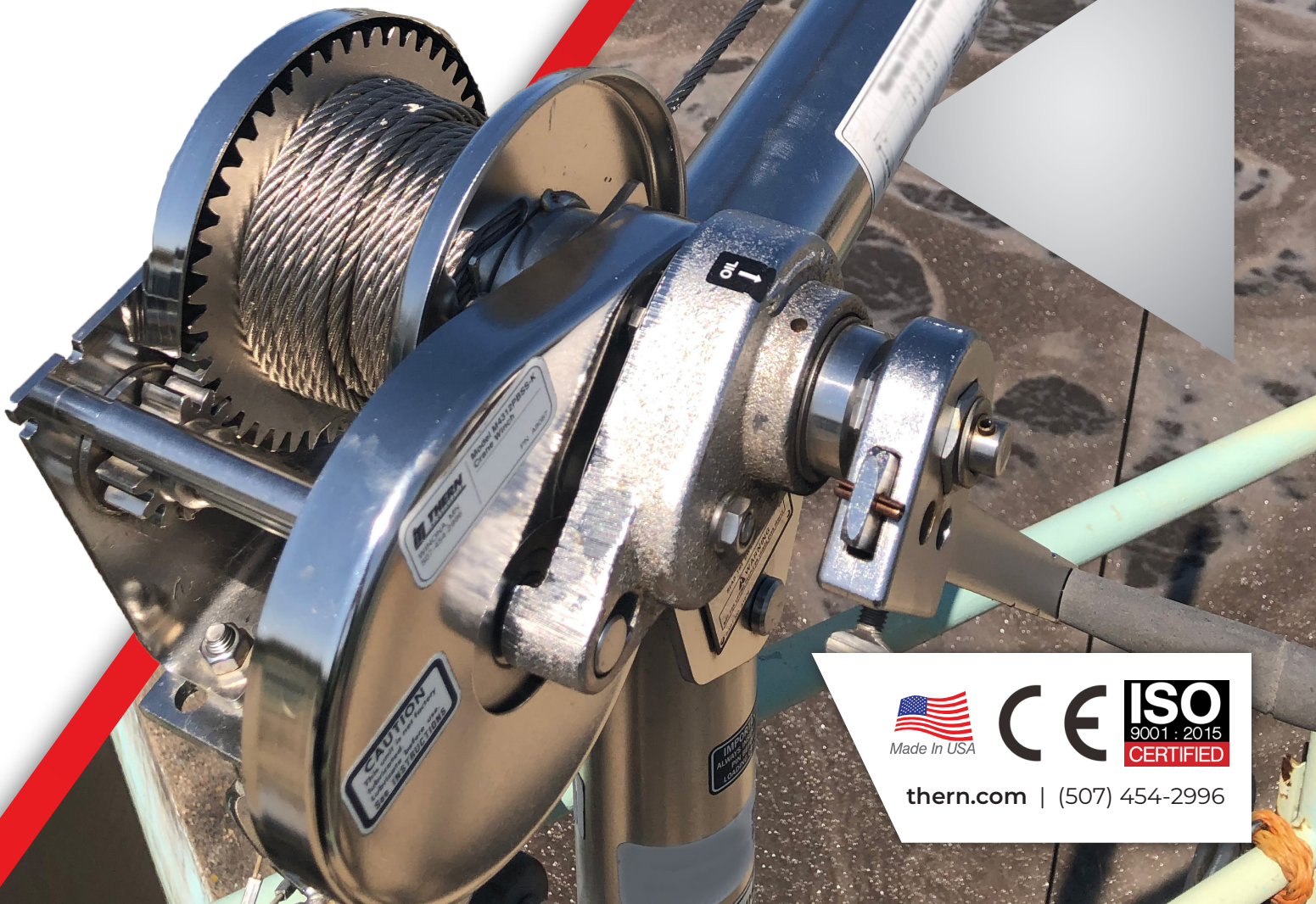




YOUR **TRUSTED SOURCE** FOR PREMIUM LIFTING,
PULLING & POSITIONING SOLUTIONS FOR

WATER/ WASTEWATER APPLICATIONS



thern.com | (507) 454-2996

Lifting Solutions Manufactured by **A NAME YOU TRUST**

Maintaining a Steadfast Reputation of Manufacturing Excellence & Customer Satisfaction Since 1948

