempered.
- Metric sizes available.
- Recommended for straight line pull.



#### **GRADE 100 CHAIN**

- Working load limit up to 17 tons.
- Diameter sizes available from (7/32" to 3/4").
- Meets or exceeds many National and International standards.
- 25% higher working load limit when compared to Grade 80.
- Available self-colored, or grey thermal dip.
- Certification included with every drum.
- 100% proof tested.



#### THIMBLES-WIRE ROPE

Made specifically for wire rope turn back forming a cable loop. Used in conjunction with wire rope clips. Manufactured of hot rolled steel in accordance with FED. SPEC. FF-T-276. Available in sizes to fit a maximum of 1 1/2" diameter wire rope.



Turnbuckles find many uses to apply tension to wire rope or cable. They are composed of a forged body and two end fittings. End fittings can be eyes, jaws, or hooks. They must, however, be applied only up to loads within their working load limit as specified for the particular end fitting being applied.



#### **EYE SWIVELS**

- Hot dip galvanized.
- Ultimate load is 5 times working load limit.
- Meets the performance requirements of RR-C-271D, Type VII, Class 2.
- Made in USA
- Regular forged eye and eye swivels.



#### **GRADE 30 CHAIN**

An economical utility chain for apps which do not require a high strength to weight ratio.

- Typically used as trim chain or studio chain.
- Low carbon steel.
- Diameter sizes available from 3/16" to 1"
- Available as self colored, zinc plated, or hot galvanized.
- Also available in Grades 43, 70, 80 and 100





#### **TRAINING**

For decades, the Lodestar Electric Chain Hoist or "Motor" has taken on many different supporting roles in the entertainment industry. From standard lifts to sophisticated computer-automated projects, the Lodestar has been the number one choice in the market. Loyal users trust the Lodestar for unparalleled reliability and durability, show after show.

As the entertainment industry continues to evolve through technological advancements and greater production demands, the need for qualified and trained hoist technicians continues to expand.

From basic motor maintenance training to certification classes, professionals from Columbus McKinnon cover everything from hoist design and operation to maintenance tips of the trade. Participants become well versed in all aspects of hoist technology and understand practices related to safe operation and long hoist life.

In addition to the popular Lodestar, numerous rigging accessories are available as part of the CM-ET line. Theatrical shackles, lever hoists, winches, beam clamps, and wire rope clips provide riggers with numerous options, depending on the venue. Most product categories feature a wide range of capacities, allowing the user to choose the exact product for the job.



#### **REGULATION & STANDARDS**

The Lodestar meets or exceeds the most stringent standards for lifting equipment around the world, including the following: ASME B30.16; ASME HST-1; EC Machine Directive 2006/42 EC; Low Voltage Directive 73/23/EEC; EC EMC Directive 89/336/EEC; FEM 9.511 - 9.671 - 9.811 - 9.683 - 9.941 - 9.755; EN 12100-1; EN 60204-1; EN 349; EN 60204-32; EN 294; EN 55011; EN 55014; DIN 568-3; DIN 56850; BS 7905-1; BS 7906-1; CEN 15902 (ex CEN CWA 25)



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