

PORTABLE AND STATIONARY  
**DAVIT CRANES**



**LEAVE THE HEAVY LIFTING TO US**

Winona, MN USA | [www.thern.com](http://www.thern.com)





# Need



# a lift?



## ***DAVIT CRANES THAT WORK HARD IN MORE PLACES***



When it comes to equipment for heavy-duty lifting and positioning, There has the experience you are looking for. Large or small, heavy or light, There has designed and manufactured standard and custom cranes and winches for countless customer applications around the world.

**Water/Wastewater**

**Marine**

**Construction**

**Oil & Gas**

**Manufacturing**

**Utilities/Power Generation**

**Defense/Government**

**Bulk Handling**

**Mining**



# Industries All Over the World...

Thern winches and cranes can be found lifting, pulling and positioning loads in virtually every industry imaginable. Our portable davit cranes are seen lifting submersible pumps in wastewater treatment plants around the world. Our industrial strength hand winches make quick work of heavy loads in manufacturing.



MADE IN USA 

Form FCS4-1114

# ...Leave the Heavy Lifting to Us

No load is too large. No job is too small. Whatever industry you're in, Thern winches and cranes make any job easier and more efficient. Contact us today and let us help you determine the right product for your application.



**MANUFACTURING**



**MINING**



**BULK HANDLING**



**WATER / WASTEWATER**



**DEFENSE**



**BULK HANDLING**



**WATER / WASTEWATER**



**AEROSPACE**



**MARINE**



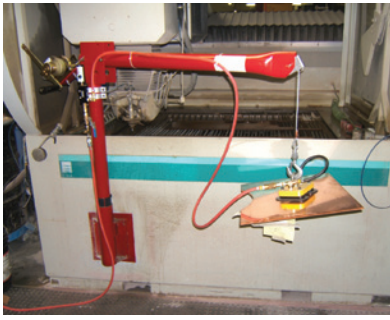
**MINING**



**POWER GENERATION**



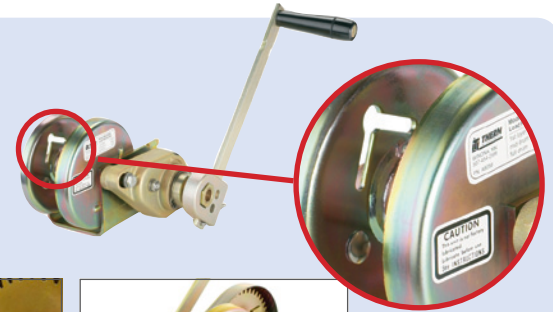
**CONSTRUCTION**



# Our Rugged **STEEL** Cranes Work Harder

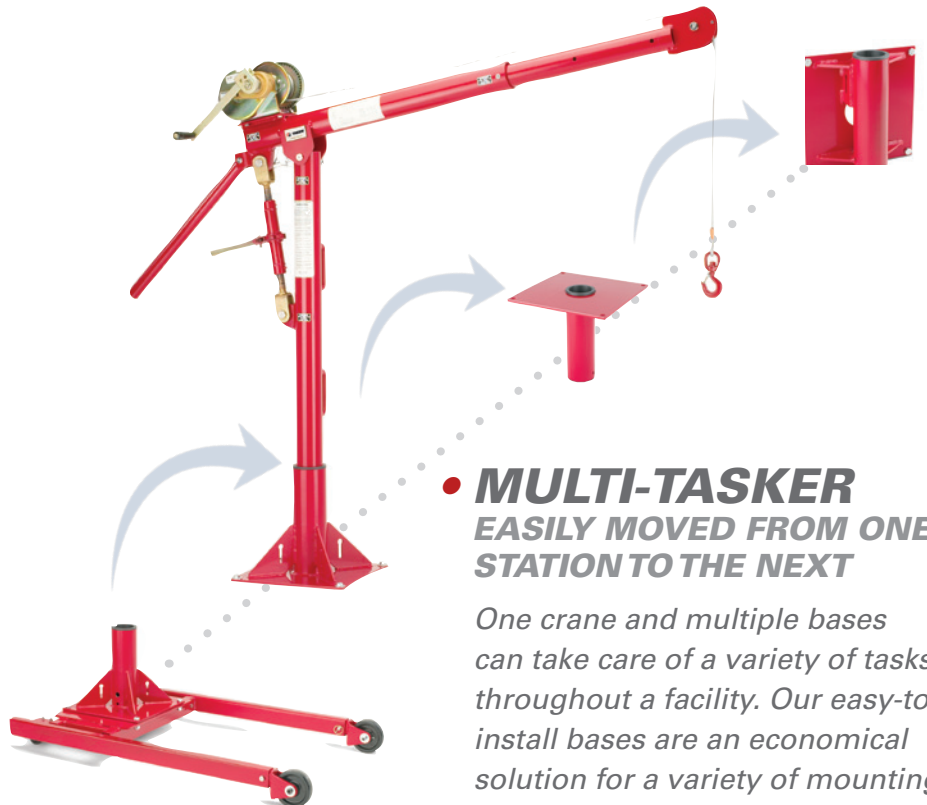
## • **QUICK DISCONNECT ANCHOR**

Wire rope is secured to an anchor hole in the flange of the drum, allowing you to rapidly attach or remove wire rope from the crane so wire rope assemblies can be left permanently attached to submersed pumps while the crane is moved to a new location.



## • **HAND OR POWER OPERATION**

Thern Davit Cranes can be configured with a manual winch for short, infrequent lifts, or a power winch for longer lifts or heavier loads.



## • **MULTI-TASKER** EASILY MOVED FROM ONE STATION TO THE NEXT

One crane and multiple bases can take care of a variety of tasks throughout a facility. Our easy-to-install bases are an economical solution for a variety of mounting situations.

MADE IN USA 

Form FCS4-1114



**... to Make Your Work Easier**



**• ADJUSTABLE  
BOOMS  
TELESCOPING &  
360° ROTATION**

*Booms adjust to different positions for operation. Cranes rotate 360° in a sleeve bearing in the base.*

**• EASILY INSTALLED  
NO SPECIAL TOOLS NEEDED**

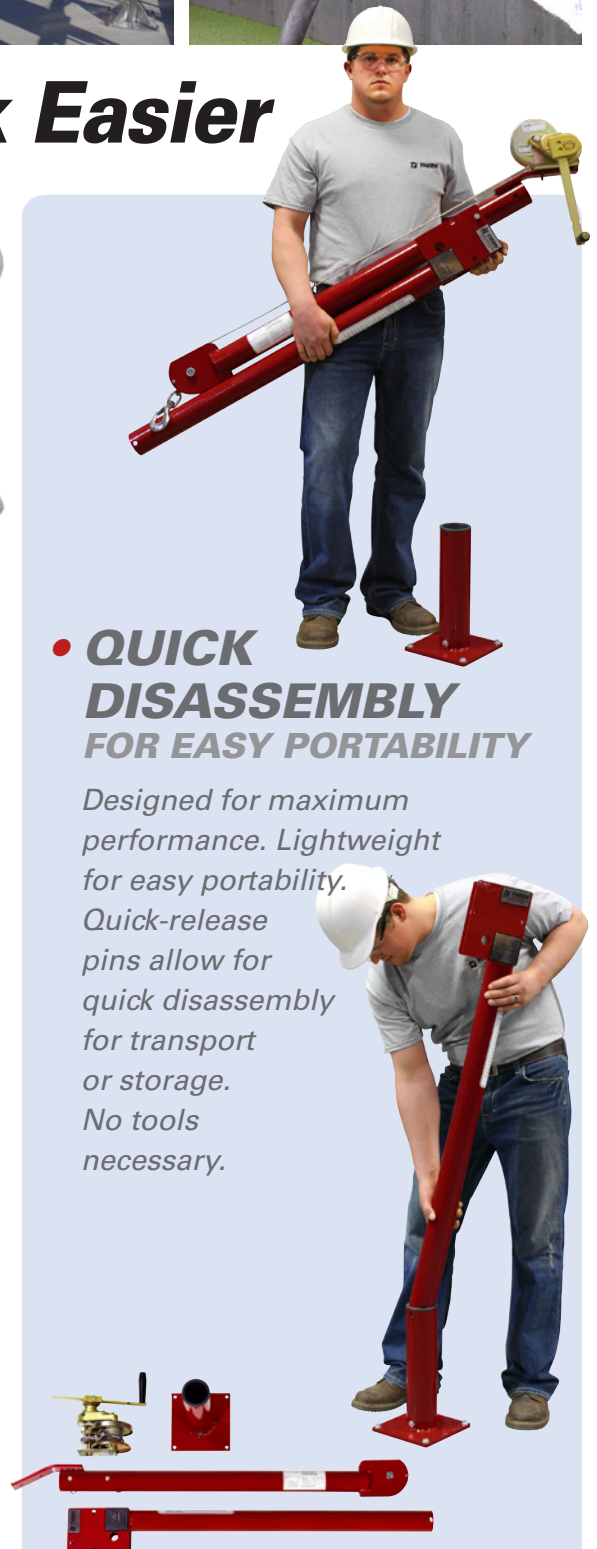
*Our bases are easily installed to a variety of surfaces with anchor bolts or other fastening methods.*



**• QUICK  
DISASSEMBLY  
FOR EASY PORTABILITY**

*Designed for maximum performance. Lightweight for easy portability.*

*Quick-release pins allow for quick disassembly for transport or storage. No tools necessary.*



# Thern Davit Crane Advantages . .

## • SIMPLE INSTALLATION

### Davit Installation

In typical Thern davit installations, the base is simply anchored to existing industrial floor slab with 4 anchor bolts.