Founded in Winona, Minnesota by Royal G. Thern and his wife Lucille in 1948, Thern Inc. began manufacturing a handful of winches and other tools, which formed the foundation for the cutting-edge lifting, positioning, and tensioning solutions we offer today.

Upholding a legacy built on innovation, we have leveraged 75 years of continuous research, development, and testing to establish a worldwide reputation for toughness, versatility, and reliability. Thern winches and cranes are engineered to perform and last, *guaranteed*.

As a family-owned manufacturer, we are dedicated to providing you with the best solutions by carefully listening to your needs and exceeding all your expectations. We take pride in offering top-quality products and services, timely responses, and accurate information for every project.

Some of the key industries that we serve include water and wastewater, construction, bulk material handling, mining, marine, defense/aerospace, energy, manufacturing, entertainment, and OEMs. Backed by a diverse portfolio of reputable clients, you can rely on Thern to move it all from big to small.

WHAT MAKES US DIFFERENT

IN-HOUSE ENGINEERING

Pooling decades of knowledge, our experienced in-house engineers consult, design, and make modifications as necessary to provide unsurpassed solutions for any application.

QUALITY STANDARDS

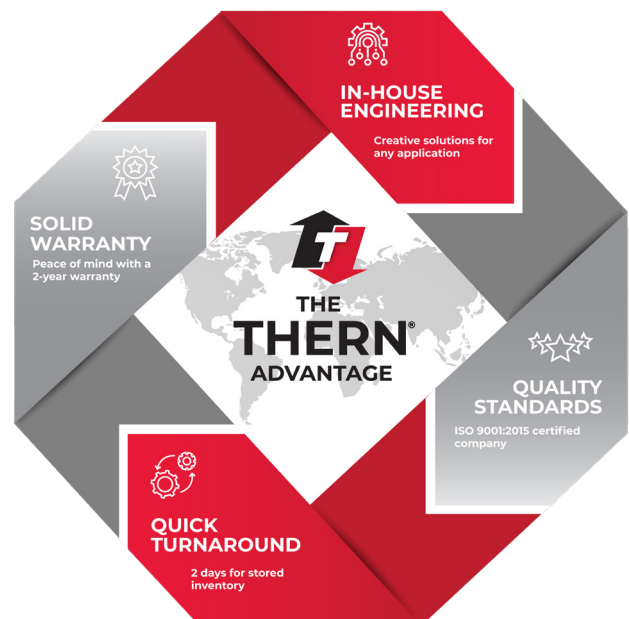
Being an ISO 9001:2015 certified company, we make sure that every product we manufacture in the U.S.A. meets our strict quality standards and is thoroughly tested for performance and durability.

QUICK TURNAROUND

We take pride in offering exceptional lead times that you can count on. We can ship most standard products within two days of order placement. Even our custom products are modular in design with lead times that rival competitors' delivery of standard products.

SOLID WARRANTY

Have peace of mind as we guarantee consistent service life for your Thern products by offering a two-year limited warranty to ensure complete customer satisfaction.



