When Royal G. Thern returned from the U.S. Air Force after WWII, it was as part of a generation tired of war and determined to be builders. Roy Thern, along with his wife Lucille, set-up operations in a tiny block building in Winona, a small Minnesota river town. In that building, Roy and Lucille Thern fixed up, dreamed up, machined and marketed a variety of products for the agricultural market they knew so well. Among their earliest creations: A corn sheller, a lever-operated chain hoist, a cordwood saw frame and their most significant invention – a differential chain hoist.

This differential hoist soon became a popular item in the 1950’s Sears and Roebuck catalog, the single most-widely used retail publication of its day. As the years passed, the Thern company grew, its product line broadened and winches and cranes became the dominant lines. In 1977, Roy’s son-in-law, Fred A. Morgan joined the sales force and began to seek markets for custom made-to-order products. Soon, niche markets had Thern winches and cranes tailored for their special needs such as portable davit cranes for the wastewater industry, large electric winches for railroad car handling and portable one-ton winches for general industrial use. Today 50-plus years after its beginning, Thern, Inc. is providing standard and customized load handling equipment to leading companies all around the world.

Two-Year Limited Warranty

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FACTORY AUTHORIZED REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY TO THE CONSUMER. THERN, 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.

What Thern Has To Offer
* Quick Response and Delivery
* Compliance with Government and Industry Standards
* Custom Design Services

Thern Incorporated • 5712 Industrial Park Road • PO Box 347 • Winona, MN • 55987
507.454.2996 • 1.800.843.7648 • fax: 507.454.5282 • www.thern.com • e-mail: info@thern.com

Important: It is the owner's responsibility to determine the suitability of the equipment to its intended use. Thern products are for lifting material only.
All the right moves.

If you need to lift it, lower it, move it or pull it we have the perfect Thern product for you. At this moment, there are thousands of our cranes, davits, and winches working smoothly and efficiently in plants of every description. These range from hand winches as small as 500 lb. capacity up to power winches rated at up to 100,000 lb. And cranes – portable or fixed – with capacities from 500 to 2500 lb. Our standard product line is very broad with many options but if you have a very special need, we will also design and build you a custom Thern winch or crane to perfectly meet your need. We moved to the top of our industry by being attentive to our customers. We stay on top by delivering products that get the job done, fast, effectively and dependably. Your comments on any aspect of our operations or products are both welcome and essential and we look forward to working with you soon.

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Leave the heavy lifting to us.

Wherever you turn, there’s Thern.

Bulk Handling uses special winches for load-out chute, barge and rail car positioning.

Wastewater plants use special hoists for handling submersible pumps and mixers.

Construction sites have many uses for portable Thern winches and cranes.

Manufacturing plants use Thern throughout for lifting, moving and pulling.

Mining, agriculture, aerospace and other industries use Thern winches for lifting and positioning.

Maritime applications include winches for mooring, anchor handling, and accommodation ladders.
Built to lend a hand...

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

We’ve also taken a long look at where these winches are used and made the design refinements where they’re most needed. For example, we have winches made completely of stainless steel for dependable performance in severely corrosive conditions such as wastewater environments. For less punishing environments, we use zinc and iridescent dichromate plating for effective, economical corrosion protection.

...wherever it’s needed.

You also have a choice of machine-cut single or double reduction spur gear designs with capacities from 500 lb to 10,000 lb.

Most of our hand winches are available with optional brakes for lifting (brake models have a B or PB suffix). Quick Disconnect anchors on most models allow attaching or removing wire rope equipped with a swaged ball fitting. Wire rope assemblies are sold separately.
Built to lend a hand...

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For confident load-lifting control.

To the positive attributes of our other hand winches, our worm gear units add the special feature of reducing tendencies of units to backdrive under load because they operate with a low efficiency. These gears are also enclosed in an oil bath for constant lubrication and long life. Bronze and radial ball bearings produce smooth, efficient operation.

When you have to move on the move...

Construction, manufacturing and process sites have plenty of general pulling and lifting jobs where overhead hoists or fixed installations are impractical. Atlas compact power winches lift or pull with 2000 lb of force and are easily moved from place to place around your work site. Among its many performance features: machine cut gears, enclosed oil bath, rugged cast aluminum construction, and internal mechanical brakes.

<table>
<thead>
<tr>
<th>Series</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4WM2</td>
<td>For lifting or pulling up to 2000 lb. Includes internal load brake. Wire rope assemblies sold separately.</td>
</tr>
<tr>
<td>465</td>
<td>For pulling only up to 750 lb.</td>
</tr>
<tr>
<td>462</td>
<td>Shown with brake, for lifting or pulling up to 1000 lb.</td>
</tr>
<tr>
<td>482</td>
<td>Shown without brake, for pulling up to 4000 lb. Brake available for lifting.</td>
</tr>
<tr>
<td>4WP2T8</td>
<td>Portable winch for lifting or pulling up to 2000 lb. Wire rope assemblies sold separately.</td>
</tr>
<tr>
<td>4WP2TC</td>
<td>Clutch version for horizontal pulling up to 2000 lb.</td>
</tr>
<tr>
<td>4WP2T8-PN</td>
<td>Pneumatic winch for lifting or pulling up to 2000 lb.</td>
</tr>
<tr>
<td>4WP2D8</td>
<td>High speed winch for lifting or pulling up to 1500 lb.</td>
</tr>
</tbody>
</table>
Worm Gear Hand Winches

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Portable Power Winches

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Series 4WP2T8 portable winch for lifting or pulling up to 2000 lb. Wire rope assemblies sold separately.

Series 4WP2T8-PN pneumatic winch for lifting or pulling up to 2000 lb.

