With more than 50 years supporting industrial markets, Enerpac has gained the unique and in-depth expertise that is respected by industrial professionals around the world. Across every continent, Enerpac’s network of application engineers, authorized distributors and technical service centers can reach any location, and deliver innovative solutions, technical assistance and quality products.

Enerpac’s complete line of standard and customized products and a unique systems approach offers the benefits of safety and efficiency to applications where high forces are required.

Whether constructing a signature bridge across a deep valley, lifting a national landmark for seismic retrofit or simultaneously testing hundreds of foundation pilings to support a new building, Enerpac will supply the high-force solutions to get the job done.
## Integrated Solutions Section Overview

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<tr>
<th>Capacity</th>
<th>Capabilities</th>
<th>Series</th>
<th>Page</th>
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</thead>
</table>
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**Contact Enerpac!**
Contact the Enerpac office nearest to you for advice and technical assistance in the layout of your ideal Lifting System or visit us at: [www.enerpac.com](http://www.enerpac.com).
Or ask Enerpac for assistance by email: integratedsolutions@enerpac.com.
Hydraulic Gantries

Shown: SBL1100 Hydraulic Gantry

- Self-contained hydraulics and electronics
- Intelli-Lift wireless control system
- Self-propelled wheels or tank rollers
- Foldable boom on SBL900, SBL1100, MBL500 and MBL600
- Full range of supplementary equipment: header beams, lifting lugs, side shift, skid tracks
- All gantries are ASME B30.1 compliant.

SL, SBL, MBL Series

Capacity with 4 towers:
60 - 1100 ton
Lifting Height:
3.39 - 14.52 m

Hydraulic Gantries

Hydraulic Gantries are a safe, efficient way to lift and position heavy loads in applications where traditional cranes will not fit and permanent overhead structures for job cranes are not an option.

Hydraulic Gantries are placed on skid tracks to provide a means for moving and placing heavy loads, many times with only one pick.

Enerpac offers three series of Hydraulic Gantry systems:
- the cost-effective SL-Series offers entry level control and capacity
- the heavy-duty SBL-Series offers capacities up to 1100 ton and 3-stage lifting capability through the boom structure
- the MBL-Series incorporates all features of the SBL-Series and offers full lifting capacity over the full stroke. The MBL Gantries have been designed with increased footprint stability and can therefore lift using 2 legs as well as 4.

All Enerpac gantries are delivered with specific properties and control systems to ensure optimum stability and safety.
**Strand Jacks**

- Full control of lifting and lowering through SCC control
- Two sizes strand diameter: 15.7 and 18 mm
- Complete line of electric and diesel power packs
- Nickel plated telescopic pipes preventing bird caging
- Standard supplied with lifting anchor
- Automated locking – unlocking operation
- Special corrosion treated high endurance multi-use wedges
- Full range of accessories: strand dispenser, strand guide, re-coiler and strand tensioner.

**HSL Series**

Capacity:

- 15 - 1250 ton

**Strand Jacks**

A strand jack can be considered a linear winch. In a strand jack, a bundle of steel cables or strands are guided through a hydraulic cylinder. Above and below the cylinder are anchor systems with wedges that grip the strand bundle simultaneously, this is how the strand jack is able to carry a load. Lifting and lowering a load is achieved by hydraulically controlling the main jack and both mini jacks alternately.

Enerpac utilizes Smart Cylinder Control (SCC), ensuring full control of the lifting and lowering operation.

Today strand jacks are widely recognized as the most sophisticated heavy lifting solution. Strand jacks are used all over the world to erect bridges, load out offshore structures, and lift/lower heavy loads where the use of conventional cranes is neither economical nor practical.
Skidding Systems

- PTFE skid pads with dimpled surface for low friction and long lifetime
- Easy to replace skid pads, no tools necessary
- Unique gripper anchor system complete with lever for easy selection of skidding direction
- Double acting hydraulic cylinders with sufficient capacity in both push and pull direction. No need to turn the skid shoe for reverse skidding direction
- Large load support surface on the skid beam
- Bottom of skid shoes equipped with stainless steel sliding plates.