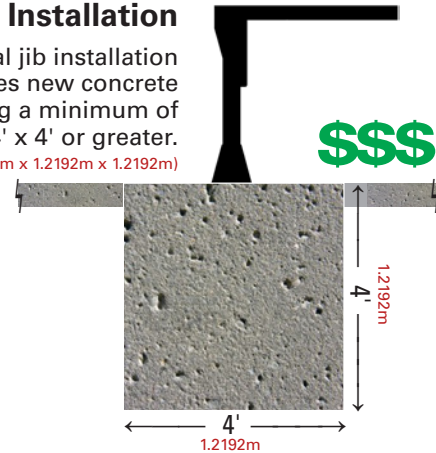
Additional bases can be installed in multiple locations.



### Jib Installation

Typical jib installation requires new concrete footing a minimum of 4' x 4' x 4' or greater.

(1.2192m x 1.2192m x 1.2192m)



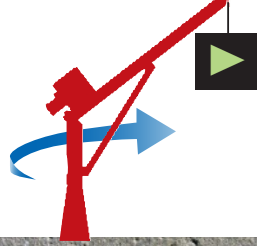
## • INDUSTRIAL APPLICATIONS

### Lift



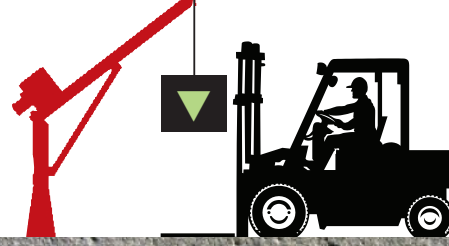
Lift up to 3,000 lbs. (1,360 kg) with ease and control of load.

### Rotate



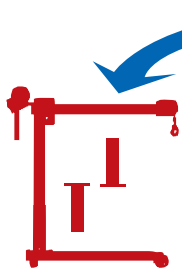
Rotate load to desired position.

### Lower



Lower load to desired location.

## • TRUCK MOUNTED APPLICATIONS



- Wheel
- Wall
- Flush
- Pedestal

Lightweight, portable, electric or hand operated. Use in truck, or remove and install in shop using a variety of other bases.

vs



Heavy-duty, expensive truck and equipment. Limited use to truck access. Permanent, cannot be removed.

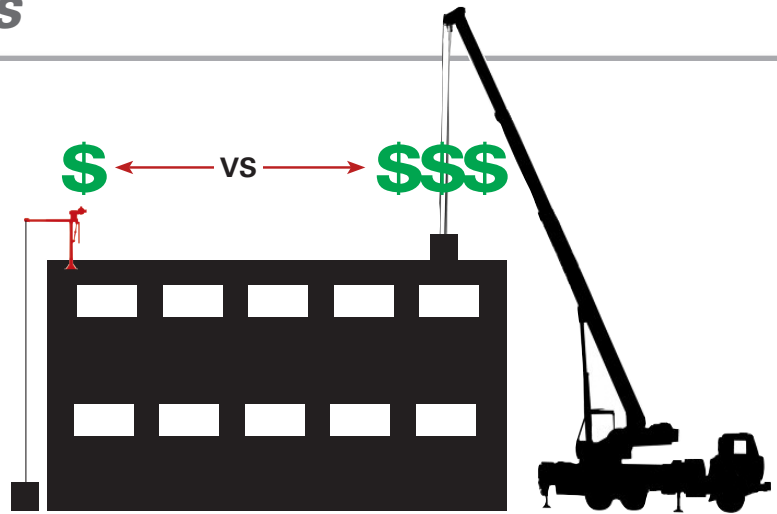


# . . are Clear as Black and White

## • ROOFTOP APPLICATIONS

### Rooftop Installations

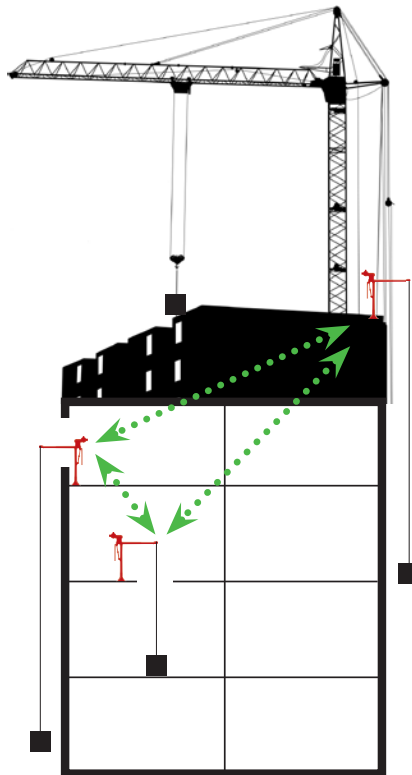
Thern davit cranes installed on rooftop applications provide an economical, permanent solution for lifting tools, maintenance and HVAC equipment versus expensive mobile crane rentals.



## • CONSTRUCTION SITES

### Construction Site Applications

For small lifts up to 2,000 lbs (907 kg). Thern davit cranes offer a convenient, portable, economical alternative vs on-site oversized tower cranes.

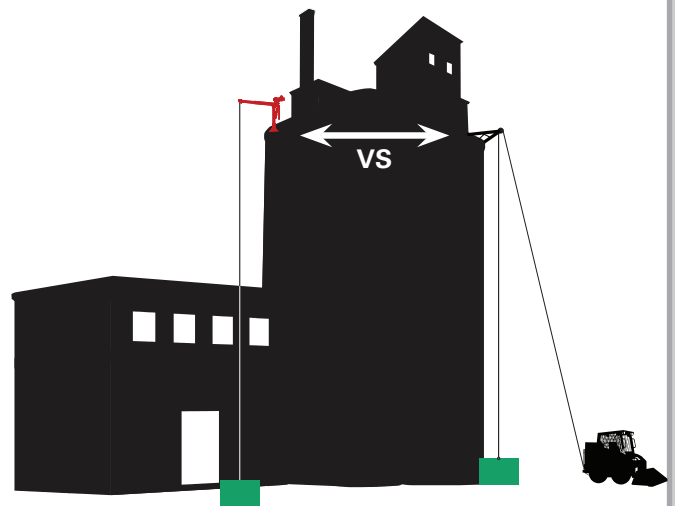


## • GRAIN ELEVATORS

*Where safety and convenience are an issue - turn to Thern*

### Grain Elevator Applications

Thern electric or hand operated davit cranes mounted on top of elevators provide a safer, easy and economical solution for lifting tools and equipment versus other makeshift methods.



# PORTABLE / STATIONARY DAVIT CRANES

## at a GLANCE

No one knows cranes like Thern. We build our stationary davit cranes and portable davit cranes to exacting specifications to ensure long-lasting performance and reliability.

Our standard cranes are available in multiple styles and sizes to raise and lower loads up to 3,000 lbs.



MODEL	Max Capacity	PORTABLE		MAXIMUM HOOK				ADJUSTABLE BOOM		MANUAL	
		Yes	No	Reach	Height (above floor)	Standard Lift (below floor)	Long Lift* (below floor)	Length	Angle	Spur	Worm
										●	●
<b>First Mate 500 Series</b> 5122	500 lbs 226 kg	●		42 in 1066 mm	60 in 1524 mm	65 ft 19.8 m	240 ft 73.1 m		●	●	▲
<b>Ensign 500 Series</b> 5PA5	500 lbs 226 kg	●		36 in 914 mm	101 in 2565 mm	75 ft 22.8 m	240 ft 73.1 m	●	●	●	●
<b>Ensign 1000 Series</b> 5PA10	1200 lbs 544 kg	●		48 in 1219 mm	120 in 3048 mm	71 ft 21.6 m	240 ft 73.1 m	●	●	●	●
<b>Commander 1000 Series</b> 5PT10	1000 lbs 453 kg	●		66 in 1676 mm	85 in 2159 mm	77 ft 23.4 m	240 ft 73.1 m	●	●	●	●
<b>Commander 2000 Series</b> 5PT20	2000 lbs 907 kg	●		82 in 2082 mm	97 in 2463 mm	75 ft 22.8 m	350 ft 106.6 m	●	●	●	●
<b>Captain 1500 Series</b> 571	1500 lbs 680 kg		●	87 in 2209 mm	118 in 2997 mm	56 ft 17.1 m	290 ft 88.3 m		⊙	●	●
<b>Captain 2200 Series</b> 572	2200 lbs 997 kg		●	106 in 2692 mm	140 in 3556 mm	52 ft 15.8 m	350 ft 106.6 m		⊙	●	●
<b>Admiral 3000 Series</b> 5PT30	3000 lbs 1360 kg	●		112 in 2844 mm	153 in 3886 mm	55 ft 16.8 m	350 ft 106.6 m	●	⊙	●	●