Series 4WP2D8 high speed winch for lifting or pulling up to 1500 lb.
Big performance from small winches.

Our Durahoist cast aluminum winches are powerful, rugged and lightweight - the perfect combination of features for industrial power winches. Machine cut helical/worm gearing, internal mechanical brake, enclosed oil bath and durable finish give them a long service life. Ball bearings ensure smooth operation, and accessory options let you fit them to your specific tasks.

Bigger winches for bigger jobs.

Thern Series 4WS worm/spur gear winches with load ratings up to 6500 lb all feature TEFC brake motors, enclosed machine cut gearing, and flange style ball or roller bearings. Electric motors are 115/230 volt single phase or 230/460 volt 3-phase.
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**Industrial Power Winches**

**Heavy Duty Power Winches**

**Series 4771**
for lifting or pulling up to 2000 lb. Wire rope assemblies sold separately.

**Series 4771PN**
pneumatic winch for lifting or pulling up to 2000 lb.

**Series 4771HY**
hydraulic winch for lifting or pulling up to 2000 lb.

**Series 4WS3M**
for lifting or pulling up to 3500 lb.
Controls sold separately.

**Series 4WS6M Special**
shown with custom drum and radio-remote controls.

**Series 4WS6M Special**
shown with clutch option, for horizontal pulling up to 6500 lb.

**Series 4WS1M**
for lifting or pulling up to 1500 lb.
When you need a lot of pull...

Turn to one of our heavy duty pulling winches. With load ratings as high as 76,000 lb, and multiple options, any of these units provides strength, dependability and ease of use. Among your options are:

- Electric motor controls with pendant control
- UL rated custom motor controls
- Motor and gear ratio changes to meet line speed and load rating requirements
- Wall or ceiling installation
- Air or hydraulic motors

- Voltage or phase changes, multi-speed motors, or special motor ratings including IEEE 45, tropical duty, severe duty or explosion proof
- Rotary limit switches for secondary shutoff
- Cable pressure bars to maintain uniform cable winding
- Manual overrides

Sometimes you need a really big lift...

When you're dealing with the big loads, check out the Tern Heavy Duty Winches. Durable gears, heavy duty frames, high-capacity drums and load ratings to 76,000 lb. and you have the same design options listed on page 10.
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Special needs need special products.

Our standard Thern winches and cranes accommodate a wide variety of tasks in a wide variety of applications. But for those really special demands, we’ll customize a Thern product to do exactly what you need with maximum efficiency and minimum maintenance. In addition to the special products shown on these pages, we also offer:

- Manual clutches for quick payout of unloaded wire rope
- Grooved drums for better wire rope winding
- Multiple compartment drums for additional wire ropes
- Modified drum widths or diameters to meet fleet angle requirements, accommodate longer cables, or alter line speeds
- Mechanical torque limiters to provide overload protection
- Special finishes for extra protection in harsh or hazardous environments
- Special secondary or overspeed brakes
- Variable speed motor controls
- Special controls for almost any requirement

4HPF Special
shown with drum shaft mounted encoder, grooved drum and custom finish.

4HWF Special
shown with rotary limit switch, grooved drum, and special finish.

4HWF Special
shown with modified drum diameter and length, grooved drum, secondary centrifugal brake and rotary limit switch.

Electrical Control Panel
for remote pendant control operation of power winches.

We adjust to any market demands.

If your market involves special sizes, portability features, wire rope attachment methods or other unique adaptations – we’re here to do it for you. Tell us about your application and we’ll work with you to find the perfect fit.

548 Series
collapsible floor crane for lifting up to 1000 lb.

Rolling Base
for use with portable cranes.

Wire Rope Assemblies
with different length and hook configurations for use with Thern winches and cranes.

FVC-1000 Series
special purpose hand winch for closing and testing fire vents.
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- Series FVC-1000
  special purpose hand winch for closing and testing fire vents.
We also have Fre Rol davit cranes (series 571 and 572) for permanent installation on stable gusset style bases. These units may have either fixed or adjustable booms and hand or power winches.

By installing independent bases where needed around your work site, you can serve multiple work stations with a single portable davit crane. Available in a range of sizes and capacities, all our davit cranes are fitted with hand or power winches and are available in 304 or 316 stainless steel construction. We offer a choice of finishes including electrostatic powder, epoxy or galvanized coating for superior corrosion resistance. They also feature the Quick Disconnect Cable which lets you remove the cable from the crane leaving it hooked to the load. This is especially useful in handling submerged pumps where disconnecting and reconnecting the cable at the pump is difficult or impossible.

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Perfect for permanent or portable power.

Series 5110 portable crane for lifting up to 1000 lb. Shown in stainless steel with spur gear hand winch and upright base.

Series 5110 crane disassembles for easy portability.

Series 5122 portable crane for lifting up to 500 lb. Shown with powder coat finish, spur gear hand winch and upright base. Wire rope assemblies sold separately.

Series 5122 portable crane folded for transport. Shown in stainless steel.

Series 5124 portable crane for lifting up to 2000 lb. Shown with boom retracted, worm gear winch, pedestal base and wire rope.

Series RW50 stainless steel storage spool for wind up of unloaded wire rope. Wire rope assemblies sold separately.

Series 577 stationary crane for lifting up to 2200 lb. Shown with adjustable boom, power winch and wire rope.

Series 57 stationary crane for lifting up to 1500 lb. Shown with spur gear hand winch and wire rope.
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This warranty does not cover any damage due to accident, misuse, abuse, or negligence. Any alteration, repair or modification of the product performed by anyone other than Thern, Inc. shall void this warranty. This warranty does not cover any costs for removal of our product, downtime, or any other direct, indirect or incidental 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.

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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 limitations or exclusions 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.

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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 limitations or exclusions 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.