



ENTERTAINMENT

P R O D U C T S

Working Harder For You

As a result of our quality products and superior service, Harrington Hoists, Inc. (a subsidiary of KITO CORPORATION) has a long history as the industrial hoist and crane market leader in the USA. As we address the diverse needs of the entertainment market, we are pleased to expand our product offering under the KEG (KITO ENTERTAINMENT GROUP) brand.

After years of research and development, we created the products listed in this catalog just for YOU. We offer fully customizable products that can easily handle stage and entertainment equipment needs from small studios and nightclubs to arenas and stadiums.

Not only do these products include entertainment industry-specific features but they come with a full support team. Our Sales and Customer Service Departments are dedicated to serving you and our well qualified Engineering Department will support your technical needs before and after purchase.

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TNER Krewmate Entertainment Chain Hoists

Unique Features

Standards

Hoist exceeds stringent world standards; complies with German regulation **BGV-D8**. Standard configuration meets CE Declaration.



Pull-Rotor Motor Brake

World's most reliable entertainment hoist brake. Simple design. No brake coil to fail or brake disc to replace. **5 year hoist brake warranty.**



Unique Chain Guide

Provides quiet and smooth guiding of chain into hoist and chain container. Durable, heavy cast iron construction.



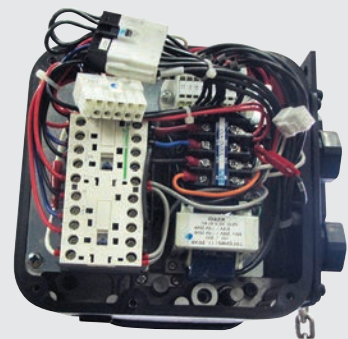
Sleek Rounded Body

Rugged aluminum housing; no sharp edges and flexible, soft-grip handles.



Plug and Play Voltage Changer

Quickly change between 208/230V and 460V. Saves valuable time during setup and integration.



Low Profile Upper/Lower Limit Switches

No adjustment required. Protects hoist and provides maximum travel.



Size and Speed

Designed to fit standard road cases.
 ½ and 1 Ton—16 fpm;
 2 Ton—8 fpm.



Grease-Packed Gearbox

For demanding entertainment applications.
 Maintenance free.



Nickel-Plated Load Chain

Meets DIN and EN 818-7 standards.
 Optional black chain available.



Friction Clutch

Carbon friction material provides consistent performance over a wide temperature range.



Chain Container

Reversible black canvas chain container needed to meet **BGV-D8** regulations. Also designed with two secure attachment points.



Optional Pendant Control (Pickle)

Red button emergency stop.
 NEMA 4X, UL/cUL (CSA) listed.



TNER Krewmate Entertainment Chain Hoists

Swivel Top and Bottom Hooks

Both hooks swivel 360 degrees. Ball bearings produce smooth rotation. Heavy duty hook latches standard.

Corrosion Resistant Load Chain

Nickel-plated, DIN chain for superb durability, strength and corrosion resistance.

Flexible Handles

Equipped with two convenient handles for comfortable and easy handling.