SEE WHAT'S **INSIDE**

PAGE 03 | THERN DAVIT CRANES

PAGE 04 | THERN WINCHES

PAGE 05 & 06 | THERN WATER/WASTEWATER: THE DIFFERENCE

PAGE 07 | REAL-LIFE SOLUTIONS: STOCKTON, CALIFORNIA WASTEWATER TREATMENT FACILITY

PAGE 08 | REAL-LIFE SOLUTIONS: PUT-IN-BAY, OHIO RESEARCH CENTER

PAGE 09 | REAL-LIFE SOLUTIONS: ELK RIVER, MINNESOTA SLUDGE CART POSITIONING SYSTEM

PAGE 10 | PROFESSIONALLY ENGINEERED CUSTOM SOLUTIONS

Best-Selling Davit Cranes by Thern: **LEAVE THE HEAVY LIFTING TO US**

Time and time again, clients like you turn to Thern for heavy-duty davit cranes to streamline applications and save on hefty installation costs. Choose from a wide selection of portable and stationary davit cranes that are engineered to perform efficiently in numerous lifting, lowering, and positioning applications.

We have you covered with superior equipment that will make your work easier, safer, and more productive. Features and specifications vary depending on the model, so rely on our talented team to help select the perfect davit crane for your project.



HIGH-LEVEL CRANE FEATURES:

- Capacities up to 5,500 pounds to handle sizable loads
- Fixed or adjustable boom lengths provide the correct reach and clearance for your most challenging lift
- Variety of bases allow for flexible mounting and installation
- Robust, heavy-gauge steel construction provides long service life
- Manual, electric (AC and DC), hydraulic, and pneumatic winch offerings provide multiple options to accommodate any power source or when none exists
- Extra tall hook heights for enhanced reach and clearance
- Tool-less setup and disassembly of portable and transportable cranes save valuable time and effort
- Portable units easily transported and stored for optimal accessibility
- Smooth 360° rotation, even under full load
- Quick-disconnect anchor allows one end of the wire rope to stay connected to the load and the other end to be easily disconnected from the winch
- Corrosion-resistant finishes withstand the harshest environments

AVAILABLE ACCESSORIES

- Base Extensions
- Rotational Locks/Rotational Bearings with Locking Pins
- Limit Switch Kit/Limit Switch-Ready Power Winches
- Headache Balls
- Drill Drive Kit (For Use with Compatible Worm Gear Hand Winches)
- Expansion (Concrete) Anchor Bolts
- Hitch-Mounted Davit Crane Base

Industry-Leading **Winches** by Thern: **POWER & PERFORMANCE YOU CAN COUNT ON**

Our experience in winch manufacturing encompasses 75 years of American innovation and ingenuity, which is reflected in the products we manufacture today. Choose from an extensive offering of manual, electric (AC and DC), hydraulic, and pneumatic winches built for numerous pulling, lifting, and positioning applications across a variety of industries.

Each of our premium winches undergoes rigorous testing to provide maximum durability, reliability, and safety to keep your facility running smoothly, day in and day out.



HIGH-LEVEL WINCH FEATURES:

- Capacities up to 120,000 pounds to handle a wide range of loads and applications
- Economical, compact, and lightweight options available
- Modular designs allow for customized solutions without excessive lead times
- Traverse long distances with rapid line speeds
- Durable steel or cast aluminum construction holds up to years of use
- Corrosion-resistant epoxy finishes available to withstand the harshest of environments
- Numerous configurations and options for maximum design flexibility
- Single or variable speed control, wireless control, and custom control systems available
- NEMA, MG1, ANSI, AGMA, ASME, CSA, and IEC1 compliant

Thern Water/Wastewater: **THE DIFFERENCE**

The treatment of water and wastewater is unheralded, tough, dirty, and often dangerous work—but incredibly important. So, it helps to have a partner like Thern. We understand the industry and the people behind the scenes that make it possible to put precious resources, like water, back into effective and useful circulation. That knowledge and our continuing deep passion for helping customers meet very specific needs are reflected in the widest array of stationary, portable, and transportable davit cranes in the industry. We also complement our cranes with a wide variety of hand, electric, hydraulic, pneumatic, and hybrid winches to lift, lower, position, hold, and control a variety of loads. You can count on years of service from our U.S.-made products and unsurpassed support from our engineers and customer care representatives. Here are other ways we are different from fabricators and competing suppliers ...