MADE IN USA

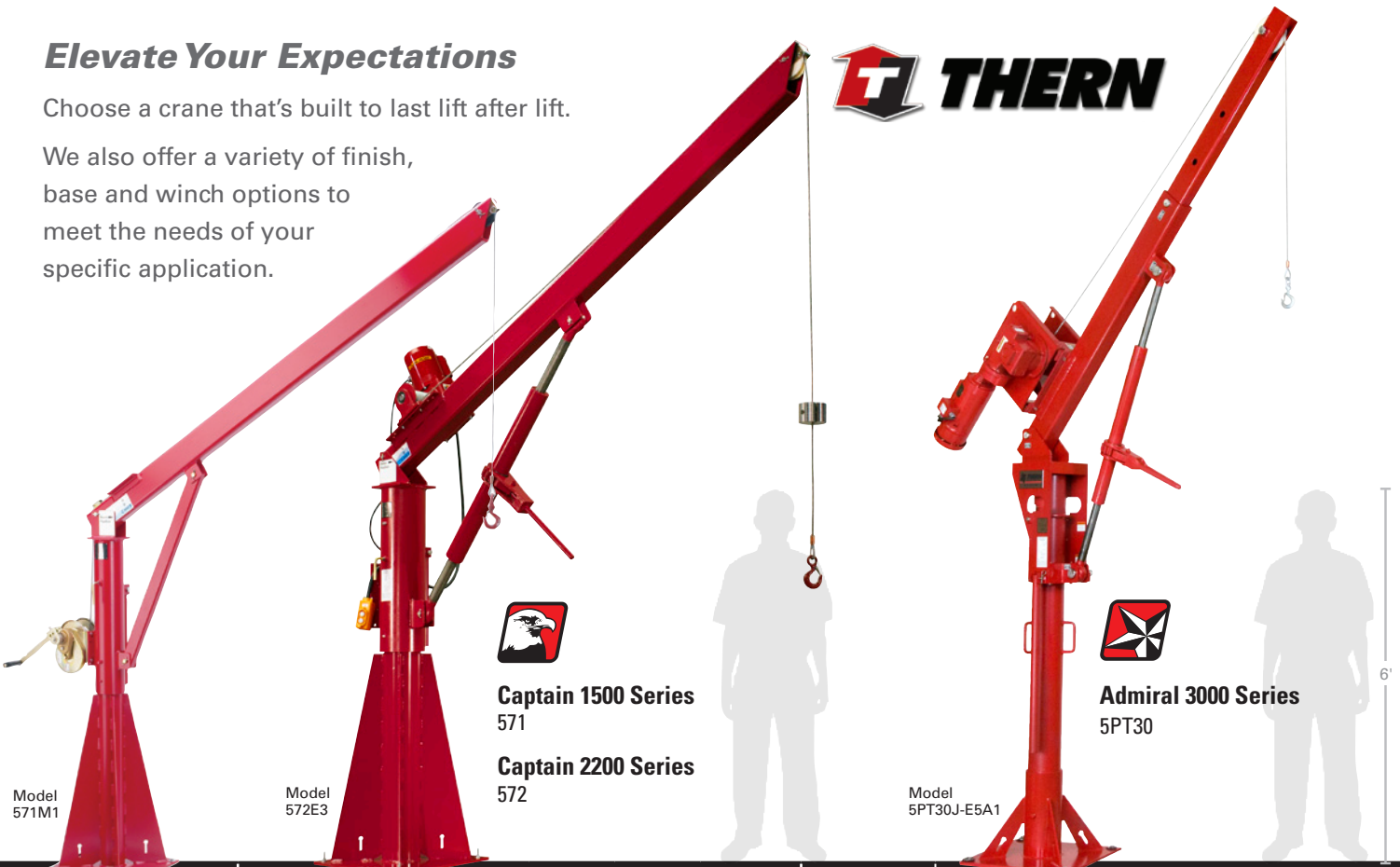
\* Long lift ratings require electric winches. Max capacity may vary depending on wire rope diameters. Contact factory.

Form FCS4-1114

# Elevate Your Expectations

Choose a crane that's built to last lift after lift.

We also offer a variety of finish, base and winch options to meet the needs of your specific application.



**Captain 1500 Series**  
571

**Captain 2200 Series**  
572



**Admiral 3000 Series**  
5PT30

Model 571M1

Model 572E3

Model 5PT30J-E5A1

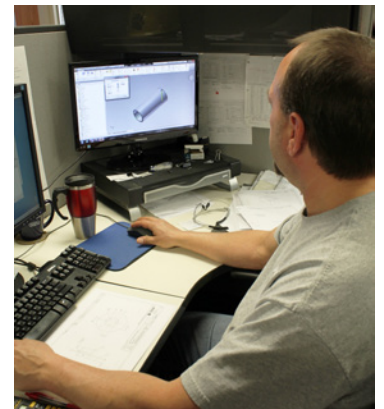
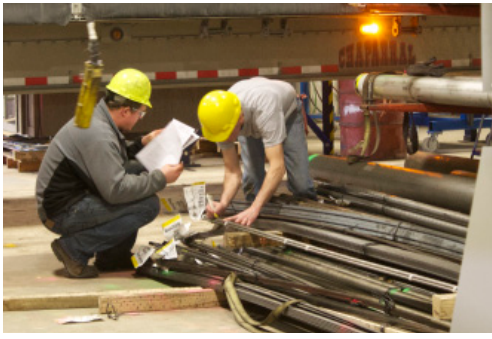
WINCHES			FINISHES					Quick Disconnect Anchor	WHY THIS CRANE?
WAL	POWER		Powder Coat (Red)	Enamel Paint (Red)	Galv	304 SS	316 SS		
SS Spur	AC	DC							
●	▲	▲	●		●	●	●	●	Lightweight, economical, easy to carry and easy to use, the First Mate 500 is perfect for a wide variety of simple jobs where adjustable height and reach are not required.
●	●	●	●		●	●	●	●	Longer mast and boom provide increased hook height, making the Ensign 500 an excellent choice for clearing tall objects, such as hand rails, or lifting tall loads.
●	●	●	●		●	●	●	●	Shorter horizontal reach than the Commander Series, the Ensign 1000 features increased vertical hook height for clearing tall objects, such as hand rails, or lifting tall loads.
●	●	●	●		●	●	●	●	Our work horse crane for mid-range loads, easy to carry when disassembled, and includes an adjustable boom to reach a wide range of height and reach combinations.
●	●	●	●		●	●	●	●	Our largest fully portable crane, capable of handling larger loads with an adjustable boom for a full range of height and reach options, with only a 6" concrete floor required.
▲	●	●		●				●	Designed for permanent installation and smooth rotation, the Captain 1500 provides extended height and reach, and still only requires a 6" concrete floor for installation.
	●	●		●				●	Designed for permanent installation and smooth rotation, the Captain 2200 handles larger loads with extended reach and height. Requires a foundation pad for installation.
	●	●		●	●			●	The best of all worlds, handling large loads up to 1.5 tons, with an adjustable boom for high lifts and almost 10 feet of reach, and can still be disassembled for relocation.

Form FCS4-1114

⦿ Boom angle adjustment with optional ratchet-style screw-jack.

▲ Non-standard configuration.

MADE IN USA



MADE IN USA 

Form FCS4-1114

# **FIRST MATE** SERIES

## ■ **LIFTS LOADS UP TO 500 LBS**

Like a favorite tool in your toolbox, Thern's First Mate series portable davit cranes can be used for a large variety of smaller lifting jobs. Their simple set-up makes them easy to use and easy to transport, making them ideal for multiple station service. With multiple bases in place, the Thern First Mate goes anywhere you need it.



- *Light and portable*
- *Simple and affordable*
- *Quick-Disconnect Anchor*
- *Accepts manual winch*
- *Rotates 360°*
- *Durable - Rugged - Reliable*
- *Available in 5 finishes*  
Powder Coat Paint, Galvanized,  
304 & 316 Stainless Steel, 3-Part Epoxy Paint
- *2-Year Standard Warranty*

Model  
5122M1

Form FCS4-1114

MADE IN USA 

# **FIRST MATE** SERIES

## Features & Benefits



Swaged ball fitting allows for easy installation of wire rope assemblies. Four drum wraps required for proper operation.

boom  
27 lbs  
12.3 kg

hand winch  
17 lbs  
7.7 kg

### QUICK DISCONNECT ANCHOR

On end of wire rope. For quickly attaching or removing wire rope equipped with a swaged ball fitting.