Shown: HSK1250 Skidding System

HSK, HSKLH Series

Capacity per shoe:
125 - 250 ton

Stroke Push/Pull Cylinders:
600 mm

Skidding Systems

The HSK skidding system is comprised of a series of skid-shoes powered by hydraulic push-pull cylinders, travelling over a pre-constructed track.

Enerpac Skidding Systems are available in three versions:
- HSK1250 with a capacity of 125 ton per skid unit
- HSK2500 with a capacity of 250 ton per skid unit
- HSKLH2500 with a capacity of 250 ton per skid unit and a lower collapsed height.

The HSK1250 and HSK2500 skidding systems are available in 2 varieties: using a "skid shoe jack" or a "skid shoe beam". The skid shoe jack includes an integrated lifting cylinder. A skid shoe beam is designed for skidding purposes only.

To calculate the minimum required capacity per shoe, the entire load has to be able to rest safely on 2 of the 4 shoes. To skid a load of 500 ton, the required skidding system is HSK2500.
Self-Propelled Modular Trailer

Shown: SPMT600

- Multiple configurations possible
- Reduced height and slim design
- Intellidrive wireless control system
- Up to 3 units per power pack.

SPMT Series

Capacity: 61 ton (600 kN)
Transport Speed: 3 km/h

Self-Propelled Modular Trailer

The Enerpac Self Propelled Modular Trailer features a minimized height and slim design, which make it very easy to operate in confined spaces. Each unit has 3 axles.

Each wheel unit has a steering as well as a lifting cylinder at its disposal. Wheel propulsion is accomplished by hydraulic propulsion. The power pack has a 54 kW tier 4 driven engine.

The SPMT is controlled by Intellidrive, a wireless control system that allows the entire system to be operated by one person.

One of the unique features of the system is that it is able to be containerized. Two units and a power pack can be shipped inside a 20 ft. container.
EVO-Series, Synchronous Lifting Systems

- Modular lifting system to control 4, 8 or 12 lifting points
- Can be connected to single- or double-acting cylinders with the same or different lifting capacities
- PLC-controlled system with integrated 700 bar hydraulic power unit, 3,0 kW motor, 250 litres reservoir
- Network capability to link up to 4 HPUs to a separate master control box via wireless control
- Intuitive user interface providing easy set up, control and navigation
- Data storage and recording capabilities
- Variable frequency drive motor (VFDM) and PLC for precise synchronization and oil flow control.

The multi-functional synchronous lifting system

- Bridge lifting and repositioning
- Bridge launching
- Bridge maintenance
- Incremental launching and box jacking
- Lifting and lowering of heavy equipment
- Lifting, lowering, levelling and weighing of heavy structures and buildings
- Structural and pile testing
- Lifting and weighing of oil platforms
- Foundation levelling of onshore and offshore wind turbines
- De-propping/load transfer from temporary steel work
- Foundation shoring.

EVO-System Work Modes

The application possibilities are infinite with the EVO-system, powering interlinked hydraulic cylinders – single or double-acting, push or pull, stage lift, hollow plunger or lock nut cylinders. The EVO-System has 9 work modes. The operator can navigate to any of these menus:

1. Manual
2. Pre-Load
3. Automatic
4. Retract Fast
5. Depressurize
6. Tilting
7. Stage Lift
8. Weighing *
9. Center of Gravity determination *

* Available in the EVO-W System.

Typical Synchronous Lifting Applications

- Bridge lifting and repositioning
- Bridge launching
- Bridge maintenance
- Incremental launching and box jacking
- Lifting and lowering of heavy equipment
- Lifting, lowering, levelling and weighing of heavy structures and buildings
- Structural and pile testing
- Lifting and weighing of oil platforms
- Foundation levelling of onshore and offshore wind turbines
- De-propping/load transfer from temporary steel work
- Foundation shoring.

