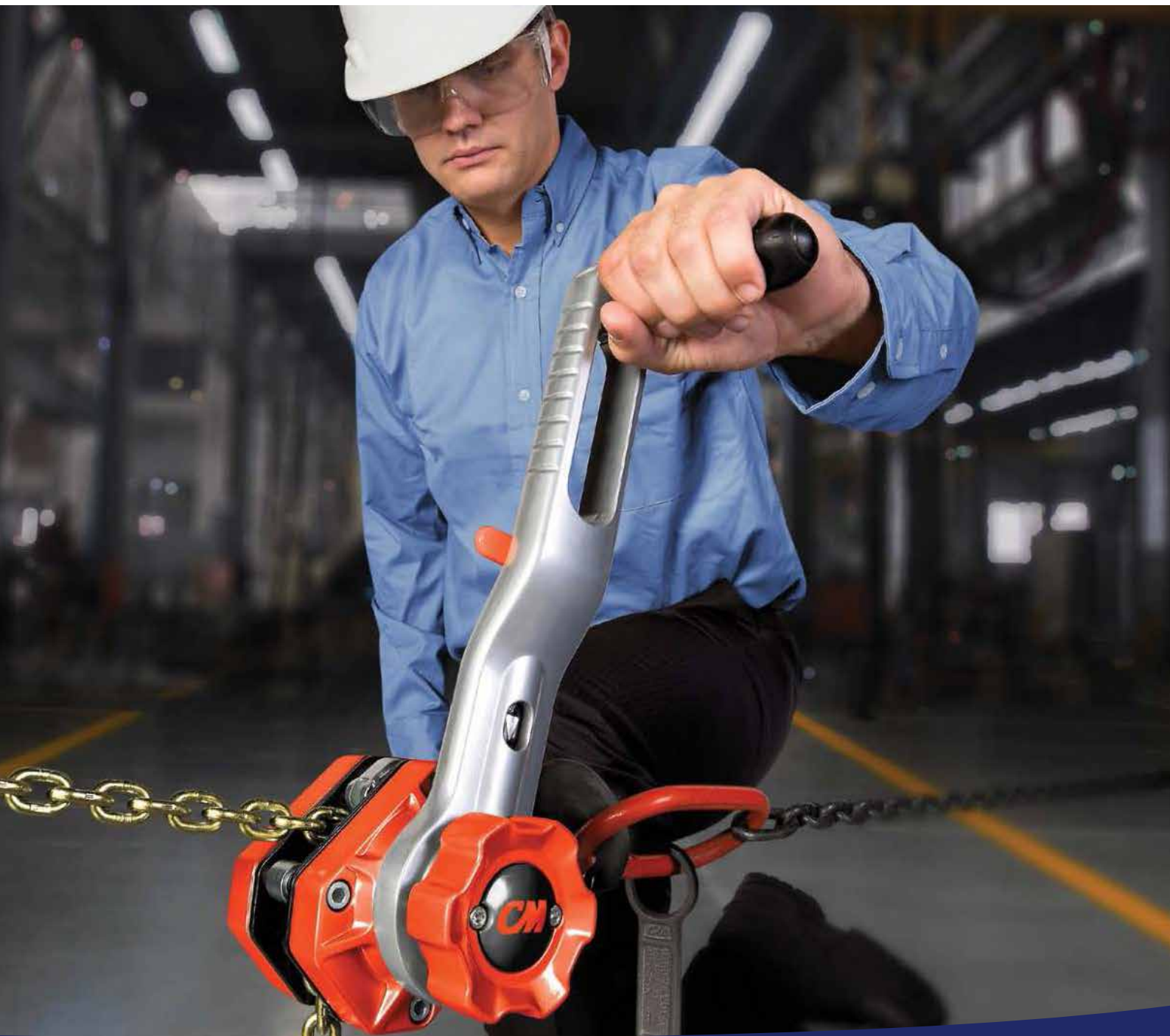


CM

TORNADOTM
RATCHET LEVER HOIST **360°**



INNOVATIVE ENGINEERING DESIGNED FOR YOU

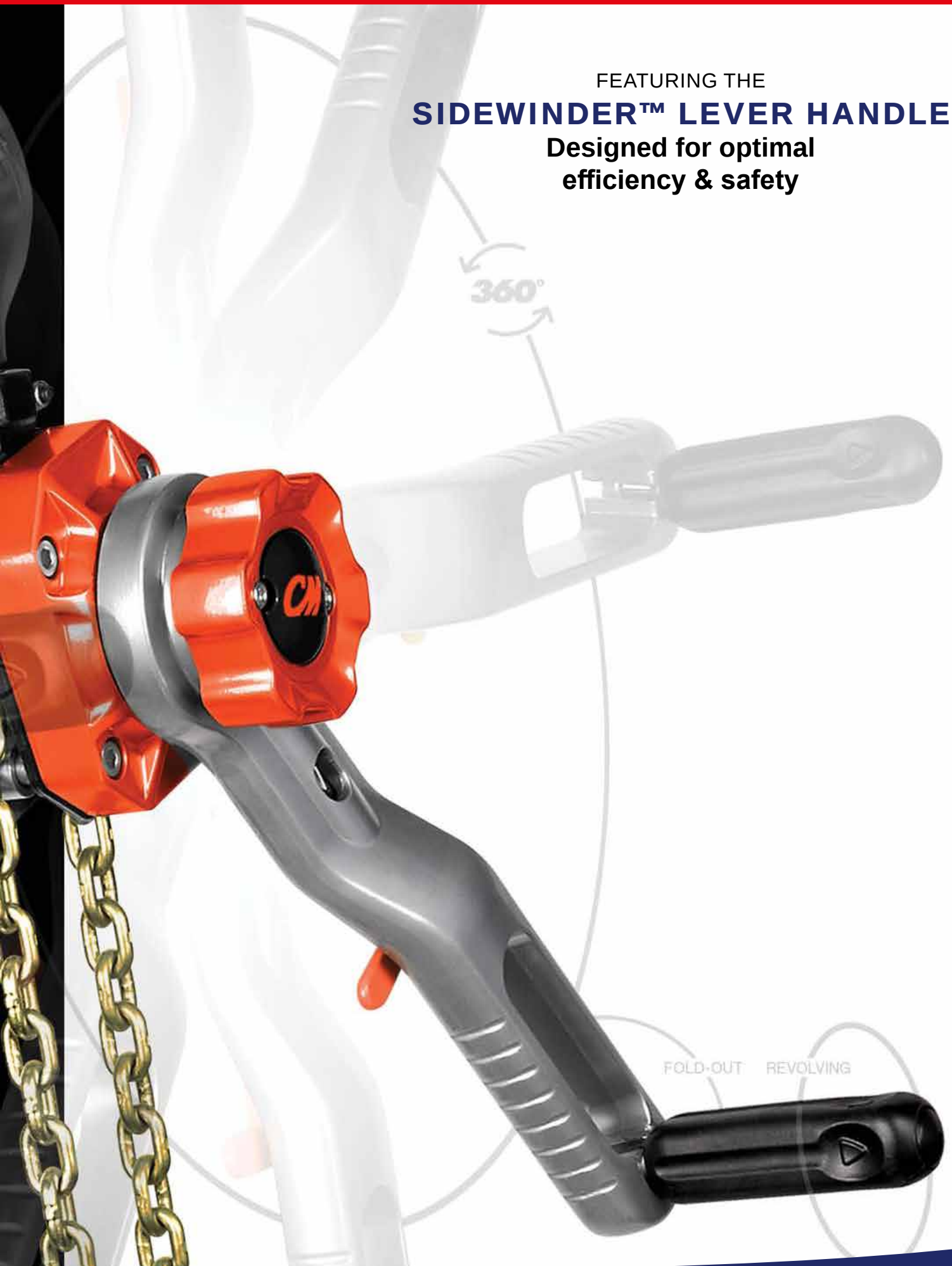
To create the best ratchet lever hoist on the market, Columbus McKinnon started with a fundamental question – how do people use ratchet lever tools to perform their jobs?

To answer that question, a global team of CMCO engineers and application specialists worked with the Institute for Product Innovation at the University of Wuppertal, Germany, to perform an in-depth ergonomic study. Research included more than 200 voice-of-customer interviews across 10 countries, as well as numerous on-site evaluations of real-life applications for traditional lever tools. The study revealed that lever hoists are more often used for pulling and securing than they are for lifting. And, in many applications, proper, safe and ergonomic use is not possible. Using the data collected, Columbus McKinnon engineered and built a first-in-class product that exceeds the ergonomic and performance expectations of our customers around the world. The result is not simply the best, but rather one of the most innovative and safest ratchet lever hoists in the world – the CM Tornado 360,[®]™ featuring the revolutionary Sidewinder[™] lever handle.