Heavy Duty Motor

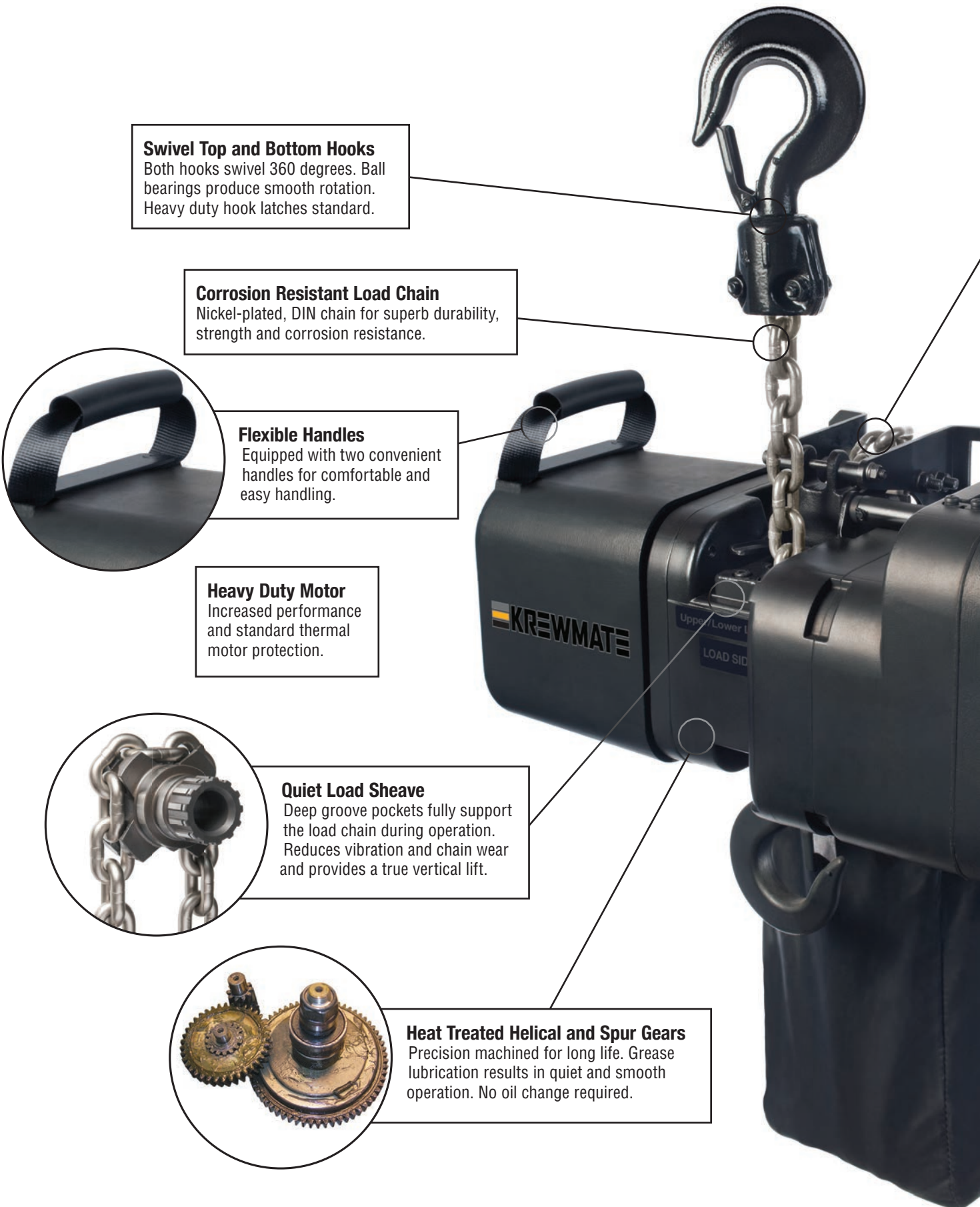
Increased performance and standard thermal motor protection.

Quiet Load Sheave

Deep groove pockets fully support the load chain during operation. Reduces vibration and chain wear and provides a true vertical lift.

Heat Treated Helical and Spur Gears

Precision machined for long life. Grease lubrication results in quiet and smooth operation. No oil change required.



Unique Chain Guide

Provides quiet and smooth guiding of chain. Easily replaced without disassembly of the hoist. Heavy cast iron construction for improved wear versus stamped steel design offered by many manufacturers.



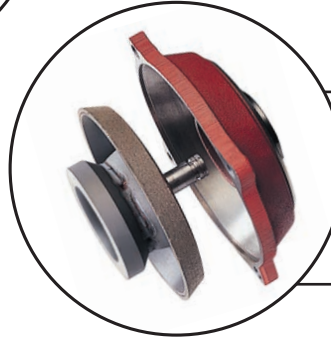
Completely Sealed Body

Suitable for both indoor and outdoor applications, including harsh environments. (Consult Owner's Manual for details.) Gaskets throughout the hoist provide IP55 rating.



Pull-Rotor Motor Brake

Extremely durable and reliable, this advanced design contains no brake coil to fail like conventional disc brakes.