3600 ton Tunnel Boring Machine lowered and tilted into its starting position with the EVO-Series Synchronous Lifting System.

3600 ton Tunnel Boring Machine lowered and tilted into its starting position with the EVO-Series Synchronous Lifting System.
Synchronous Lifting Systems

What is Synchronous Lifting?
To achieve high-precision movement of heavy objects it is necessary to control and synchronise the movements of multiple lifting points.

The PLC-control uses feedback from multiple sensors to control the lifting, lowering and positioning of any large, heavy or complex structure, regardless of weight distribution.

By varying the oil flow to each cylinder, the system maintains very accurate positional control. This control maintains structural integrity and increases the productivity and safety of the lift, by eliminating manual intervention.

PLC-controlled synchronous lifting systems reduce the risk of bending, twisting or tilting, due to uneven weight distribution or load-shifts between the lift points.

Benefits of the Enerpac EVO-System
Precise control of multiple lift points
- Comprehensive understanding and management of a lifting operation from a central control system improves safety and operational productivity.
- Programmable synchronized lifting.
- Automatic stop at pre-set cylinder stroke or load limit.

Safe and efficient movement of loads
- System secured with warning and stop features to realize optimal safety.

High accuracy
- Variable frequency drive (VDFM) and PLC for precise synchronization and control of oil flow, stroke and speed.
- Depending the cylinder capacities used, an accuracy of 1.0 mm between lifting points is achieved.

Ease of operation
- User friendly interface: visual screens, icons, symbols and color coding.
- A single operator controls the entire operation.

Monitoring and Data Recording
- Displays data of the operation.
- Data recording at user-defined intervals.
- Data storage and read-out for reporting.

Network capability
- Ethernet IP protocol for communication between hydraulic power units, allow easy “plug and play”.

Global standardized system
- Enerpac global coverage ensures local support.

EVO-W Weighing System
Weighing applications with 1% accuracy
- Includes calibrated sensors and auto-calibration of external load cells.
- Center of gravity determination functionality.
- Parameters for “waiting time for stabilization” and “number of cycles”.

<table>
<thead>
<tr>
<th>Number of Lifting Points:</th>
<th>4, 8 or 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy EVO-System:</td>
<td>1.0 mm over full stroke</td>
</tr>
<tr>
<td>Accuracy EVO-W (weighing) System:</td>
<td>1% of full scale</td>
</tr>
</tbody>
</table>

Lifting Cylinders
For a complete line of Enerpac cylinders, see the Cylinder and Lifting Products in our catalogue.

The superlifting and launch of a 43,000-ton floating oil production system in Malaysia for the Gumusut-Kakap offshore field has set high benchmarks for safety through its use of sophisticated EVO-Series synchronous hydraulics to lift, balance, weigh and smoothly launch massive resources structures.

Lifting and levelling a building foundation.

Box jacking: Multi-point synchronous system to push hydraulically the tunnel segments under the railway.
BLS-Series, Stage-Lift Cylinders

- Double-acting cylinder
- Swivel saddle for load adjustment
- Large footprint for stability
- Anti-rotation device
- Built-in overload protection.

A Simple Solution to Incremental Lifting

**Lifting Height**
Stage-lift cylinders overcome the usual limitation of lift height imposed by the cylinder’s plunger stroke length. Large objects, such as oil tanks, can be lifted, held and lowered for maintenance without sending for a crane.

**Split-Flow Pumps**
SFP-Series Pumps with multiple outlets with equal oil flow. For lifting applications on multiple points Split-Flow Pumps are a far better alternative than using separate operated pumps.

**EVO-Series, Synchronous Lifting Systems**
The EVO-system is the ideal system for stage lifting, powering interlinked hydraulic cylinders – single or double-acting, push or pull, stage lift, hollow plunger or lock nut cylinders. The EVO-system has 9 work modes including the stage lift work mode.

- Synchronous Stage Lifting: 48 double-acting jacks (25 and 50 ton) are networked in to a 16 points synchronous system to lift this 50 metres long, 1000 ton building up to a height of 2.5 metres to construct a new floor level.

