BARNHART

LIFTING LETTER

www.barnhartcrane.com

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PG. 5 COMMERCIAL: House Lift and Set

Barnhart lifts and sets tiny homes in Vancouver, Washington.

LOCAL SUPPORT WITH A NATIONAL REACH: BARNHART'S BRANCH NETWORK

Barnhart's branches provide localized services for markets including HVAC/Refrigeration.

If your company operates project sites with a large geographic footprint, Barnhart can offer you valuable support through our network of over 60 branches in the U.S. and Western Canada.

This widespread network allows Barnhart to provide comprehensive lifting, transportation and project management services nationwide. With access to a vast fleet of specialized equipment including cranes, Self-Propelled Modular Trailers (SPMTs), gantries and custom rigging tools like the Movable Counterweight Cantilever System (MOCCs), each branch can offer local solutions while maintaining the ability to scale support across regions.

Barnhart's comprehensive services include heavy haul capabilities, barge roll-on/roll-off options and turnkey transportation solutions, all designed to simplify the movement of heavy cargo across land, sea or rail.

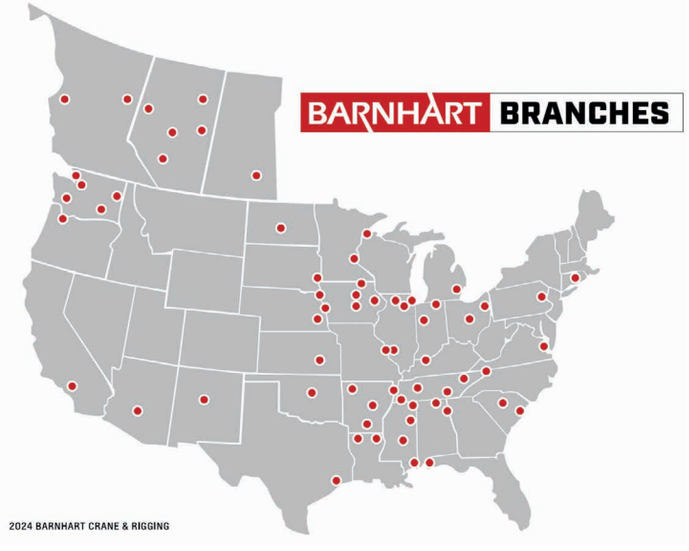
Additionally, the company's deep understanding of state and federal regulations allows us to navigate permitting processes efficiently, eliminating delays in critical path tasks.

While Barnhart is recognized for tackling complex projects, equally important is the frequent, localized services for customers in markets such as:

- Communications Infrastructure
- Substation Services
- Industrial Gas
- Original Equipment Manufacturer Services
- HVAC/Refrigeration

By working with area branches, you gain access to local support and a nationwide pool of experienced staff, innovative solutions and specialized tools. Additionally, you can rely on the Barnhart brand, which upholds a standard of excellence and ensures safe, reliable and efficient job execution.

Whether you need solutions to a complex heavy haul project, dependable crane service, or skilled project management, Barnhart's extensive branch network guarantees consistent service backed by decades of experience, engineering expertise and a strong commitment to safety.



1 Barnhart was hired to transport a 350,000-pound kiln from New Orleans to a hazardous waste treatment operation in Gum Springs, Arkansas. Before the team barged the kiln down the Ouachita River, they conducted a navigation study. This involved utilizing bathymetric ultrasound technology to assess the river's depth, crucial for confirming the viability of the seldom-traveled commercial route.

2 The kiln measured 19' x 19' x 60'. When placed in Barnhart's 12-dolly rig system, the transport configuration was 23' wide, 20' tall and 220' long. Due to its considerable size, an extensive bridge analysis, route surveys and coordination with law enforcement were essential to ensure proper clearances and a safe delivery.

3 The route was 189 miles on country roads, with the transport vehicle traveling between five and 25 mph. Barnhart's engineers surveyed the route ahead of the journey, assessing turns, road width, bridge capacities, other potential obstructions and pull off availability.

4 Securing approval for the route involved extensive coordination with three districts, five counties and two towns. Three-dimensional modeling was employed to navigate pinch points. After a six-day journey, the team successfully delivered the kiln with zero citations, accidents or incidents.

1 Barnhart's Portland, Oregon branch was contracted to lift and set seven tiny prebuilt homes for a no-income housing community initiative in Vancouver, Washington. The site was challenging due to the tight space, which was barely big enough for the crane. Short notice was another challenging factor due to a crane competitor backing out of the project the day before the original lift date.

2 The crew squeezed the crane into its set up area and went to work setting up the rigging assembly. Each tiny home was 14' wide x 44' long, weighed 34,000 pounds and contained 735 square feet of living space. The homes were brought in by trailer to be set onto their designated pads.