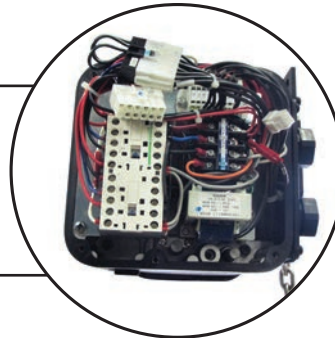
Long Life Friction Clutch

Protects hoist from damage and prevents overwinding.



Quick Voltage Changer

Change voltage on-the-fly from 208/230V to 460V-3-60. Minimizes prep time from venue to venue. Simple as plug and play.



Optional Push Button Pendant (Pickle)

Easy to use, one-handed operation. Rated NEMA 4X, UL/cUL (CSA) listed. Standard control voltage is 110V. Strain relief wire is molded to pendant cord for added support and dependability. Emergency stop on all pendants.



TNER Krewmate Entertainment Chain Hoists



TNER010L

Our TNER Series entertainment chain hoists were designed using the latest technology for handling stage and entertainment equipment. These high quality, low-headroom, full-featured hoists provide reliable performance for use in theaters, concert halls, arenas, studios and outdoor venues.

Features

Standards

Hoist exceeds stringent world standards; complies with German regulation BGV-D8. Standard configuration meets CE Declaration.

Pull-Rotor Motor Brake

World's most reliable entertainment hoist brake. Simple design. No brake coil to fail or brake disc to replace. **5 year hoist brake warranty.**

Unique Chain Guide

Provides quiet and smooth guiding of chain into hoist and chain container. Durable, heavy cast iron construction.

Sleek Rounded Body

Rugged aluminum housing; no sharp edges and flexible soft-grip handles.

Plug and Play Voltage Changer

Quickly change between 208/230V and 460V. Saves valuable time during setup and integration.

Low Profile Upper/Lower Limit Switches

No adjustment required. Protects hoist and provides maximum travel.

Size and Speed

Designed to fit standard road cases. ½ and 1 Ton—16 fpm; 2 Ton—8 fpm.

Grease-Packed Gearbox

For demanding entertainment applications. Maintenance free. No oil changes required.

Nickel-Plated Load Chain

Meets DIN and EN 818-7 standards. Optional black chain available.

Friction Clutch

Carbon friction material provides consistent performance over a wide temperature range.

Chain Container

Reversible black canvas chain container needed to meet **BGV-D8** regulations. Also designed with two secure attachment points.

Optional Pendant Control (Pickle)

Red button emergency stop. Nema 4X, UL/cUL (CSA) listed.

Standard Hoist Specifications

Capacity Range

1/2 Ton – 2 Ton

Reconnectable Voltage

208-230/460-3-60

Control Voltage

110V

Duty Cycle*

30 Minutes

Classification*

ASME H3
JS/ISO M3
FEM 1Bm

Ratings

Hoist — IP55
Optional Pendant — NEMA 4X,
UL/cUL (CSA) listed

Chain Container

Standard
Canvas

Standard Lift

60' (other lengths available)

Standard Pendant and Power Supply Cord

2.5' (longer lengths available)

Optional**

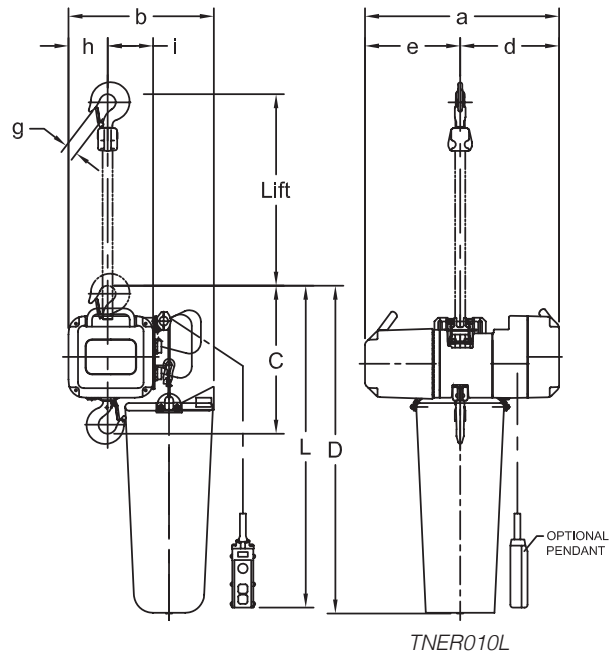
Pendant (Pickle)
Pendant Cord
Power Supply Cord
Hubbell, 7-Pin or 14-Pin Connectors
Road Case
Black Load Chain
Bullard® and Shur-Loc® Hooks