FEATURING THE
SIDEWINDER™ LEVER HANDLE

Designed for optimal
efficiency & safety





Redefining lever-operated hoists, the CM® Tornado 360°™ features the revolutionary Sidewinder™ lever handle that allows for efficient operation in both lifting and pulling applications. Ergonomically designed for increased safety, the patent-pending CM Tornado 360° lets the operator to work up to 12 times faster and with as much as 30% less pull force than with conventional ratchet lever tools.

¾ TO 6 TON CAPACITIES | STANDARD LIFTS UP TO 20 FT.

Benefits & Features

SIDEWINDER LEVER HANDLE

This first-of-its-kind lever handle design will revolutionize the ratchet lever hoist industry. Its unique foldable handle and 360° rotating lever increases productivity while reducing the risk of operator injury.

CONVENIENT DIRECTIONAL INDICATOR

Easy-to-use, highly visible directional indicator located on the handle clearly shows the operating direction as lifting, lowering or neutral.

EASY & SMOOTH FREE CHAINING

For quick take up and positioning of slack chain - even with one hand. Designed not to accidentally free chain while under load. Cast chain end stop allows the user to easily position the chain in free-chaining mode and prevents it from entering the liftwheel and jamming the hoist.

POSITIVE LOAD CONTROL

Enclosed Weston-type brake stays clean and dry for precise load positioning.

BUILT TO LAST

Lightweight aluminum housing withstands rigorous use and features high-quality, long-lasting bearings. Powder coat finish provides extra protection in harsh environments.

MEETS ASME B30.21

EXCELLENT CORROSION PROTECTION

Robust chain guide and chain stripper made from cast steel and zinc-plated for corrosion protection.

100% LOAD TESTED GOLD CHROMATE CHAIN

Designed and manufactured in the U.S.A. by Columbus McKinnon. Protects against corrosion. (Canadian units feature corrosion-resistant, zinc-plated chain.)

EASY-TO-INSPECT SWIVEL HOOKS

Bolt-on hooks with nylon locks help users comply with ASME B30.21 and B30.10 inspection requirements. Hooks are forged, allowing them to yield under overload without breaking. Cast safety latches provide positive and secure load engagement.

INDUSTRY-LEADING WARRANTY

Our lifetime warranty on all mechanical components, including the Sidewinder lever handle, is the industry's best warranty against manufacturing and material defects. With our 3-year brake warranty, if the brake discs wear out within 3 years from the date of purchase, CMCO will replace the ratchet disc assembly free of charge.

EASY IDENTIFICATION

Each unit has a unique serial number for easy and accurate identification.

Optional Features

SHIPYARD HOOKS

Available on 1-1/2 and 3 ton units only.

INTERNAL LOAD LIMITER

Allows the handle to rotate freely, preventing the lifting of an overload sufficient to damage the hoist. Units equipped with a load limiter feature a black hand wheel for quick and easy on-site identification.

CM SMART ID™ RADIO FREQUENCY IDENTIFICATION

Simplify inventory and inspection management processes. (Available on U.S. units only)



**LIFETIME
WARRANTY**



THE REVOLUTIONARY SIDE WINDER™ LEVER HANDLE

The patent-pending CM Tornado 360° ratchet lever hoist features the revolutionary Sidewinder™ lever handle. What makes the Sidewinder so unique are two innovative components:

1. 360° ROTATING LEVER

The unique offset, or curved, design of the lever keeps the operator's hand and body aligned with the load chain. This reduces the risk of the twist effect (when a hoist twists around the chain) and the need to stabilize the hoist with another hand.

2. FOLD -OUT REVOLVING HANDLE

Recessed in the lever, the heavy-duty steel core handle folds down into position on either side of the lever, allowing for easy operation from any angle. The handle is grooved to provide a secure grip – even with gloves. The handle revolves, allowing the operator to ergonomically and easily maintain control of the lever through its full 360° range of motion.