### MANUAL or POWER OPERATION

An economical solution to your lifting needs, Thern davit cranes can be configured with a spur gear hand winch equipped with automatic disc brake for load control on short, infrequent lifts; or a power winch for longer lifts and heavier loads. Winch is located behind the crane at the right height for ergonomic operation.

### NYLATRON FLANGE BEARING

Supports the mast at the top of the base and assists with the crane's smooth rotation.

### ROLLER ASSEMBLY

Crane mast and boom rotate on a bolt and roller assembly located in the bottom of the base.

### CRANE STANDARDS

- CE cranes available
- PE stamp available upon request
- ISO 9001:2008 Registered



mast  
25 lbs  
11.3 kg

flange bearing

pedestal base  
18 lbs  
8.2 kg

Model  
5122M1



Model  
5122M3SS

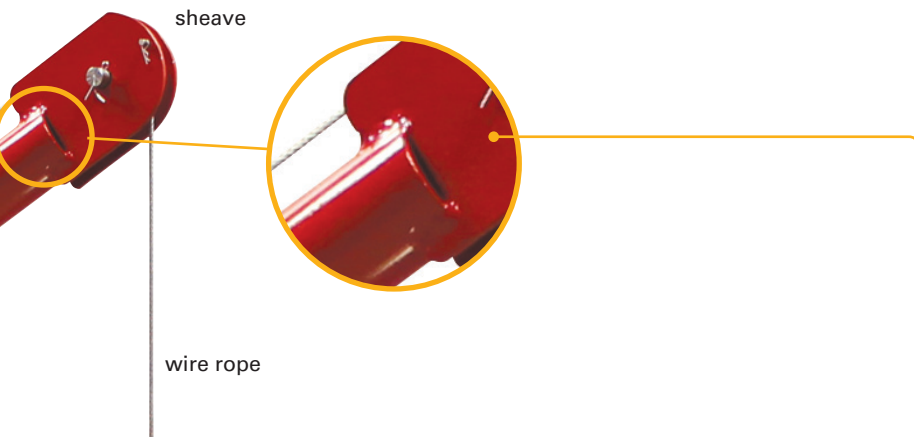


**2-YEAR WARRANTY**  
Industry-leading two-year limited warranty.



MADE IN USA 

Form FCS4-1114



sheave

wire rope



### WELDED STEEL CONSTRUCTION

Crane boom, mast and base fabricated from heavy duty structural steel that limits deflection and meets ASTM standards. Features a built-in 3:1 design factor that stands up to abuse.



Clevis style pins for quick release, boom adjustments, and fold down for storage.



powder coat



stainless steel



galvanized

### CORROSION RESISTANT FINISH

Electrostatic powder coating on crane, zinc plating on winches, and stainless steel fasteners combine to resist corrosion in harsh environment. Other options available including galvanized and stainless steel.



### ADJUSTABLE BOOM ANGLE

With 2 different positions for operation, and folds down for storage or transport.

### CRANE ROTATES

360° in a sleeve bearing on the base for ease of positioning load.



1



2



3



4

headache ball



load hook



### STAINLESS STEEL PINS

Clevis style pins for quick release, boom adjustments, and fold down for storage.

### WIRE ROPE ASSEMBLY

Available in a variety of lengths in galvanized and stainless steel. Sold separately.

### HEADACHE BALL

Clamped to wire rope to keep cable taut when no load is attached. Sold separately.

### EASY ASSEMBLY & DISASSEMBLY (FOLD-DOWN)

Quick-release pins allow for easy assembly and quick disassembly for transport or storage. No tools required.



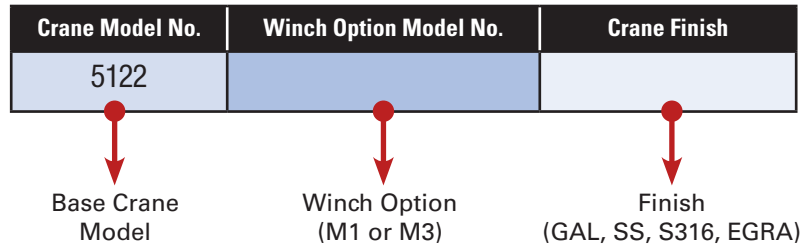
### VARIETY OF BASES

Pedestal, flush and wall mount bases allow for removal of the mast. Wheel base also available. Bases sold separately.

# **FIRST MATE** SERIES

## **CONFIGURING** YOUR CRANE IS AS EASY as **1-2-3**

Begin with your base crane model, then select a winch option and crane finish.



### **1 CRANE BASE MODEL**

Base model crane for First Mate 500 is 5122. See performance characteristics.

Series	Base Model	Capacity
First Mate 500	5122	500 lbs <b>227 kg</b>

### **2 WINCH OPTIONS FOR FIRST MATE**

**HAND WINCHES** Mounted to the mast, includes disc brake for load control, and steel gear covers to protect gears and help prevent injuries.



Winch	Model No.	Description	Finish	Approx. Ship Weight	Advantage
M1	M4022PB-K	• 1000-lb spur gear hand winch with brake • auto disc brake for load control	Zinc Plated	17 lbs <b>7.7 kg</b>	<ul style="list-style-type: none"> <li>• corrosion-resistant trivalent zinc plated</li> <li>• disc brake for load control</li> <li>• steel gear covers</li> </ul>
M3	M4042PBSS-K	• 1000-lb stainless steel spur gear hand winch with auto disc brake for load control	Stainless Steel	24 lbs <b>11 kg</b>	<ul style="list-style-type: none"> <li>• larger capacity drum holds more rope for longer lifts • electro-polished for added protection</li> <li>• D:d capacity</li> </ul>

### **3 FINISH OPTIONS FOR FIRST MATE**

All cranes come standard with corrosion-resistant electrostatic powder coat red finish and are available in four optional corrosion-resistant finishes: galvanized, 304 stainless steel, 316 stainless steel, and epoxy. Custom colors are available upon request.

Finish	Code	Description
Powder Coat (Red)	(standard)	• the standard red electrostatic powder coating applied to all cranes
Galvanized	<b>GAL</b>	• the economical choice that provides extra corrosion protection
304 Stainless Steel	<b>SS</b>	• electro-polished for added protection
316 Stainless Steel	<b>S316</b>	• a higher level of corrosion protection
Epoxy (Gray)	<b>EGRA</b>	• 3-part epoxy that dries very hard and is impact, fire, water, and slip-resistant



# **FIRST MATE** SERIES

## Select your base(s)

Select the appropriate base(s) for your application from the Base Options chart. Matching your crane with multiple bases provides optimal worksite flexibility and an economical solution for servicing multiple lift stations.

## BASE OPTIONS FOR FIRST MATE

Independent bases for Thern portable davit cranes are sold separately and are available in a variety of styles and finishes to suit the needs of your application.

Finish	Pedestal / Flush	Wall	Wheel
Powder Coat (Red)	522	522W	—
Galvanized	522GAL	522WGAL	—
304 Stainless Steel	522SS	522SSW	—
316 Stainless Steel	522S316	522S316W	—
Epoxy (Gray)	522EGRA	522WEGRA	—
Enamel Paint	—	—	514
Approx. Ship Weight	18 lbs 8.2 kg	21 lbs 9.5 kg	80 lbs 36 kg



## WIRE ROPE ASSEMBLIES FOR FIRST MATE

Thern winches and cranes are sold without wire rope. However, we carry top quality wire rope assemblies optimally designed for use with our winches and cranes.