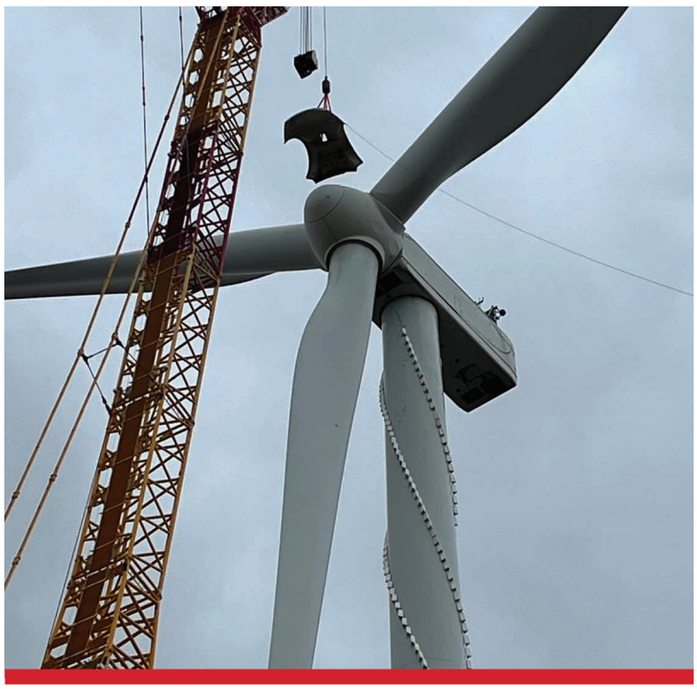
3 The team utilized a 265-ton Liebherr LTM 1220 crane and a ground crew with one lift director and three riggers. It required precision to lift the units up in the air, maneuver them in place and set them in position.

4 Despite the last-minute change, everything was set on schedule and the customer went to work getting the homes plumbed with electricity and other utilities. The homes will house up to five people each, giving those who are struggling a way out of homelessness.

1 Barnhart was called upon by a customer to support the removal and replacement of three failed main bearings at a wind site in Kansas. The OEM Standard Operating Procedure called for the removal of blades, hub and drivetrain before exchanging the main bearing requiring multiple wind windows to perform. The variable weather conditions of a Kansas spring called for efficiency, so Barnhart engineered, designed and fabricated a rotor lifting methodology to remove the rotor and access the drivetrain in just two picks. This was the first time a rotor removal and replacement was performed on this turbine platform.

2 Barnhart's fabricated lifting lugs, nicknamed "angel wings," were attached to the hub and allowed for a single LR11000 crane to remove the rotor intact and downtail in coordination with a tail LTR 1220 crane. The team also designed a hanging power pack to provide electricity and hydraulics to the up-tower crews, saving them the need to run an umbilical 400 feet to the ground.

3 Adjustable rigging was also utilized, which enabled crews to locate an unknown center of gravity remotely from the ground.



4 Barnhart completed all three towers during the spring windy/muddy season in just seven weeks. Previous work on this site took approximately seven weeks per tower. Barnhart saved the customer money, reduced delays and executed the scope of work flawlessly, showcasing a safer and more efficient method.

1 Barnhart provided lifting, rigging and on-site transportation to remove and replace a section of a 93,550-pound kiln at a pulp and paper mill in Virginia.

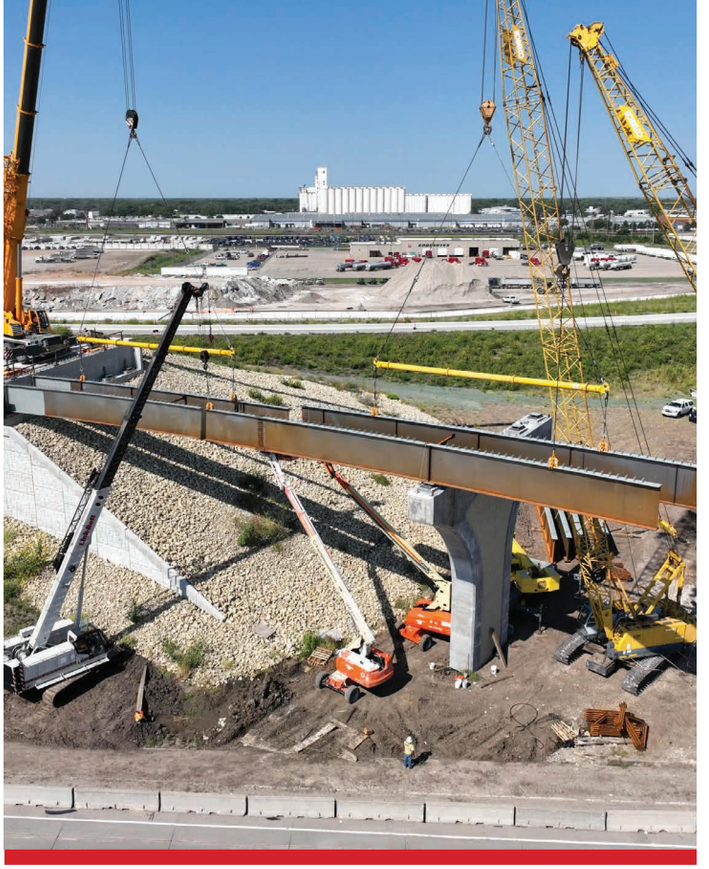
2 The crew utilized its 25-ton pull-up jacks to support the section while it was cut from the existing kiln. The jacks then set the kiln section on a 500-ton slide track system on an elevated platform.