Together, the Sidewinder's lever and handle allow the operator to realize the full potential of 360° rotation, making the CM Tornado 360° unlike any other ratchet lever hoist on the market:

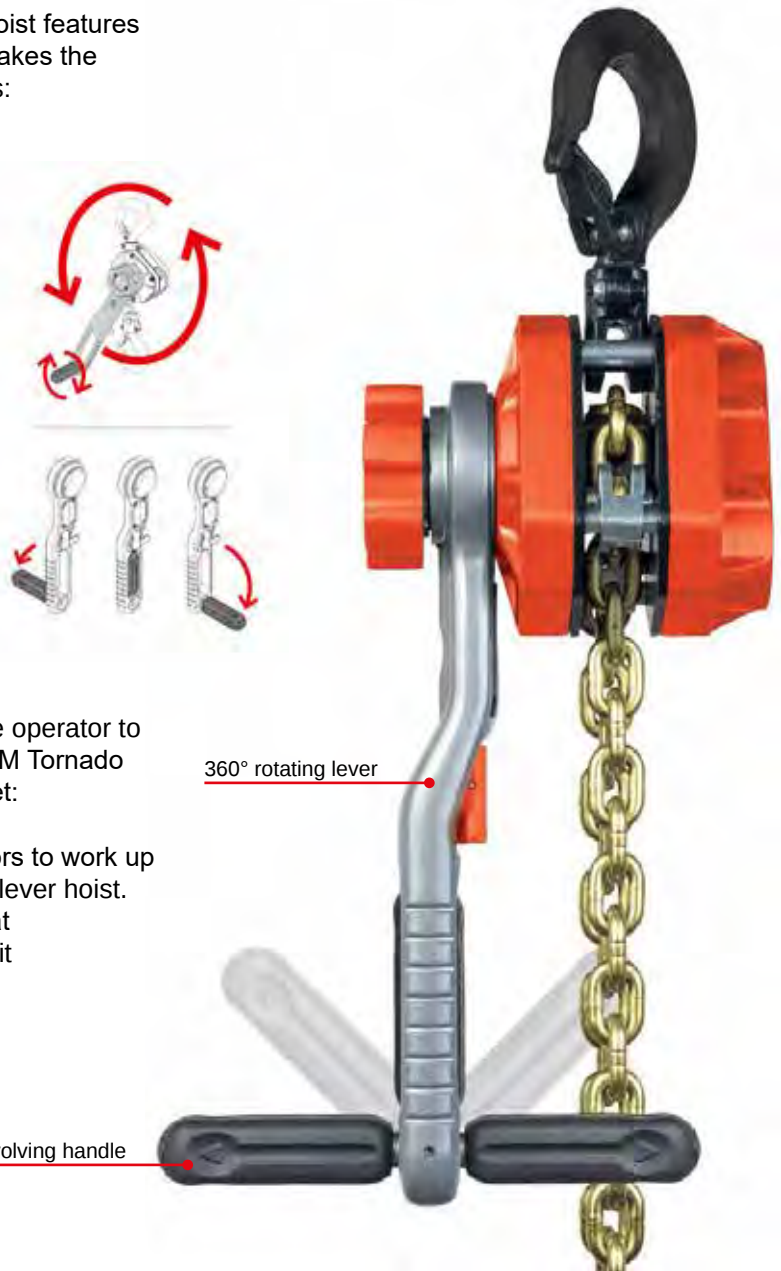
- 360° rotation increases efficiency, allowing operators to work up to 12 times faster than with a conventional ratchet lever hoist.
- Minimal effort with best-in-class lever pull force that beats the competition: 38.2 lb./ft. for the 3/4 ton unit and 58.5 lb./ft. for the 1-1/2 ton unit.

**DISTINCTIVE
CLICKING SOUND**
ENSURES THE HANDLE
IS LOCKED INTO POSITION

To return handle to upright position,
simply pull the handle outward
and snap into place inside the lever.

Fold-out revolving handle

360° rotating lever



EASILY CHANGE YOUR GRIP TO SUIT THE APPLICATION

The CM Tornado 360° gives operators ultimate flexibility. When an application requires a customary ratcheting hand grip, the Tornado 360° can be operated like a traditional lever tool when the lever handle is in the upright position.

OPTIONAL LOAD LIMITER

Units equipped with an internal load limiter feature a black hand wheel for quick and easy on-site identification.