**Galvanized Aircraft Cable:**  
Enamel swivel hook with swaged ball fitting.

**304 Stainless Steel Wire Rope:**  
SS swivel hook and swaged ball fitting.

**316 Stainless Steel Wire Rope:**  
SS swivel hook and swaged ball fitting.

Wire Rope Length	Galvanized Air Craft Cable				304 Stainless Steel Wire Rope				316 Stainless Steel Wire Rope			
	3/16" Diameter		1/8" Diameter		3/16" Diameter		1/8" Diameter		3/16" Diameter		1/8" Diameter	
	Model	Ship Wt.	Model	Ship Wt.	Model	Ship Wt.	Model	Ship Wt.	Model	Ship Wt.	Model	Ship Wt.
20 ft 6 m	WA19-20NS	3 lbs 1.4 kg	—	—	WS19-20NS	3 lbs 1.4 kg	—	—	WSS19-20NS	3 lbs 1.4 kg	—	—
28 ft 8.5 m	WA19-28NS	4 lbs 1.8 kg	—	—	WS19-28NS	3 lbs 1.4 kg	—	—	WSS19-28NS	3 lbs 1.4 kg	—	—
36 ft 10.9 m	WA19-36NS	4 lbs 1.8 kg	—	—	WS19-36NS	3 lbs 1.4 kg	—	—	WSS19-36NS	3 lbs 1.4 kg	—	—
45 ft 13.7 m	WA19-45NS	5 lbs 2.3 kg	—	—	WS19-45NS	4 lbs 1.8 kg	—	—	WSS19-45NS	4 lbs 1.8 kg	—	—
60 ft 18.2 m	WA19-60NS	10 lbs 4.5 kg	WA12-60NS	4 lbs 1.8 kg	WS19-60NS	9 lbs 4.1 kg	WS12-60NS	4 lbs 1.8 kg	WSS19-60NS	9 lbs 4.1 kg	WSS25-60NS	4 lbs 1.8 kg
75 ft 22.8 m	WA19-75NS	12 lbs 5.4 kg	WA12-75NS	4 lbs 1.8 kg	WS19-75NS	11 lbs 5.0 kg	WS12-75NS	4 lbs 1.8 kg	WSS19-75NS	11 lbs 5.0 kg	WSS25-75NS	4 lbs 1.8 kg
90 ft 27.4 m	WA19-90NS	7 lbs 3.2 kg	WA12-90NS	5 lbs 2.3 kg	WS19-90NS	7 lbs 3.2 kg	WS12-90NS	5 lbs 2.3 kg	WSS19-90NS	7 lbs 3.2 kg	WSS25-90NS	5 lbs 2.3 kg
120 ft 36.5 m	—	—	WA12-120NS	6 lbs 2.7 kg	—	—	WS12-120NS	6 lbs 2.7 kg	—	—	WSS25-120NS	6 lbs 2.7 kg
150 ft 45.7 m	—	—	WA12-150NS	7 lbs 3.2 kg	—	—	WS12-150NS	7 lbs 3.2 kg	—	—	WSS25-150NS	7 lbs 3.2 kg

NOTE: 1/8" 316 wire rope is available with a derate. Please contact the factory. See page 23 for performance characteristics.

# **FIRST MATE** SERIES

## ■ **ACCESSORIES FOR FIRST MATE**

Thern offers a variety of accessories designed to protect your equipment and make operating your portable davit crane as efficient and trouble-free as possible.

### BASE INSTALLATION HARDWARE

A torque controlled expansion anchor especially suited to seismic and cracked concrete applications.

#### • **CARBON STEEL ANCHOR KIT**

**AN50A-5** - Carbon steel anchor body, nut and washer with type 316 stainless steel expansion sleeve. Size: 1/2 inch x 5-1/2 inch. Approx. ship weight: 1.40 lb (0.64 kg).

#### • **304 STAINLESS STEEL ANCHOR KIT**

**AN50A-5S** - Type 304 stainless steel anchor body, nut and washer with type 316 stainless steel expansion sleeve. Size: 1/2 inch x 5-1/2 inch. Approx. ship weight: 1.40 lb (0.64 kg).

#### • **316 STAINLESS STEEL ANCHOR KIT**

**AN50A-5S316** - Type 316 stainless steel anchor body, nut, washer and expansion sleeve. Size: 1/2 inch x 5-1/2 inch. Approx. ship weight: 1.40 lb (0.64 kg).



### BASE COVER

Cover fits in the mast hole in the base to help keep water from collecting inside the base when the crane is removed.

• **TK2P** - Plastic. Approx. ship weight: 0.05 lb (0.02 kg)

• **TK2** - Steel, enamel finish. Approx. ship weight: 0.05 lb (0.02 kg)



### HEADACHE BALL

Keeps cable taut when no load is attached. Attach to cable.

• **HB10-12-25** - Painted Steel, 1/8 to 1/4 inch wire rope. Approx. ship weight: 9.96 lb (4.52 kg).

• **HB10S-12-25** - Polished 304 Stainless Steel, 1/8 to 1/4 inch wire rope. Approx. ship weight: 10.19 lb (4.62 kg).



### CABLE SPOOL

• **RW50** - Keeps wire rope neat and safe when not in use. 316 stainless steel reel winds up wire rope when detached from crane. Suitable for wire ropes up to 5/16 diameter, capacity will vary. Not designed to hold a load. Rated capacity: 50 lbs. Approx. ship weight: 14.0 lb (6.35 kg).



### WIRE ROPE CAPACITIES

3/16 in wire rope	140 ft
1/4 in wire rope	75 ft
5/16 in wire rope	50 ft

### WIRE ROPE KEEPER

• **RK19-25S** - 304 Stainless steel metal bracket attaches to base or other structure to hold free end of the wire rope when detached from crane. Not designed to hold a load. Approx. ship weight: 1.00 lb (0.45 kg).



# **FIRST MATE** SERIES

## ■ **ADDITIONAL OPTIONS FOR FIRST MATE SERIES**

Thern offers a variety of additional options you can choose to enhance your davit crane.

- **FACTORY LOAD TEST**

Upon request, Thern can test your crane prior to shipping, up to 125% of rated load.

- **EXTENDED 5-YEAR WARRANTY**

Extend our standard 2-year warranty to 5 years .

- **PE STAMP - PROFESSIONAL ENGINEER STAMP**

Available upon request at time of order.

- **CE MARK**

Available upon request at time of order, CE mark for products sold into the European union.

- **ATEX CLASSIFICATION**

Specially rated for use in explosive settings. Available upon request at time of order.

- **WINCH COVER**

Canvas cover that fits all hand winches. Protects your winch from the elements when not in use.



## ■ **ADDITIONAL OPTIONS FOR POWER**

- **POWER WINCH OPERATION**

AC electric in any voltage. DC electric, hydraulic and pneumatic power winches available.

- **CUSTOM ELECTRIC CONTROLS**

Thern can build the high quality controls you need to operate your equipment.

- **DRILL-DRIVEABLE WINCH**

A worm gear hand winch is also available for operation with a 400 rpm max drill motor option.

- **LIMIT SWITCH**

Add an emergency safety shut-off to ensure safe operation.

## ■ **CUSTOMIZATION AVAILABLE FOR FIRST MATE SERIES**

Customization is available for almost all Thern products and should always be performed by our engineers to assure the changes meet our stringent quality standards. Below are some of our more common customization requests. Only factory modifications are covered under warranty.

- **LONGER LIFT DISTANCES**

Customized winch and crane configurations to accommodate longer lifts.

- **CUSTOM COLORS & FINISHES**

Custom colors and finishes are available to match your unique application

- **EXTENDED BOOM AND MASTS**

Thern can extend mast heights and boom lengths to fit your needs

- **RELOCATE THE WINCH**

The winch can be relocated to fit confined spaces or height restrictions

- **SPECIAL BASES**

Custom bases or mounting requirements can be manufactured to meet your unique situation

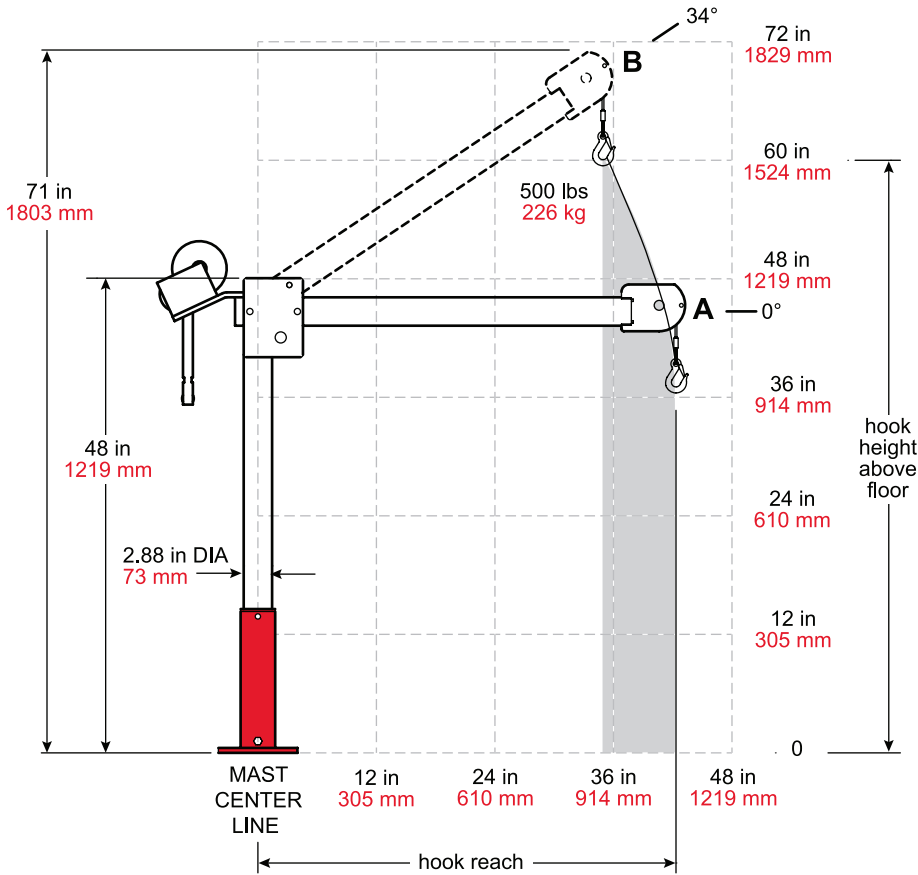


Special davit crane built to lift UV panels.