*See page 12 for additional information.

**See page 10 for additional information.



TNER010L



TNER010L

SINGLE SPEED—SPECIFICATIONS

Capacity (Tons)	Product Code	Standard Lift (ft)	Standard Push Button Cord L* (ft)	Lifting Speed (ft/min)	Lifting Motor 3 Phase 60 Hz			Load Chain Diameter (mm) x Chain Fall Lines	Net Weight for 10' Lift (lbs)	Net Weight for 60' Lift (lbs)	Weight for Additional One Foot of Lift (lbs)
					Output (Hp)	Rated Current (amps)					
						@208 – 230V	@460V				
1/2	TNER005L	10 or 60	2.5	16	0.65	3.7	1.9	6.3 x 1	77	104	0.57
1	TNER010L				1.3	5.6	2.8	8.0 x 1	99	146	0.93
1	TNER010S			32	2.4	10.4	5.2		108	155	
2	TNER020L			8	1.3	5.6	2.8	8.0 x 2	126	217	1.9
2	TNER020S			16	2.4	10.4	5.2		135	225	

*Pendant (pickle) is optional.

SINGLE SPEED—DIMENSIONS

Capacity (Tons)	Product Code	Headroom C (in)	a (in)	b (in)	d (in)	e (in)	g (in)	h (in)	i (in)	D (in)
1/2	TNER005L	13.2	18.7	14.2	9.6	9.2	0.9	3.9	4.0	35.4
1	TNER010L	16.1	20.0	15.0	10.2	9.8	1.2	4.1	4.7	37.0
1	TNER010S	16.1			8.8	11.2				
2	TNER020L	22.8			10.2	9.8	1.5			48.8
2	TNER020S	22.8			8.8	11.2				

Options and Technical Data

Road Cases

KITO offers rugged road cases for easy transportation and motor storage. Two sizes are available to hold either one or two motors.

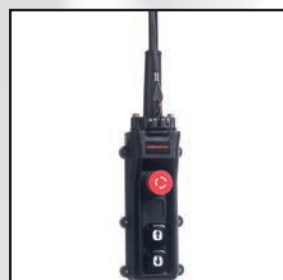
- 20% lighter than conventional plywood cases
- Foam suspension system reduces fatigue during transportation
- Heavy duty recessed hardware
- 600 pound 4" polyurethane swivel casters
- Stackable up to 3 cases high



Black Pendant (Pickle)

KITO's black pendant is available for hoist operation and includes up, down and emergency stop functions. Pendant can be customized with pendant cord at any length.

- Black for low visibility
- NEMA 4X, UL/cUL (CSA) listed



Pendant and Power Supply Cords with Hubbell Connectors

Hubbell Connectors for both power supply cord and push button cord are available for quick installation.

- Male and female ends



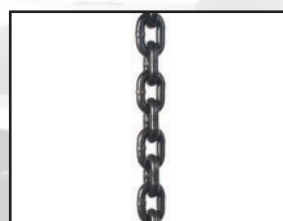
Control and Power Supply Cord with Pin Connector

- Socapex compatible extension for hoists and motors
- 7 or 14 pin available



Black Chain

Grade 80, High strength black chain for low visibility.



Bullard® and Shur-Loc® Hooks

These hooks offer a positive locking latch feature.



Entertainment Universal Beam Clamps

Adjustable and efficient, cost effective method for most work holding and positioning applications. Available in 1–5 Ton capacities.