ERGONOMIC DESIGN DELIVERS OPTIMAL OPERATOR SAFETY



Hoist design allows the operator to work in a safe and ergonomic position.



Sidewinder lever handle enables smooth 360° operation, reducing repetitive wrist action experienced with traditional ratchet lever hoists.



Double reduction gearing and high-quality bearings decrease required pull force by up to 30%, reducing operator fatigue.

EASY-TO-USE DIRECTIONAL CONTROL & FREE CHAINING

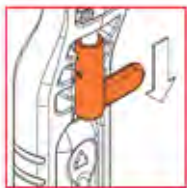
Convenient Directional Indicator

Easy-to-use, highly visible directional indicator window located in the lever clearly shows the operating direction as lifting (▲), lowering (▼) or neutral (N).



EASY & SMOOTH FREE CHAINING

Allows for quick take up and positioning of slack chain – even with one-handed use. Designed not to accidentally free chain while under load. Cast chain end stop allows the user to quickly position the chain in free-chaining mode and prevents it from entering the liftwheel and jamming the hoist. In this mode of operation, the chain can be pulled through the hoist in either direction by hand for quick attachment to the load. To engage the free chaining feature, remove the load and move the directional lever to the neutral (N) position.



SAFE & SECURE SELECTOR LEVER LOCKS IN PLACE TO PREVENT ACCIDENTALLY SWITCHING.

Pull down on the selector lever to unlock it, turn it to the desired direction, and release it into the locking position.

EASILY CARRY & TRANSPORT WITH JUST ONE HAND

When folded out, the lever handle can serve as a carrying grip for easy transport. Simply attach the end stop to the hook and slip the hook onto the Sidewinder lever handle to lift and carry the unit with one hand.





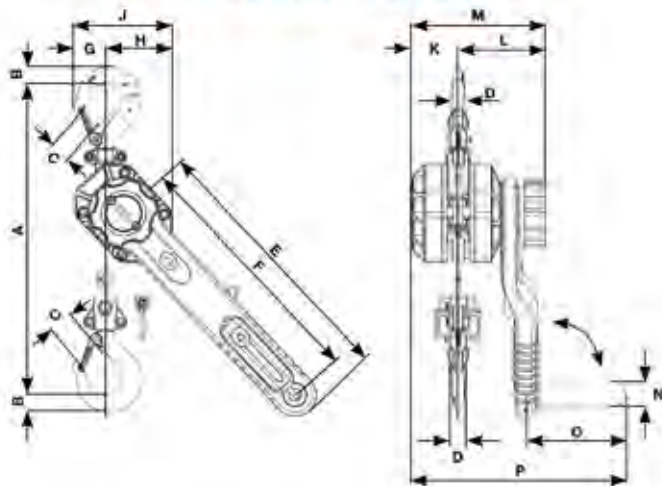
EASY AND SAFE POINT LOADING

With a blunt tip and the ability to point load, these hooks are ideal for positioning steel plates and figures during welding. They are used in common applications like shipbuilding, metal fabrication and many other industries. Optional on 1-1/2 and 3 Ton CM Tornado 360° units, these hooks are forged from 8630 quenched and tempered alloy in the USA and have a 4:1 design factor.