# FIRST MATE<sup>500</sup> SERIES

## CRANE DIMENSIONS WITH PEDESTAL BASE

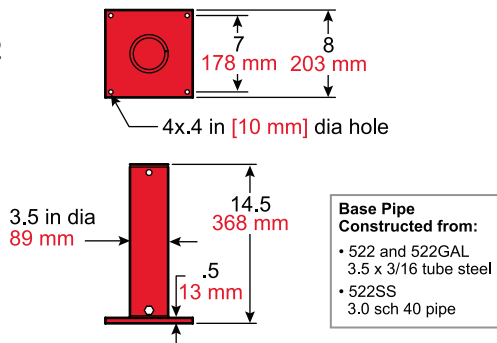
First Mate 500 Series Model 5122



## BASE DIMENSIONS OF PEDESTAL

### First Mate 500 Pedestal Base 522

- 522
- 522GAL
- 522SS
- 522S316
- 522EGRA



### First Mate 500 Upright Reach & Height Above Floor

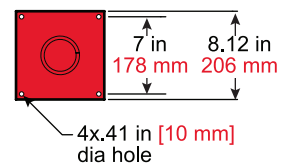
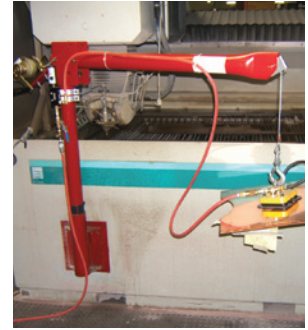
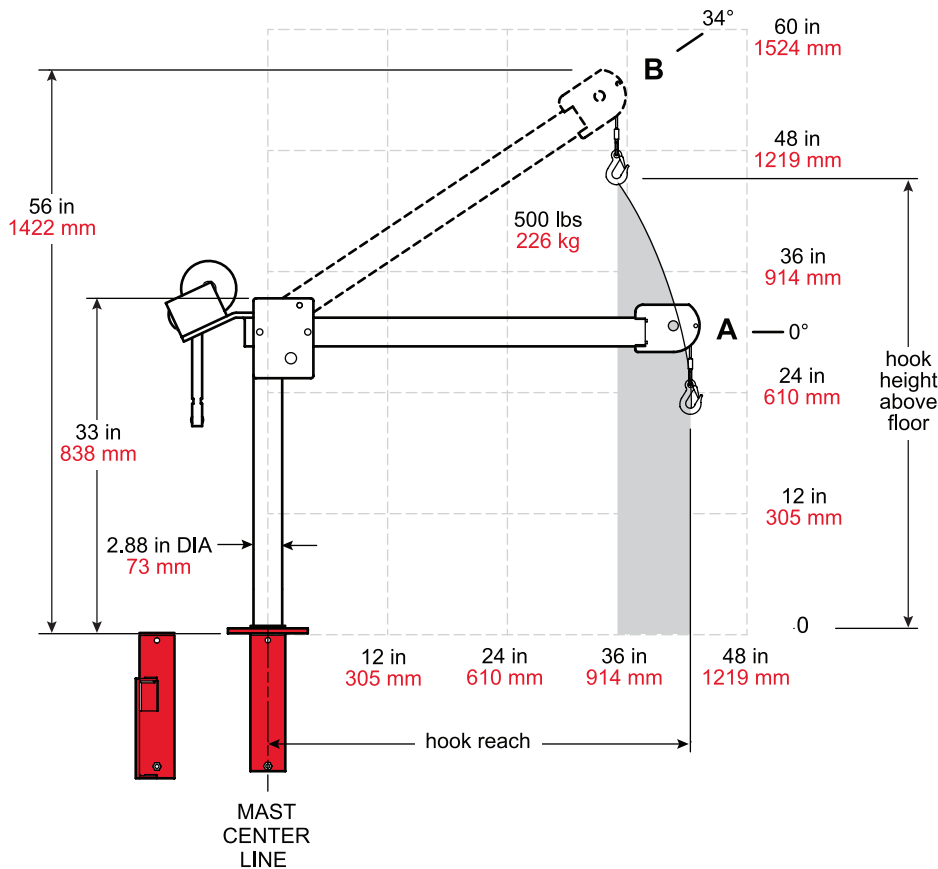
Boom Position	Hook Reach		Hook Height	
	(in)	(mm)	(in)	(mm)
A	42	1066	37	939
B	35	889	60	1524

Dimensions are for reference only and subject to change without notice.

# FIRST MATE<sup>500</sup> SERIES

## CRANE DIMENSIONS WITH PEDESTAL BASE

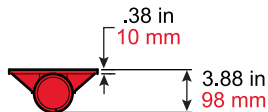
First Mate 500 Series Model 5122



## BASE DIMENSIONS OF FLUSH OR WALL-MOUNT

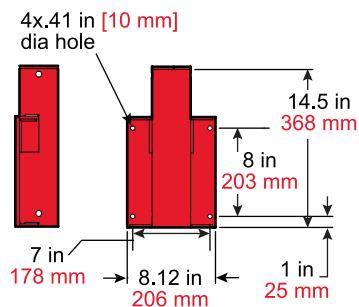
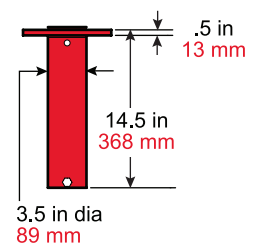
### First Mate 500 Wall-Mount Base 522W

- 522W
- 522WGAL
- 522WSS
- 522WS316
- 522WEGRA



### First Mate 500 Flush Base 522

- 522
- 522GAL
- 522SS
- 522S316
- 522EGRA



**Base Pipe Constructed from:**

- 522 and 522GAL  
3.5 x 3/16 tube steel
- 522SS  
3.0 sch 40 pipe

### First Mate 500 Flush or Wall-Mount Reach & Height Above Floor

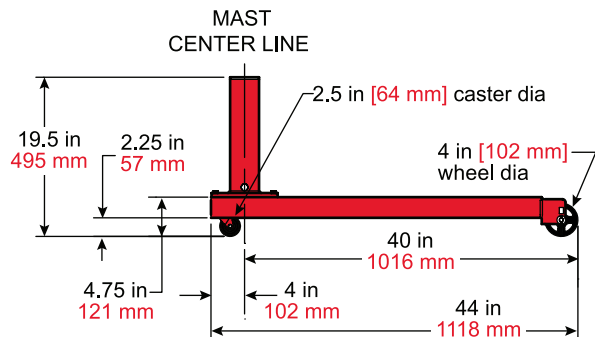
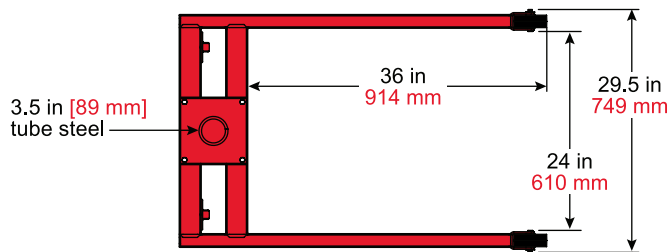
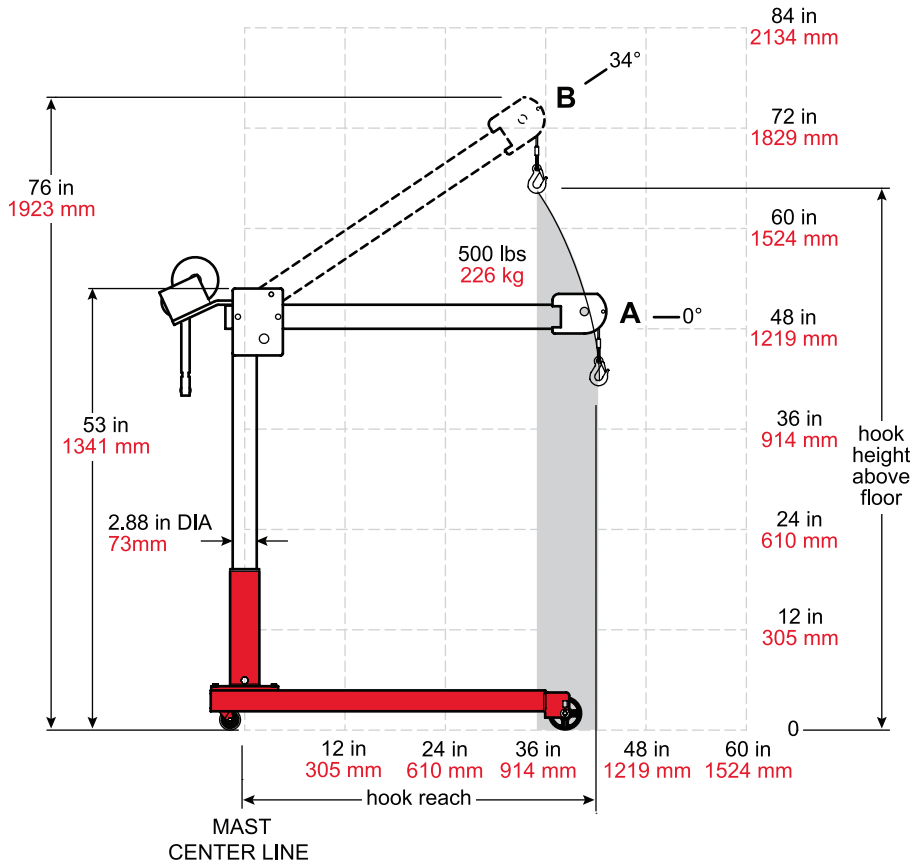
Boom Position	Hook Reach		Hook Height	
	(in)	(mm)	(in)	(mm)
A	42	1066	22	558
B	35	889	45	1143

Dimensions are for reference only and subject to change without notice.