<table>
<thead>
<tr>
<th>Cylinder Capacity (ton)</th>
<th>Stroke (mm)</th>
<th>Model Number</th>
<th>Max. Cylinder Capacity (kN)</th>
<th>Push</th>
<th>Pull</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>150</td>
<td>BLS-506</td>
<td>498</td>
<td>103</td>
<td></td>
</tr>
<tr>
<td>95</td>
<td>161</td>
<td>BLS-1006</td>
<td>933</td>
<td>435</td>
<td></td>
</tr>
<tr>
<td>140</td>
<td>151</td>
<td>BLS-1506</td>
<td>1386</td>
<td>668</td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>151</td>
<td>BLS-2006</td>
<td>1995</td>
<td>1017</td>
<td></td>
</tr>
</tbody>
</table>
Double-Acting Stage-Lift Cylinders

Typical stage-lift application using a custom built Enerpac system to lift the 360 ton Akkerwinde wooden bridge in the Netherlands.

Stage Lifting Sequence

Step 1: The Stage Lift cylinder is placed on a solid support under the load (retracted plunger).

Step 2: Plunger extends, lifting the load and giving clearance to insert two outer blocks under the spreading plate.

Step 3: Plunger retracts, giving clearance to position the central blocks which will support the plunger plate for the next extension.

Step 4: Plunger extends, lifting the load, giving clearance to insert two new blocks, placed crosswise under the spreading plate.

### BLS Series

- **Capacity per Lifting Point:** 50 - 200 ton
- **Stroke per Stage:** 150 - 161 mm
- **Maximum Operating Pressure:** 700 bar

### Table: Cylinder Dimensions

<table>
<thead>
<tr>
<th>Cylinder Effective Area (cm²)</th>
<th>Oil Capacity (cm³)</th>
<th>Stage Lift Cylinder Dimensions (mm)</th>
<th>Support Blocks * and Dimensions (mm)</th>
<th>Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Push</td>
<td>Pull</td>
<td>Push</td>
<td>Pull</td>
<td>A</td>
</tr>
<tr>
<td>71.2</td>
<td>21.5</td>
<td>1111</td>
<td>335</td>
<td>406</td>
</tr>
<tr>
<td>133.3</td>
<td>62.2</td>
<td>2238</td>
<td>1045</td>
<td>445</td>
</tr>
<tr>
<td>198.1</td>
<td>95.4</td>
<td>3090</td>
<td>1488</td>
<td>473</td>
</tr>
<tr>
<td>285.6</td>
<td>145.6</td>
<td>4332</td>
<td>2209</td>
<td>510</td>
</tr>
</tbody>
</table>

* Support blocks are not supplied by Enerpac.

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Accurate Hoisting and Load Positioning
Enhancing a Crane’s Capability

Synchronous Hoisting
Enerpac SyncHoist is a unique crane product for below-the-hook positioning of heavy loads that require precision placement. The SyncHoist system may reduce the number of cranes needed and reduce the costs of multiple picks.

Functions
- High precision horizontal and vertical load positioning
- Pre-programmed positioning, tilting and aligning.

Applications
- Positioning of rotor, stator and propeller blades of wind turbines
- Positioning of roof sections, concrete elements, steel structures
- Positioning of turbines, transformers, fuel rods
- Precise machinery loading, mill rod changes, bearing changes
- Precise positioning of pipe lines, blow out valves
- Positioning and aligning of ship segments prior to assembly.

Options for system management & control:
- Manual control: stroke control and system warning functions
- Automatic control: fully PLC-monitorized system with programmable functions using touch screen and wireless remote control and system warning functions.

Bridge segments are hoisted from the ground, being positioned with a 4-point SyncHoist system with fully monitored cylinders.

The Enerpac SyncHoist system was used with one hydraulic cylinder to level and position the 95 ton, 115 m diameter rotor assembly of wind turbine.