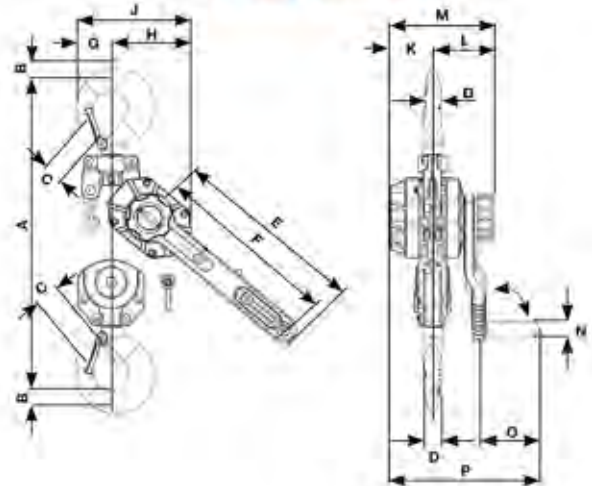
DIMENSIONS & SPECIFICATIONS

Capacity Tons (kg.)	Product Code		Standard Lift ft. (m)	Pull Force to Lift Rated Load lb./ft. (kg./ft.)		Reeving	Weight lbs. (kg)	Dimensions in. (mm)															
	without load limiter	with load limiter		Sidewinder Lever Handle Operation	Traditional Lever Operation			A (Min.)	B	C	D	E	F	G	H	J	K	L	M	N	O	P	
0.75 (750)	TOR07505	TOR07505LL	5 (1.5)	38.2 (17.3)	47.2 (21.4)	1	14.6 (6.62)	12.60 (320)	0.79 (20)	1.06 (27)	0.71 (18)	12.87 (327)	11.81 (300)	1.57 (40)	3.19 (81)	4.76 (121)	2.20 (56)	4.13 (105)	6.53 (161)	1.18 (30)	4.72 (120)	10.1 (257)	
	TOR07510	TOR07510LL	10 (3.0)				16.8 (7.62)																
	TOR07515	TOR07515LL	15 (4.5)				19.0 (8.62)																
	TOR07520	TOR07520LL	20 (6.0)				21.2 (9.62)																
	TOR075LCX	TOR075LCXL	Less Chain				11.96 (5.42)																
1.5 (1,500)	TOR15005	TOR15005LL	5 (1.5)	58.5 (26.5)	60.7 (27.5)	1	21.0 (9.52)	14.76 (375)	1.02 (26)	1.22 (31)	0.83 (21)	12.87 (327)	11.81 (300)	2.01 (51)	3.76 (96)	5.79 (147)	2.71 (69)	4.33 (110)	7.05 (179)	1.18 (30)	4.72 (120)	10.7 (273)	
	TOR15010	TOR15010LL	10 (3.0)				24.5 (11.11)																
	TOR15015	TOR15015LL	15 (4.5)				28.1 (12.75)																
	TOR15020	TOR15020LL	20 (6.0)				31.6 (14.33)																
	TOR150LCX	TOR150LCXL	Less Chain				16.71 (7.58)																
	00002145	Optional Upper Shipyard Hook			4.4 (2.00)	14.02 (356)	1.10 (28)	1.06 (27)	0.91 (23)	12.87 (327)	11.81 (300)	1.46 (37)	3.76 (96)	5.24 (133)	2.72 (69)	4.33 (110)	7.05 (179)	1.18 (30)	4.72 (120)	10.75 (273)			
	3315WLP	Optional Lower Shipyard Hook			2.87 (1.30)																		
3 (3,000)	TOR30005	TOR30005LL	5 (1.5)	79.4 (36)	90.4 (41)	1	36.61 (16.61)	17.52 (445)	1.46 (37)	1.57 (40)	1.10 (28)	14.84 (377)	13.78 (350)	2.24 (57)	4.84 (123)	7.09 (180)	3.39 (86)	4.76 (121)	8.15 (207)	1.18 (30)	4.72 (120)	11.77 (299)	
	TOR30010	TOR30010LL	10 (3.0)				44.01 (19.96)																
	TOR30015	TOR30015LL	15 (4.5)				51.41 (23.32)																
	TOR30020	TOR30020LL	20 (6.0)				58.81 (26.68)																
	TOR300LCX	TOR300LCXL	Less Chain				29.21 (13.25)																
	00002383	Optional Upper Shipyard Hook			4.23 (1.92)	17.17 (436)	1.46 (37)	1.42 (36)	1.10 (28)	14.84 (377)	13.78 (350)	1.89 (48)	4.84 (123)	6.73 (171)	3.39 (86)	4.76 (121)	8.15 (207)	1.18 (30)	4.72 (120)	11.77 (299)			
3403WLP	Optional Lower Shipyard Hook			4.81 (2.18)																			
6 (6,000)	TOR60005	TOR60005LL	5 (1.5)	83.8 (38)	92.5 (42)	2	52.26 (23.70)	22.17 (563)	1.77 (45)	1.73 (44)	1.38 (35)	14.84 (377)	13.78 (350)	2.80 (71)	6.38 (162)	9.17 (233)	3.39 (86)	4.76 (121)	6.15 (207)	1.18 (30)	4.72 (120)	11.77 (299)	
	TOR60010	TOR60010LL	10 (3.0)				59.66 (27.06)																
	TOR60015	TOR60015LL	15 (4.5)				67.06 (30.42)																
	TOR60020	TOR60020LL	20 (6.0)				74.46 (33.77)																
	TOR600LCX	TOR600LCXL	Less Chain				44.86 (20.35)																