# FIRST MATE<sup>500</sup> SERIES

## CRANE DIMENSIONS WITH WHEEL BASE

First Mate 500 Series Model 5122



### First Mate 500 Wheel Base Reach & Height Above Floor

Boom Position	Hook Reach		Hook Height	
	(in)	(mm)	(in)	(mm)
A	42	1066	42	1066
B	35	889	65	1651

Dimensions are for reference only and subject to change without notice.

**IMPORTANT:** Crane DOES NOT rotate in base when assembled in 514 wheel base.

# **FIRST MATE**<sup>500</sup> **SERIES**

## ■ **PERFORMANCE CHARACTERISTICS**

### First Mate 500 Series Model 5122

#### AT A GLANCE...

- Lift Below Floor Level up to 65 feet
- 500 lb Load Rating with M1 and M3 winches



Lift Below Floor Level*				Wire Rope Diameter		Wire Rope Length		Load Rating First Mate 500 Series with M1				Load Rating First Mate 500 Series with M3			
Max Pos A		Max Pos B		(in)	(mm)	(ft)	(m)	Position A		Position B		Position A		Position B	
(ft)	(m)	(ft)	(m)					(lb)	(kg)	(lb)	(kg)	(lb)	(kg)	(lb)	(kg)
9	3	10	2.7	3/16	4.9	20	6.1	500	226	500	226	500	226	500	226
17	5.5	18	5.2	3/16	4.9	28	8.6	500	226	500	226	500	226	500	226
25	7.9	26	7.6	3/16	4.9	36	11	500	226	500	226	500	226	500	226
34	10.7	35	10.4	3/16	4.9	45	13.8	500	226	500	226	500	226	500	226
49	15.2	50	14.9	3/16	4.9	60	18.3	—	—	—	—	500	226	500	226
64	19.8	65	19.5	3/16	4.9	75	22.9	—	—	—	—	500	226	500	226

\* Lift below floor level varies depending on boom position and base configuration. For longer lifts, please contact factory.

Lift Below Floor Level*				Wire Rope Diameter		Wire Rope Length		Load Rating First Mate 500 Series with M1				Load Rating First Mate 500 Series with M3			
Max Pos A		Max Pos B		(in)	(mm)	(ft)	(m)	Position A		Position B		Position A		Position B	
(ft)	(m)	(ft)	(m)					(lb)	(kg)	(lb)	(kg)	(lb)	(kg)	(lb)	(kg)
49	15.2	50	14.9	1/8	3.4	60	18.3	500	226	500	226	—	—	—	—
64	19.8	65	19.5	1/8	3.4	75	22.9	500	226	500	226	**	—	**	—
79	24.3	80	24	1/8	3.4	90	27.5	500	226	500	226	**	—	**	—
109	33.5	110	33.2	1/8	3.4	120	36.6	—	—	—	—	**	—	**	—
139	42.6	140	42.3	1/8	3.4	150	45.8	—	—	—	—	**	—	**	—

\* Lift below floor level varies depending on boom position and base configuration. For longer lifts, please contact factory.

\*\* 1/8" rope assembly can be supplied. Contact factory.

See page 17 for wire rope assemblies.

▶ **IMPORTANT:** It is the owner's or operator's responsibility to determine the suitability of the equipment to its intended use. Study all applicable codes, manuals, and regulations. Be sure to read the Owner's Manual supplied with the equipment before operating it.

## **SPUR GEAR & WORM GEAR HAND WINCHES**

*BUILT TO LEND A HAND ... WHERE THEY'RE NEEDED*

Thern's line of hand winches is precisely engineered to add muscle, eliminate frequent maintenance and bring reliability to new levels.

### ■ **Stainless Steel**

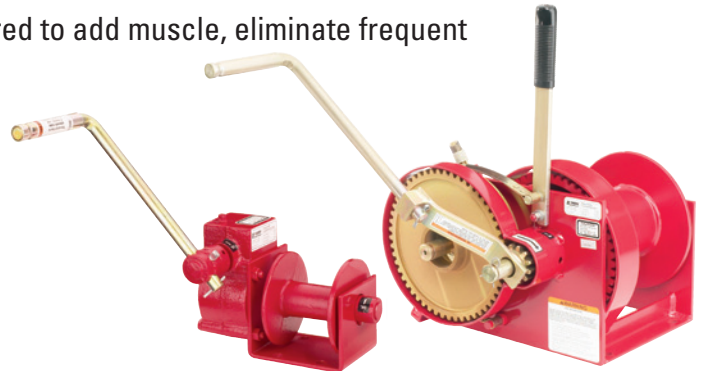
*For dependable performance in severely corrosive conditions such as wastewater environments.*

### ■ **Zinc & Iridescent Dichromate Plating**

*For effective, economical corrosion protection in less punishing environments.*

### ■ **Machine-Cut Design**

*Single or double reduction spur gear designs with capacities from 500 to 10,000 lbs.*



### ■ **Optional Brakes for Lifting**

*Available on most of our hand winch models.*

### ■ **Quick Disconnect Anchors**

*Available on most models allow attaching or removing wire rope equipped with a swaged ball fitting.*

## **INDUSTRIAL HEAVY DUTY POWER WINCHES**

*WHEN YOU NEED A LOT OF PULL ... OR A REALLY BIG LIFT*

When you're dealing with the big loads, check out Thern's Heavy Duty Power Winches. Durable gears, heavy duty frames, high-capacity drums and load ratings to 76,000 lbs.

### ■ **Options for Strength, Dependability & Ease of Use**

- *Motor/gear ratio changes to meet line speed/load rating requirements*
- *Cable pressure bars to maintain uniform cable winding*
- *Rotary limit switches for secondary shut-off*
- *Voltage or phase changes, multi-speed motors or special motor ratings including IEEE45, tropical duty, severe duty, or explosion proof*
- *Electric motor controls with pendant*
- *UL rated custom motor controls*
- *Wall or ceiling installation*
- *Air or hydraulic motors*
- *Manual overrides*



MADE IN USA 

Form FCS4-1114



## BASE COVER

Plastic cover fits in the mast hole in the base to help keep water from collecting inside the base when the crane is removed.



Model No.	Color	Material
TK2P	Black	Plastic
TK3P	Black	Plastic
TK4P	Black	Plastic

## CABLE SPOOL

Winds up wire rope when detached from crane. Keeps wire rope neat and safe when not in use. For all crane wire ropes.



Model No.	Finish	Weight
RW50	316 Stainless Steel	12 lbs

## HEADACHE BALL

Keeps cable taut when no load is attached.



Model No.	Common Wire Rope Size	Finish
HB10-12-25	1/4 in	???
HB10-25-38	3/8 in	???
HB10S-12-25	1/4 in	Stainless Steel
HB10S-25-38	3/8 in	Stainless Steel

## WIRE ROPE KEEPER

Attaches to base or other structure to hold the free end of wire rope when detached from crane.



Model No.	Finish	???
B1766	Metal	???