Support for Specifying Engineers

Getting it *right* from the start is important. When you're working with Thern, you'll have our undivided attention and collaboration when it comes to specifying the right products for the job. In fact, Thern offers industry-specific product and application training whether you are a specifying engineer, a facility manager, or an end user.

Time is money. Thern won't waste yours. We have specifications prepared and ready for standard product models. These specifications will be used with budgetary quotes for any solutions we may suggest, from cranes to winches and more. Providing reliable data and details up front makes your specifying work faster and easier.

Innovative Product Details Enhance Operation & Installation/Disassembly

QUICK-MOUNT WINCH BRACKET

The utility of a portable crane is a given. It's even better when it's easy for the operator to attach or change out a winch efficiently. That's why Thern engineered the quick-mount winch bracket. It allows you to easily remove the winch for use on other cranes, change out cables, or equip the crane with a different winch mechanism. It's a time saver.

BASE EXTENSION

Sometimes, you need just a bit more clearance when moving a piece of equipment over a fixed barrier or an obstacle. Thern's base extension provides an extra 15 inches (381 mm) of clearance without affecting the crane's load rating. It's ideal for wall- or flush-mount situations when that extra height is required. Available in five finishes, the extension will also match your crane. You can also add it later if things at your site change. It's a problem solver.

ROTATION LOCK

When a heavy load is swung too quickly, the boom can keep traveling until the load is no longer in a desirable position. Thern has a solution designed to prevent this ghost travel. Our rotation lock keeps loads in place to stabilize unloading and enhance safety. It's a ghost buster.



Product Customization

Thern excels at developing custom products—and we relish those opportunities. Yet, more economical solutions may be found when we tailor *existing* modular products to meet your needs. By collaborating directly with specifying engineers or technical staff, we achieve the best results.

Tiny details make an enormous difference in enhancing productivity, aiding operational comfort (ergonomics), and facilitating precision and safety.

New Challenges, New Ideas, New Products & New Solutions

At Thern, we're always innovating. A steady flow of challenges from customers inspire solutions, like our hitch-mount davit crane base for lifting power in difficult-to-reach terrain. It might be your answer for removing pumps from pits or placing pumps and mixers from the ground to the back of a truck.

Exemplary Customer Care (Before, During & After the Sale)

At Thern, we take customer service to another level—we tailor it to the specific needs of each customer. We assign a specific individual to your business; one that will develop a deeper understanding of your needs over time. Individualized customer service is the foundation of our growth and success. When you call Thern, you will talk to a real person who cares and has a vested interest in Thern's future and yours. If our representative does not have the answer, they will find an expert that does. Here is what you can expect from our customer care experts:

➤ SPECIFICATION PROCESS

Collaborate/consult with specifying engineer firms to review data, documents, and other information required to facilitate the product selection and specification process.

➤ TIME OF QUOTE

Provide answers to all questions, documentation of clarifications, and required submittal data to deliver a complete scope of supply.

➤ TIME OF ORDER

Provision of any additional required documents.

➤ PRODUCT DELIVERY

At the time of delivery or installation, Thern assists with customer/end-user questions and provides onsite startups if requested.





STOCKTON, CA WASTEWATER TREATMENT FACILITY

Portable Lifting Power Facilitates **COST EFFICIENCY**

REAL-LIFE SOLUTIONS:

- HOISTING PUMPS
- LIFTING MIXERS

Located in the lush farmland of California's San Joaquin Valley, the city of Stockton covers 64.8 square miles and hosts a thriving population of 314,000. It is a popular transportation hub, featuring a natural inland seaport and waterways, navigable by ocean-going vessels. To accommodate its large population, the wastewater treatment facility collects and treats up to 33 million gallons of wastewater per day.

CLIENT: The Regional Wastewater Control Facility (RWCF) located in Stockton, California.

CHALLENGE: Find a cost efficient but effective means of lifting multiple sewage pumps and mixers from several wastewater tanks for periodic service.