3/4, 1-1/2 AND 3 TON UNITS



6 TON UNITS



BULK CHAIN

Product Code	Description	Weight lbs. (kg)
635221	Bulk Chain (per foot) for 3/4 ton units	0.42 (1.91)
635221D500	Chain Drum (500 ft.) for 3/4 ton units	210 (95.25)
85961Z	Bulk Chain (per foot) for 1-1/2 ton units	.708 (.32)
85961ZD500	Chain Drum (500 ft.) for 1-1/2 ton units	354 (160.6)
85394	Bulk Chain (per foot) for 3 & 6 ton units	.708 (0.32)
85394D500	Chain Drum (500 ft.) for 3 & 6 ton units	735.5 (33.62)

AVAILABLE IN
¾ TO 6 TON CAPACITIES
WITH STANDARD LIFTS UP TO 20 FT.



¾ TON CAPACITY

HEADROOM: 12.60 in. (320 mm)

PULL FORCE:

Sidewinder Lever Handle: 38.2 lb./ft. (17.3 kg/ft.)

Traditional Lever Operation: 47.2 lb./ft. (21.4 kg/ft.)

WEIGHT: 5 ft./1.5 m lift - 14.6 lbs. (6.62 kg)

1-1/2 TON CAPACITY

HEADROOM: 14.76 in. (375 mm)

PULL FORCE:

Sidewinder Lever Handle: 55.5 lb./ft. (28.5 kg/ft.)

Traditional Lever Operation: 60.7 lb./ft. (27.5 kg/ft.)

WEIGHT: 5 ft./1.5 m lift - 21.0 lbs. (9.52 kg)



3 TON CAPACITY

HEADROOM: 17.52 IN. (445 MM)

PULL FORCE:

Sidewinder Lever Handle: 79.4 lb./ft. (36 kg/ft.)

Traditional Lever Operation: 90.4 lb./ft. (41 kg/ft.)

WEIGHT: 5 FT./1.5 M LIFT - 36.61 LBS. (16.61 KG)



6 TON CAPACITY

HEADROOM: 22.17 in. (583 mm)

PULL FORCE:

Sidewinder Lever Handle: 83.8 lb./ft. (38 kg/ft.)

Traditional Lever Operation: 92.6 lb./ft. (42 kg/ft.)

WEIGHT: 5 ft./1.5 m lift - 52.26 lbs. (23.70 kg)

BETTER BY DESIGN

Unique body design allows the CM Tornado 360° to lay flat to minimize tipping or slipping during operation.



EASIER MAINTENANCE & INSPECTION

For quicker maintenance and lower repair costs, screws are set into the hoist body to protect them from potential damage. To ensure optimal performance and safety, demand genuine CMCO parts.

Protect your investment, maintain warranty requirements and preserve the integrity of your hoist's superior design – ask for Parts Star™ by Columbus McKinnon.



An established name in the Netherlands

Founded in 1892 and importer / wholesaler and specialist in lifting and lifting equipment & fall protection since 1950.

Active in the market segments Industry & Entertainment

Our products are delivered to specialized retailers, rental companies and other resellers.

In addition, we directly serve several major users in specific market segments.

This gives Louis Reyners a **unique market position**.

Stands for quality and is ISO 9001: 2015 certified

We constantly strive for quality improvement with the focus on our customers.

In addition to the mentioned brand, it also has its own brand: **ELLER** for hoisting and lifting and **ELLERsafe** for fall protection. A reliable range of products at a competitive price.

A wide assortment of products in stock

This enables Louis Reyners to deliver **quickly and completely** from **stock**.

24/7 Customer portal

Order online, your net purchase prices and our stock immediately visible.

An overview of your invoice and order history. Easy download of manuals, images, folders and documents.

Custom work

Due to our years of experience, we can always find a product that is suitable for your application. If this does not work with a standard product, we also do **custom work** and tailor the product to your specific requirements.

Has **certified inspectors** and an experienced team of workshop staff who can help you **repair, modify, inspect, approve** and **certify**.

Do you want information, technical support or special product training?

Our product specialists and sales consultants are available daily to **quickly and professionally** answer all your questions.



Repairs & modifications



Online



Inspections



Stock



Certification

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