An 4 x 110 ton SyncHoist system used to align steel blocks of the ship’s control tower sections allowing gradual lift of the load and dynamic adjustment in relation to the centre of gravity during the lift.
SyncHoist - High Precision Load Positioning

What is SyncHoist?
Enerpac SHS-Series SyncHoist is a hydraulically operated auxiliary attachment for high precision load positioning for cranes. The PLC-controlled hydraulic pump monitors and guides the powerful double-acting push-pull cylinders integrated into the lifting points above the load. The SyncHoist system can be used for pre-programmed positioning, tilting and aligning of loads.

SyncHoist improves safety, operating speed and control of load movement
Geometric positioning of heavy loads in a horizontal and vertical plane are frequently done using more than one crane. Synchronising movements between cranes are difficult and risky. The lifting inaccuracy can result in damage to the load and support structures and puts workers at risk. The SyncHoist system can be used for controlled hydraulic horizontal and vertical material handling.

Two options for system management and control
Contact Enerpac for the following options, or other customised stroke, capacity and control configurations.

1. Manual control
   - Valve with manual levers
   - Plunger stroke control
   - Warnings for thermal motor protection
   - Visual check: oil level, filter indication.

2. Automatic control
   - Electric valve with pendant
   - PLC-control and touch screen
   - Remote wireless radio control
   - Load and stroke monitoring
   - Pre-programmable motions and data recording
   - System warnings for:
     - maximum cylinder load control setting
     - stroke and position control
     - thermal motor protection
     - oil level and filter indication.

SHS-Series, Enerpac Synchronous Hoisting Systems

<table>
<thead>
<tr>
<th>System Load Capacity</th>
<th>220 ton (2156 kN)</th>
<th>340 ton (3332 kN)</th>
<th>440 ton (4312 kN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. handling load 1)</td>
<td>4 x 55 ton</td>
<td>4 x 85 ton</td>
<td>4 x 110 ton</td>
</tr>
<tr>
<td>Number of lifting points 2)</td>
<td>1, 2, 3 or 4</td>
<td>1, 2, 3 or 4</td>
<td>1, 2, 3 or 4</td>
</tr>
<tr>
<td>System reach</td>
<td>1000-1500 mm</td>
<td>1000-1500 mm</td>
<td>1000-1500 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cylinder configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Push force (kN) @ 90 bar</td>
</tr>
<tr>
<td>Pull force (kN) @ 700 bar</td>
</tr>
<tr>
<td>Plunger stroke 2)</td>
</tr>
<tr>
<td>System reach</td>
</tr>
</tbody>
</table>

Control options & system management 3)
- Manual control
- Manual directional control valves
- Automatic control
- Fully closed-loop PLC-controlled system

Pump configurations (single-stage)

<table>
<thead>
<tr>
<th>Oil flow (manual control)</th>
<th>4 x 1.0 l/min</th>
<th>4 x 1.0 l/min</th>
<th>4 x 1.0 l/min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil flow (automatic control)</td>
<td>4 x 2.1 l/min</td>
<td>4 x 2.1 l/min</td>
<td>4 x 2.1 l/min</td>
</tr>
<tr>
<td>Motor power (manual control)</td>
<td>5.5 kW</td>
<td>5.5 kW</td>
<td>5.5 kW</td>
</tr>
<tr>
<td>Motor power (automatic control)</td>
<td>15 kW</td>
<td>15 kW</td>
<td>15 kW</td>
</tr>
<tr>
<td>Reservoir capacity</td>
<td>250 litres</td>
<td>250 litres</td>
<td>250 litres</td>
</tr>
<tr>
<td>Usable oil capacity</td>
<td>200 litres</td>
<td>200 litres</td>
<td>200 litres</td>
</tr>
</tbody>
</table>

1) Subject to angle and position of lifting cylinders.  
2) Cylinder are equipped with parachute valve for added safety in event of hose rupture or coupler damage.  
3) Manual directional control valves

Note: Enerpac SyncHoist have standard 4 lifting points. In the event that more or less lifting points are required, contact your local Enerpac representative.  
See information box above for detailed control features.