Entertainment Universal Beam Clamps with Optional Suspender

Used for perpendicular mounting and for oversized hooks. Available in 1–5 Ton capacities.



Reversible Hoist Configuration

Can be inverted to be used in a typical floor to hoist lifting application. Available in 1/2, 1 and 2 Ton capacities.



Options and Technical Data

LB Lever Hoist

Offers a low headroom, compact design that is perfect for use in tight quarters. Available in 3/4–9 Ton capacities.



CF Hand Chain Hoists

A practical alternative when power is not available. Available in 1/2, 1 and 2 Ton capacities.



LX Mini Pullers

This unique puller fills a wide range of uses in entertainment applications. Available in 1/4 and 1/2 Ton capacities.



CX Mini Hand Chain Hoists

Lightweight and compact. Available in 1/4 and 1/2 Ton capacity.



DUTY CLASSIFICATIONS

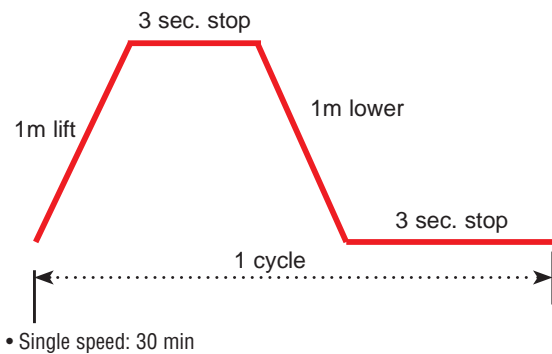
Hoist Duty Class	Typical Areas of Application	Operation Time Ratings at K = 0.65*			
		Uniformly Distributed Work Periods		Infrequent Work Periods	
		Max. Time (min/hr)	Max. No. of Starts/hr	Max. Time From Cold Start (min)	Max. No. of starts
H2	Light machine shop fabricating, service and maintenance; loads and utilization randomly distributed; rated loads infrequently handled	7.5 (12.5%)	75	15	100
H3	General machine shop fabricating, assembly, storage, and warehousing; loads and utilization randomly distributed	15 (25%)	150	30	200
H4	High volume handling in steel warehouses, machine shops, fabricating plants and mills, and foundries; manual or automatic cycling operations in heat treating and plating; loads at or near rated load frequently handled	30 (50%)	300	30	300

*K = Mean effective load factor.

LIFTING MOTOR RATINGS

Short Time Rating

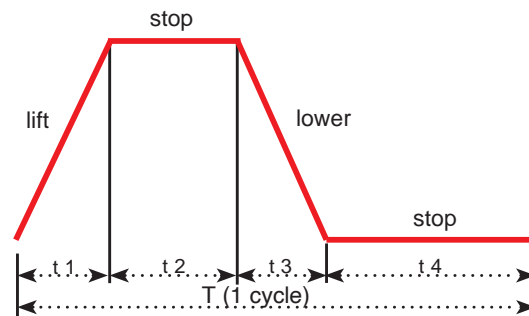
This rating indicates how long the hoist can be operated continuously at the rated capacity on the cycle below, assuming continued operation for a short time span.



Intermittent Rating (Percent ED)

Max. Number of Starts Per Hour

This rating indicates the allowable ratio of motor ON time to motor OFF time, and starts per hour for a hoist operated continuously at 63% of rated capacity on the cycle below, assuming continued operation or repeated starting over a long time span.



$$\text{Example (single speed): \%ED} = \frac{\text{Motor ON time (t1 + t3)}}{T (1 \text{ cycle})} \times 100$$

(Where T = 1 cycle (t1 + t2 + t3 + t4) and is not more than 10 minutes.)

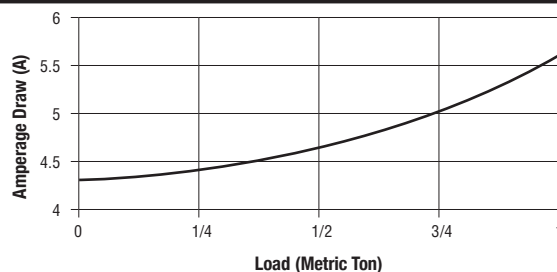
TNER Lifting Motor Ratings

• Single speed: 25% ED, 150 starts/hr

AMPERAGE DRAW VS. LOAD FOR TNER010L AT 230V-3-60HZ

Load (Metric Ton)	Amperage Draw (A)*
0	4.3
1/4	4.4
1/2	4.7
1	5.6

*Amperage draw value is taken from the highest value experienced between lifting and lowering at each load.