THERN'S SOLUTION: The RWCF in Stockton chose four Thern Commander® portable davit cranes featuring powder-coat and stainless-steel finishes to resist extreme climate variation and the harsh conditions characteristic of wastewater treatment facilities. Multiple (14) heavy-duty fixed bases placed across the site allow employees to easily transport cranes from one location to another as needed, precluding the need to purchase multiple stationary crane sets. Set up is quick and easy.

RESULTS: The flexible nature of Thern's portable davit cranes is the perfect complement to the RWCF's wastewater modification project where infrastructure is being updated to comply with new effluent limits for nitrogen. This includes construction of new aeration basins and associated secondary clarifiers. By adding crane bases, the facility can continue to use its existing Thern pump hoists and mixer lifts to place equipment. By rehabilitating its aging infrastructure and technology, the city of Stockton will reduce the amount of nitrogen discharged to surface water and improve the water quality in the California Delta.



PUT-IN-BAY, OH RESEARCH FACILITY

Robust Quality & Engineering ENDURE HARSH CONDITIONS

REAL-LIFE SOLUTIONS:
• HOISTING PUMPS

Thern winches and cranes are often the backbone of working America. They're also used to support sustainable and ecological initiatives, including those associated with academia. When the Ohio State University Research Center wanted to study the aquatic ecosystem functions of Lake Erie, it relied on Thern equipment to lift and position specialized water pumps.

CLIENT: The Ohio State University Research Center located in Columbus, Ohio.

CHALLENGE: Source a high-quality hoist that can withstand the harsh environmental and dock conditions on Lake Erie, while carefully lifting and positioning specialized submersible pumps.

TERN'S SOLUTION: A Thern specifier and supplier serving the university recommended a set of Thern Commander® 2000 portable davit cranes with a three-part epoxy finish. The Commander is one of Thern's largest portable cranes, providing maximum flexibility and control with multiple boom lengths, heights, and angles. The Research Center chose a hand-operation model, but the Commander is also available with multiple power winch options and can lift up to 2,000 pounds.

RESULTS: The Ohio State Research Center has been successfully pumping water from Lake Erie into special tanks to study the condition of its ecosystem. The goal is to mediate damage caused by shore-based heavy industry, as well as sewage and agricultural (fertilizer and pesticide) runoff.



ELK RIVER, MN SLUDGE CART POSITIONING SYSTEM

Precision Load Positioning ENHANCES PRODUCTIVITY

REAL-LIFE SOLUTIONS:

- SECURING OF HEAVY LOADS
- ACCURATE POSITIONING

Located in Minnesota, the Elk River Wastewater Treatment Plant processes 1.3 million gallons of wastewater per day. One of the byproducts of the process is heavy sludge (or cake) which needs to be collected in heavy containers and later transported for proper disposal.

CLIENT: The City of Elk River Public Works Department in Minnesota.

CHALLENGE: Position extremely heavy steel sludge carts to optimize the uniform loading of wastewater “cake” via a load-out chute.

TERN'S SOLUTION: Tern provided the wastewater plant with its electric-powered 4WS (worm spur) series winch that features a combination of helical/worm and spur gearing. The chosen 4WS wall-mounted model is capable of accurately positioning and securing loads up to 3,700 pounds and features dual-stage gear reduction for the economical handling of large sludge loads.

RESULTS: The durable Tern 4WS electric winches have helped make loading the sludge carts more efficient and effective, reducing time and labor. The plant also uses a Tern 5PT10 davit crane with a hand winch and has an electric winch mounted on a 5PT20 Tern davit crane to lift pumps and mixers from the wastewater tanks.



Professionally Engineered **CUSTOM SOLUTIONS**

Leveraging decades of combined knowledge, our talented engineering and production teams are adept at modifying existing models or designing custom solutions for your specific industry and application. In fact, nearly half of our business currently involves custom engineering, so don't hesitate to contact us to get a conversation started!

**LEAVE THE HEAVY
LIFTING TO US**



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