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Custom Solutions

When your application requires something other than our standard product offering, look to Enerpac's Integrated Solutions Team.

Our group of engineers, designers and specialist, will work with you to understand your specific application and provide a turn-key solution that will exceed your expectations.

ENGINEERING
Enerpac has a multi-disciplined engineering team capable of design and development of all aspects of an Integrated Solutions system. Leveraging design and application experience with the latest in computer software, rapid prototyping and analysis methods ensures delivery of the highest quality systems.

ELECTRONICS
Enerpac designs all control systems in-house. This capability keeps control technology close to the design engineers who are developing the rest of the system. In doing so, we can tailor the control system to match unique project requirements.

MACHINING
Enerpac utilizes the latest in CNC machining technologies and manufactures all large and special hydraulic cylinders in-house. We can machine diameters up to 1000 mm with lengths to 6000 mm.

FIELD SUPPORT
Enerpac Integrated Solutions is available to provide on-site support including training and troubleshooting of systems. We also stock repair parts and consumable items at several locations to ensure fast delivery and minimal downtime.

HYDRAULIC POWER UNITS
Enerpac designs, assembles and tests small to large hydraulic power units in-house. Power units range from 0.5 to 240 kW and are tested with the system they are intended to operate.

MAINTENANCE and REPAIR
Due to the unique nature of Enerpac’s Integrated Solutions systems, we offer complete maintenance and repair services. Our M&R group is available to assist customers who do not have access to local service facilities qualified to work on these systems.

STEEL FABRICATION
Enerpac has a dedicated facility for steel fabrication and welding. We design and manufacture custom structures used in demanding heavy-lifting applications.
Custom Solutions

SYNCHRONOUS HOISTING
A unique crane product for below-the-hook positioning of heavy loads that require precision placement. May reduce the number of cranes needed and reduce the costs for multiple picks.

STRAND JACK GANTRY
The strand jack gantry is a steel structure to facilitate erection and skidding back, forth and sideways of heavy loads. The Enerpac strand jack gantry allows you to operate in confined spaces.

BRIDGE LIFTING & LAUNCHING
Providing a solution for the most complex and demanding bridge construction applications, Enerpac has over 20 years providing unique customer bridge launching systems.

SYNCHRONOUS LIFTING
The superlifting and launch of a 43,000 ton floating oil production system in Malaysia has set high benchmarks for safety through its use of sophisticated synchronous hydraulics to lift, balance, weigh and smoothly launch massive resources structures. The active skids, mounted on guidance tracks, were used for weighing and establishing structures’ centre of gravity to ensure safety and structural integrity.

CHAIN PULLERS
The MCS Napoli was caught in a storm and was beached in Lyme Bay in 2007. The ship cracked and was broken up into sections. The 3450 ton back of the ship, measuring 65 m by 36 m, was hoisted onto two pontoons using 24 hydraulically operated chain pullers, each with a lifting capacity of 227 ton. Once on the pontoon, the wreck was sawn into pieces before being transported to land.

The Strand Jack Gantry system consists of 3 major components:
- Steel Construction
- Strand Jacks for Vertical Lifting
- Skidding System for Horizontal Skidding

This is powered by a hydraulic power unit that is situated on ground level. The capacity, height and width of the construction can be modified in cooperation with our engineering team.

MECHANIZATION SYSTEM and HYDRAULIC ROTATING MECHANISM
Enerpac supplied two major components for the Las Vegas 168m High Roller Observation Wheel. The Mechanization System which is the primary system used to drive the wheel every day for the expected 50 year life span and the Hydraulic Rotating Mechanism which was used to erect the rim of the wheel.

SELF-ERECTING TOWER
The Enerpac Self Erecting Tower (ESET) is a self-erecting-tower-lift system that enables you to build a free standing gantry from ground level. The ESET can be supplied in various capacities and lifting heights and is built with standard modular components, enabling a flexible solution to future project demands.