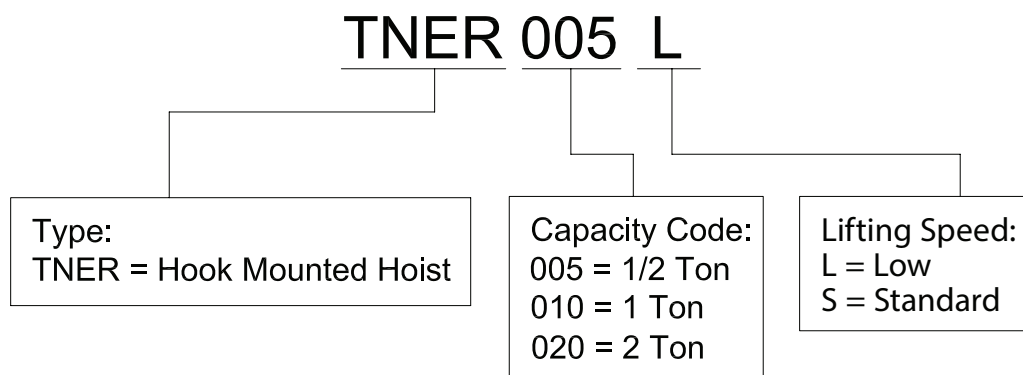


Compliance

KITO's entertainment chain hoists are produced to comply with:

- ASME B30.16 "Overhead Hoists (Underhung)"
- ASME HST-1M "Performance Standard for Electric Chain Hoists"
- FEM 9.682 "Rules for the Design of Serial Lifting Equipment – Selection of Lifting Motors"
- ISO 4301 "Cranes and Lifting Appliance – Classification"
- JIS B 8815 "Electric Chain Hoists"
- IEC 34-5 "Rotating Electrical Machines – Classification of Degrees of Protection Provided by Enclosures of Rotating Electrical Machines (IP Code)"
- IEC 529 "Degrees of Protection Provided by Enclosures (IP Code)"
- NFPA 70 "National Electric Code"
- RoHS (Restriction of Hazardous Substances) Compliance
- BGV-D8 "Winch, Hoist and Pulling Device"
- VPLT 2.0 "Codes of Practice for Event Technology"
- EC Machinery Directive 2006/42/EC
- EC EMC Directive 2004/108/EC
- EC Low Voltage Directive 2006/95/EC
- EN 14492-2 "Power Driven Hoists"
- EN ISO 12100 "Risk Assessment and Risk Reduction"
- EN 818-7 "Short Link Chain for Lifting Purposes"
- EN ISO 13850 "Emergency Stop"
- EN 60204-1 "Electrical Equipment of Machines"
- EN 60204-32 "Safety of machinery – Electrical equipment of machines – Part 32: Requirements for hoisting machines"
- EN 61000-6-4 "Electromagnetic Compatibility – Emission"
- EN 61000-6-2 "Electromagnetic Compatibility – Immunity"
- FEM 9.511 "Classification of Mechanisms"
- FEM 9.683 "Section of Lifting and Travel Motors"

Product Code for TNER Krewmate



6/0 Studio Chain



6/0 Studio Chain

Features

- Theater chain with low gloss black finish
- Used for hanging stationary lights, fixtures and/or battens
- Compatible with standard 1/4" chain hardware
- PSC & USA hallmark is stamped on every 11 links of chain
- Made in the USA

SPECIFICATIONS									
Stock #	Finish	Trade Size (in)	Wire Dia. (in)	Inside Link Dim.		Quantity (per/package)	Net Weight (lbs)	Working Load Limit	
				Length (in)	Width (in)			lbs	kgs
5032066	Black	6/0	0.28	1.50	0.45	1000 ft/drum	620	2,250	1,020
5032062	Black	6/0	0.28	1.50	0.45	100 ft/carton	62	2,250	1,020
5032060	Black	6/0	0.28	1.50	0.45	50 ft/carton	31	2,250	1,020
5032003	Black	6/0	0.28	1.50	0.45	250 - 3 ft pieces/drum	443	2,250	1,020

Users must comply with all local, state, and federal regulations pertaining to overhead lifting requirements.
DO NOT exceed the working load limit.