**1 JOB DESCRIPTION:** \_\_\_\_\_

**2 LINE PULL**

Gross Weight of load **(A)** \_\_\_\_\_ Load moves on track? \_\_\_\_\_

**3 LIFT REQUIREMENTS**

Hook Height **(B)** \_\_\_\_\_  
 Below Floor Level **(C)** \_\_\_\_\_  
 Load Height **(D)** \_\_\_\_\_  
 Obstacle Height **(E)** \_\_\_\_\_  
 Max Lift Req. TOTAL \_\_\_\_\_

**4 REACH REQUIREMENTS**

Hook Reach **(F)** \_\_\_\_\_  
 Load Width **(G)** \_\_\_\_\_  
 Min Hook Reach \_\_\_\_\_  
 Max Hook Reach \_\_\_\_\_  
 Clearance Required \_\_\_\_\_  
 Rotation: \_\_\_\_\_

**5 WINCH REQUIREMENTS**

HAND.....FINISH \_\_\_Zinc (standard) \_\_\_Stainless Steel\*  
 POWER.....FINISH \_\_\_Red Painted (standard) \_\_\_Epoxy\*  
 \_\_\_115 volt AC \_\_\_12 Volt DC \_\_\_Hydraulic \_\_\_Pneumatic  
 \_\_\_Drill Driven \_\_\_Other: \_\_\_\_\_

(\*Additional)

**6 BASE REQUIREMENTS**

Pedestal Base  Socket/Flush Base  Wall Base  
 Wheel Base Mounting surface \_\_\_\_\_

**7 ENVIRONMENT**

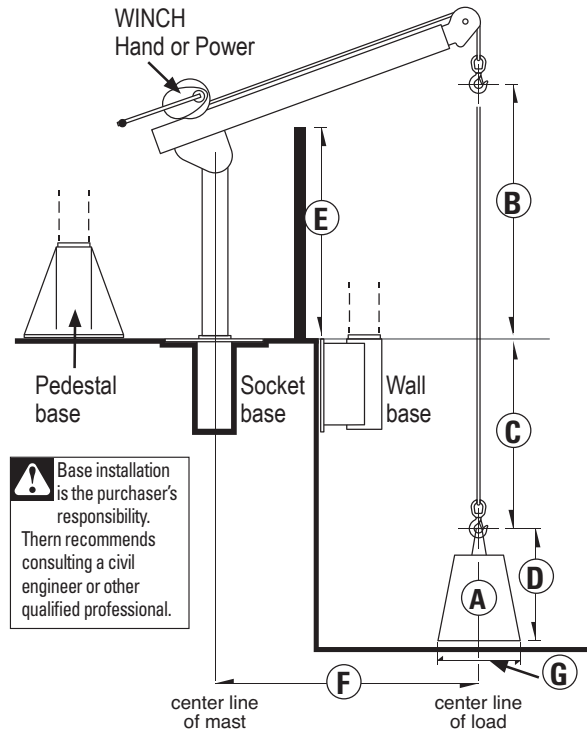
Indoor  Outdoor  Marine  
 Corrosive  Hazardous  Explosive  
 Temperature Range \_\_\_\_\_

**8 FREQUENCY OF OPERATION**

Hours per day: \_\_\_\_\_  
 Overloads or Shock Loads? \_\_\_\_\_

**9 CRANE FINISH (Additional\*)**

Red Powder Coat (standard)  Galvanized\*  
 304 Stainless SS\*  316 Stainless SS\*  Epoxy\*



**10 BASE FINISH (Additional\*)**

Red Powder Coat (standard)  Galvanized\*  
 304 Stainless SS\*  316 Stainless SS\*  Epoxy\*

**11 ACCESSORIES**

Base Covers  Wire Rope Keepers  
 Cable Spool Reel  Base Installation Hardware  
 Headache Ball  Drill Motor Drive  
 Winch Cover  Custom Electric Controls  
 Limit Switch  Extended 5 Year Warranty

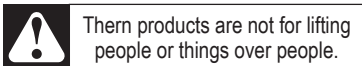
**12 WIRE ROPE SPECS:** \_\_\_\_\_

**13 FAX COMPLETED FORM TO: 507.454.5282**  
**or scan and email to sales@thern.com**

PLEASE PRINT CLEARLY

Name \_\_\_\_\_  
 Company \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone \_\_\_\_\_ Mobile \_\_\_\_\_  
 Fax \_\_\_\_\_ Email \_\_\_\_\_

QUANTITY NEEDED: \_\_\_\_\_ DATE NEEDED: \_\_\_\_\_  
 NOTES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



Thern, Inc. • 5712 Industrial Park Road P.O. Box 347 • Winona, MN 55987  
 TF 800.843.7648 • Ph 507.454.2996 • Fax 507.454.5282  
 email: sales@thern.com • www.thern.com



# TERN, INC. TERMS

*All orders are subject to Credit Department approval and are F.O.B., Winona, MN*

**Freight:** To minimize any shipping delays, Thern, Inc. reserves the right to use the carrier of its choice. For separate freight charge invoices, terms are net 15 days. Thern, Inc. reserves the right to apply a shipping and handling fee to all freight charges. We do not supply copies of original freight invoices. Thern, Inc. will attempt to comply with specific routing instructions, designated as the purchaser's responsibility, only when provided on each individual order. **Blanket instructions are not acceptable.** Shipments are F.O.B. Winona, MN unless otherwise specified.

**Small Package Service:** Shipments routed via United Parcel Service (UPS) or Federal Express will have a \$5.00 handling charge.

**Claims:** On all F.O.B. factory shipments, title to the merchandise passes to the purchaser at the time the merchandise leaves Thern, Inc.'s factory dock. When received, the purchaser should inspect the merchandise thoroughly for damage or shortages and should not sign for the merchandise until satisfied that all merchandise has arrived in good condition. Any claim for loss or damage by the purchaser must be settled with the carrier. Thern, Inc. accepts no responsibility for losses or delays in transit.

**Minimum Billing:** The minimum billing is \$25.00 per order, plus freight charges.

**Returns:** Thern, Inc.'s prior approval is required before any merchandise is returned. Approved returned merchandise must have an RGA# (Returned Goods Authorization Number) issued by Thern, Inc.

**No returns will be accepted by Thern, Inc. without an RGA#.** Approved returned merchandise will have a minimum applied charge of 25% of original cost, subject to condition upon receipt. Thern does not accept collect shipments. Non-standard or modified products are non-returnable.

Any approved merchandise returned to Thern, Inc. will be reviewed by Thern, Inc. and the purchaser shall be notified of the cost for reconditioning within 30 days. The purchaser shall have 30 days after notification by Thern, Inc. to either authorize reconditioning of the merchandise or otherwise direct the disposition of the merchandise. In the event the purchaser does not notify Thern, Inc. within the 30 day period, Thern, Inc. shall consider the merchandise abandoned and shall dispose of the merchandise.

**Conditions:** Possession of this catalog is not to be construed as an offer to sell by Thern, Inc. Products may be discontinued or changed (modified and/or improved) without notice. All orders are subject to prices established by Thern, Inc. at the time of shipment and prices are subject to change without notice. Please contact Thern, Inc. for current pricing.

**Certificates:** There is a minimum \$25.00 charge for a Quality Assurance Certification.

**Cancellation:** Orders may be cancelled only with written approval from Thern, Inc. and with terms that will indemnify Thern, Inc. against all loss.

**Documents:** Thern, Inc. will supply up to two (2) owner's manuals and two (2) assembly drawings at no charge. Additional manuals and drawings are \$5.00 each.

## PAYMENT OPTIONS

**Best Source:** Thern, Inc. sells through a nationwide network of industrial and specialty distributors. For the name of a Thern Distributor near you, call Thern Customer Service at 1-800-843-7648 or visit us online at [www.thern.com](http://www.thern.com).

**Account:** Orders can ship to open accounts upon Credit Department approval.

**MasterCard or VISA:** Thern, Inc. accepts MasterCard and VISA with no surcharge. All credit card orders are processed immediately upon authorization. Your account will not be charged until we have shipped your order.

**COD:** Thern, Inc. can ship your order cash on delivery (COD).

## 2 YEAR MOVE IT WITH CONFIDENCE WARRANTY

Thern, Inc. warrants its products against defects in material or workmanship for two years from the date of purchase by the original using buyer, or if this date can not be established, the date the product was sold by Thern, Inc. to the dealer. To make a claim under this warranty, contact the factory for an RGA number. The product must be returned, prepaid, directly to Thern, Inc., 5712 Industrial Park Road, Winona, MN 55987. The following information must accompany the product: the RGA number, the date of purchase, the description of the claimed defect, and a complete explanation of the circumstances involved. If the product is found to be defective, it will be repaired or replaced free of charge, and Thern, Inc. will reimburse the shipping cost within the contiguous USA.

This warranty does not cover any damage due to accident, misuse, abuse, or negligence. Any alteration, repair or modification of the product outside the Thern, Inc. factory shall void this warranty. This warranty does not cover any costs for removal of our product, downtime, or any other incidental or consequential costs or damages resulting from the claimed defects. This warranty does not cover brake discs, wire rope or other wear components, as their life is subject to use conditions which vary between applications.

FACTORY AUTHORIZED REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY TO THE CONSUMER. TERN, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**For Warranty Service, please call Thern Customer Service at 1-800-843-7648.**

# **TERN** LEAVE THE HEAVY LIFTING TO US

No one has more moving experience than Thern. Up or down. Here to there. Wherever you're going, whatever you're moving our winches and cranes have the muscle to get the job done smoothly and efficiently.

From hand winches as small as 500 lb capacity to power winches rated up to 50 tons and cranes with capacities from 500 to 3000 lbs., Thern products can be found around the world in almost every industry.



5712 Industrial Park Road  
Winona, MN 55987

1-800-843-7648  
[www.thern.com](http://www.thern.com)



ISO  
9001:2008  
REGISTERED

Dealer Information

Thern products are not for lifting people or things over people.

Form FCS4-1114