The Self Erecting Tower enables moving the load in all directions: lifting, lowering, skidding back and forth, and has side shift capabilities. Lifting and skidding are achieved using standard Enerpac strand jacks that can also be used for other applications.

The Self Erecting Tower is a versatile lift-system that can be used in a wide variety of operations, for example the installation of reactor vessels in a petrochemical plants or erecting a shipyard crane. When compared with large capacity cranes, the Self Erecting Tower significantly reduces transportation and set up costs.

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• Machine screw versions up to 250 ton for low-cycle, high-load applications and positive load holding
• Ball-Screw versions up to 5 tons for high-cycle, high-speed applications
• Electro-Mechanical Drive System can be interlinked and easily synchronized
• Precision rolled load screws Class 3 fit for additional strength
• Preloaded tapered roller bearings tolerate high thrust loads and minimize side loading
• Precision machine gear sets provide minimum backlash while reducing wear
• Wide variety of base-mounting and screw-end configurations.

Maximize Your System Control
Custom control boxes designed to meet your specific application requirements.

System Accessories
Enerpac offers a large array of motors, drive components, and boots to meet any demanding project.

Uni-Lift® Actuators were the ideal choice to position and adjust the complex scaffolding for aircraft maintenance. Precision movement and flexibility was an asset in getting the job done efficiently and safely.
Design Features:
- Available with translating, rotating and keyed load screw designs
- High-strength rolled load screws provide maximum durability
- Rugged aluminum alloy and ductile iron housings for demanding or rigorous environment
- Corrosion resistant zinc plating is standard on most units
- The widest range options gear ratios are available to meet all application requirements
- Speeds up to 0.17 m/sec.

Actuator Accessories:
- High-quality bellow boots for added loadscrew protection
- Easy mounting of optional screw ends are available in plain, top plate and clevis design
- Wide selection of motors and C-face adaptors
- Limit switches and encoders for complete system control
- Couplers and shafting available for individual system requirements
- A large choice of mitre gear boxes and reducers provide maximum system design flexibility
- Custom built control boxes to meet your specific need.

Typical Mechanical Actuator Set-Up

Contact Enerpac!
Contact the Enerpac office nearest to you for advice and technical assistance in the layout of your ideal Lifting System or visit us at: www.enerpac.com.
Configuring Your UNI-LIFT Actuator On-Line

www.enerpac.com/unilift

for latest Enerpac Uni-Lift® information

Visit the Enerpac Web Site and use the UNI-LIFT® Configurator to properly select the type, ratio, and size of the machine or ball screw actuator for your application.

- Provides instant results that are downloadable in 2D and 3D CAD
- Configuration snapshot is generated from your selection input
- Supports imperial and metric units
- Informative help topics guide you through the entire process.

Actuators move the ramp of ferry dock

Engineers utilized two (2) Uni-Lift® 100-ton actuators with 5 metres of travel to raise and lower the ramp on each ferry dock along the Mississippi River, USA.

The Department of Transportation engineers needed a way of lifting and lowering ramps during high and low tide conditions, while holding up to the harsh environmental conditions of the gulf coast.

Opening large doors of plating tanks

When engineers needed a quick and compact way of opening the large doors of these large plating tanks, they contacted Uni-Lift® for help. This application utilizes two 5-ton double-clevis actuators, with a motor and a limit switch box mounted on each actuator.

The operator just pushes a button to open the doors, and pushes another button to close them. This method greatly enhances operator safety and helps to prevent cross contamination between tanks.

OEM motion control solutions

Uni-Lift® screw jacks are used extensively in a variety of material handling applications. Whether used in positioning conveyor belts, placing tension on overhead beams or moving heavy-duty equipment, Uni-Lift® actuators are the ideal solution for many jacking, tensioning, and positioning applications.

Whether you have one lifting point or multiple lifting points, Uni-Lift® actuators are the perfect solution for many different OEM motion control applications.