7mm Entertainment Rigging Chain



7mm Entertainment
Rigging Chain

Features

- Readily compatible with standard 1/4" chain hardware
- Grade 63 alloy material with 0.27" diameter and 3,250 pound working load limit
- Heat treated with each link proof tested to ensure weld & material integrity
- A6 and traceability code every 10 links and TC on the back of each link
- Manufactured and tested in accordance with ASTM A413
- Manufactured and tested as a Grade 63 alloy steel chain
- Black TRAC™ finish
- Made in the USA

SPECIFICATIONS

Stock #	Chain Size (mm)	Wire Dia. (in)	Inside Link Dim.		Quantity (per/package)	Net Weight (lbs)	Working Load Limit	
			Length (in)	Width (in)			lbs	kgs
8611517	7	0.27	1.24	0.49	800 ft/drum	516	3,250	1,474
8612646	7	0.27	1.24	0.45	100 ft/carton	65	3,250	1,474

Trac Chain™



Trac Chain™

Features

- Ideal for: Entertainment rigging applications where bridle adjustability is required
- Super Strength: Grade 80 alloy material with 1/2" diameter and 6 ton working load limit
- Easy Identification: PTC8 hallmark on every 5 links & USA on the back of each link
- Proof Tested: Each link proof tested to assure weld and material integrity
- Heat Treated: Alloy steel provides long life. 4:1 Design Factor
- Low gloss black finish
- Made in the USA

SPECIFICATIONS								
Stock # Bulk	Chain Size (in)	Wire Dia. (in)	Inside Link Dim.		Quantity (per/package)	Net Weight (lbs)	Working Load Limit	
			Length (in)	Width (in)			lbs	kgs
5058051	1/2	0.53	3.74	0.92	100 ft	200	12,000	5,443
5058052	1/2	0.53	3.74	0.92	250 ft	500	12,000	5,443
5058053	1/2	0.53	3.74	0.92	500 ft	1000	12,000	5,443

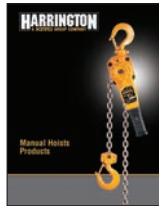
Stock # Tagged Assembly	Chain Size (in)	Length* (ft)	Net Weight (lbs)	Quantity (per drum)
5058003	1/2	3	6.3	20
5058004	1/2	4	8.1	15
5058005	1/2	5	10.6	15
5058006	1/2	6	12.5	10
5058007	1/2	7	14.3	10
5058008	1/2	8	16.2	8
5058009	1/2	9	18.1	7

*Custom lengths available.



Complete Product Offering

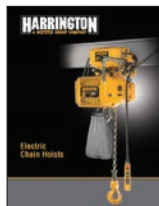
Over the years Harrington has continued to respond to the needs of our customers by further expanding our product offerings. In addition to the many models described in this catalog, our full series of product catalogs, as shown below, will provide you with all of the information you will need to answer questions, specify a product and place an order. For catalog copies or answers to specific product questions, please contact our Customer Service Department by calling 800-233-3010 or e-mail customerservice@harringtonhoists.com



Manual Hoist Products Catalog

Refer to this Harrington catalog for detailed information on the following:

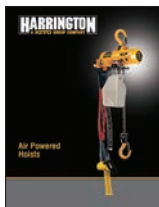
- Lever hoists
- Hand chain hoists
- Hoist and trolley combinations
- Low headroom trolley hoists
- Push and geared trolleys
- Hoist load testers



Electric Chain Hoists Catalog

Refer to this Harrington catalog for detailed information on the following:

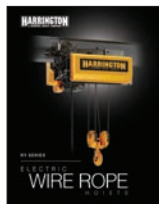
- Three phase electric hoists and trolleys
- Single phase electric hoists and trolleys
- Ergonomic electric hoists



Air Powered Hoists Catalog

Refer to this Harrington catalog for detailed information on the following:

- Compact Mini-Cat with pendant, cord and manipulator controls
- Air hoists with pendant and cord controls
- Air trolleys



Electric Wire Rope Hoists Catalog

Refer to this Harrington catalog for detailed information on the following:

- Ultra-low headroom trolley hoists



Complete Cranes Catalog

Refer to this Harrington catalog for detailed information on the following:

- Heavy-duty Class C single girder top running and underhung cranes
- Heavy-duty Class C double girder top running and underhung cranes
- Medium-duty top running and underhung push cranes
- Crane control panels

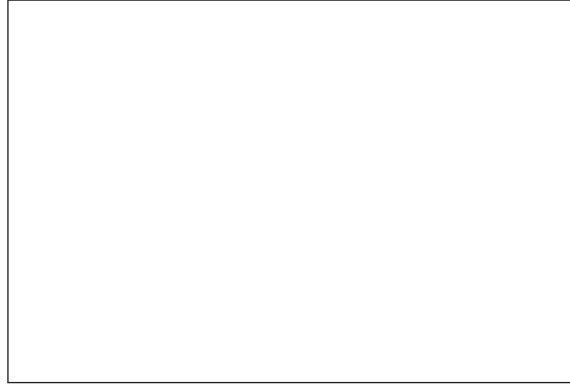


Below-The-Hook and Material Handling Equipment

Refer to this Harrington catalog for detailed information on the following:

- Lifting beams and spreader beams
- Roll lifters, coil lifters and tongs
- Sheet lifters and pallet lifters
- Fork truck accessories
- Material stands and material baskets

CONTACT YOUR NEARBY HARRINGTON DISTRIBUTOR



Warranty

All products sold by Harrington Hoists, Inc. are warranted to be free from defects in material and workmanship from date of shipment by Harrington for the following periods:

- 1 year—Electric and Air Powered Hoists (excluding (N)ER2 Enhanced Features Models, EQ/SEQ Hoists), Powered Trolleys, Powered Tiger Track Jibs and Gantries, Crane Components, Spare/Replacement Parts, Below-The-Hook and Material Handling Equipment**
- 2 years—Manual Hoists & Trolleys, Beam Clamps**
- 3 years—(N)ER2 Enhanced Features Model Hoists, EQ/SEQ Hoists, RY Wire Rope Trolley Hoists**
- 5 years—Manual Tiger Track Jibs and Gantries, TNER, EQ/SEQ and RY Pull-Rotor Motor Brake**
- 10 years—(N)ER2 “The Guardian” Smart Brake**

The product must be used in accordance with manufacturer’s recommendations and must not have been subject to abuse, lack of maintenance, misuse, negligence, or unauthorized repairs or alterations.

Should any defect in material or workmanship occur during the above time period in any product, as determined by Harrington Hoist’s inspection of the product, Harrington Hoists, Inc. agrees, at its discretion, either to replace (not including installation) or repair the part or product free of charge and deliver said item F.O.B. Harrington Hoists, Inc. place of business to customer.

Customer must obtain a Return Goods Authorization as directed by Harrington or Harrington’s published repair center prior to shipping product for warranty evaluation. An explanation of the complaint must accompany the product. Product must be returned freight prepaid. Upon repair, the product will be covered for the remainder of the original warranty period. Replacement parts installed after the original warranty period will only be eligible for replacement (not including installation) for a period of one year from the installation date. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Harrington’s warranty, the customer will be responsible for the costs of returning the product.

Harrington Hoists, Inc. disclaims any and all other warranties of any kind expressed or implied as to the product’s merchantability or fitness for a particular application. Harrington will not be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages, loss or expense arising in connection with the use or inability whatever, regardless of whether damage, loss or expense results from any act or failure to act by Harrington, whether negligent or willful, or from any other reason.

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