3 The kiln section was slid to Barnhart's LT-50 lift table, which can lift and lower equipment in a continuous motion. It was then lowered 23 feet to a waiting 6-line Goldhofer trailer.

4 The section was transported on the Goldhofer within the plant to a designated laydown area. To reach that area, the piece had to be rotated 90 degrees to maneuver around site obstructions.

5 The new section was installed in a reverse process. Despite unexpected flooding, the job finished two shifts ahead of schedule with no incidents.

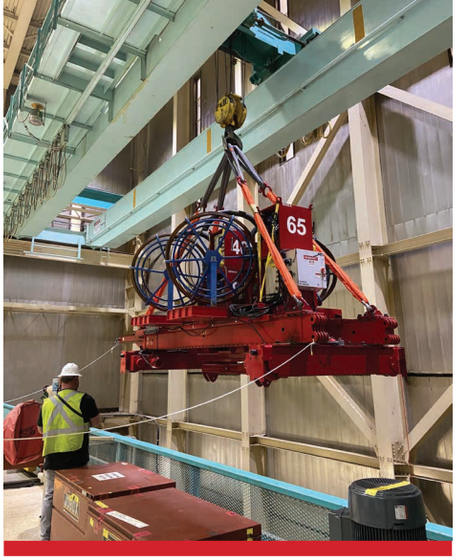
1 Barnhart was hired to set 12 bridge girders at the intersection of highways K-96 and I-135 in Wichita, Kansas. The girders were 80' long and averaged 35,000 pounds each.



2 The schedule was tight because both highways had to be shut down during the work.

3 The girders were trucked into the site and offloaded by Barnhart's all-terrain crane. The space for building the crane was congested, and the terrain required additional matting to ensure it was level.

4 The project took place in two phases, four weeks apart. Barnhart was able to set all 12 girders and complete the job one day early.



1 Barnhart devised an unusual way to remove and replace two 130,000-pound feedwater heaters (FWH) at a nuclear plant in South Carolina. They created a custom temporary lifting device (TLD) that used a combination of four strand jacks and a custom-designed Strand Management System. This system allowed lifting without damaging insulation on the FWHs or requiring workers to struggle managing strands over obstructions and from elevated positions.

2 The area was congested and ground bearing pressure allowances were low. The team used its Barnhart Push-Up Units, a high-capacity system which has a small footprint and excellent stability. The separate synchronized units pushed a turntable and the TLD to elevation. The lifting device was rotated and set on top of the overhead crane rail.

3 The old FWH was attached to the TLD utilizing a custom swiveling spreader bar. The heaters started in a vertical position and required tailing to a horizontal position for removal and over-the-road transport. There was approximately an inch of clearance available for the final TLD assembly to the roof structures and lifting configurations to clear the lower floor obstructions.

4 The heaters were lowered onto Barnhart's 500-ton slide system and custom tailing and sliding saddles prior to staging on the turbine deck. Prior to lifting operations, the team identified and labeled the operational limits of the TLD in the overhead and FWH bearing points on the floor. The engineering and fabrication of these components had to be perfect for all the moving parts to function as one.

5 The new feedwater heaters were brought in on a trailer and staged on the turbine deck prior to the outage. The process was reversed for the installation. Customer expectations were high, and Barnhart exceeded them by completing the project several shifts ahead of schedule, resulting in time and cost savings.

1 Barnhart was hired to move a 223,999-pound cold box from the Port of Tacoma in Washington to an industrial plant in Kent, Washington. The box was 117' long x 14' wide x 10'8" high. It was hauled on 12 lines of an Eastrac trailer.

2 There were tight working conditions at the site. Rigging posed a challenge as well. The picking eyes were inset into the frame of the structure, which was originally designed for lifting the tower in the horizontal position. However, it was not ideal for tripping the tower into the vertical position. The engineering-designed boomerang links allowed Barnhart to tail the vessel from the original picking eyes without damaging the cold box or modifying it for traditional rigging methods.

3 A Demag CC2800 660-ton crawler crane was assembled on site and used as the head crane to upend the box. Barnhart's Demag AC1600 650-ton all-terrain crane functioned as the tail crane.

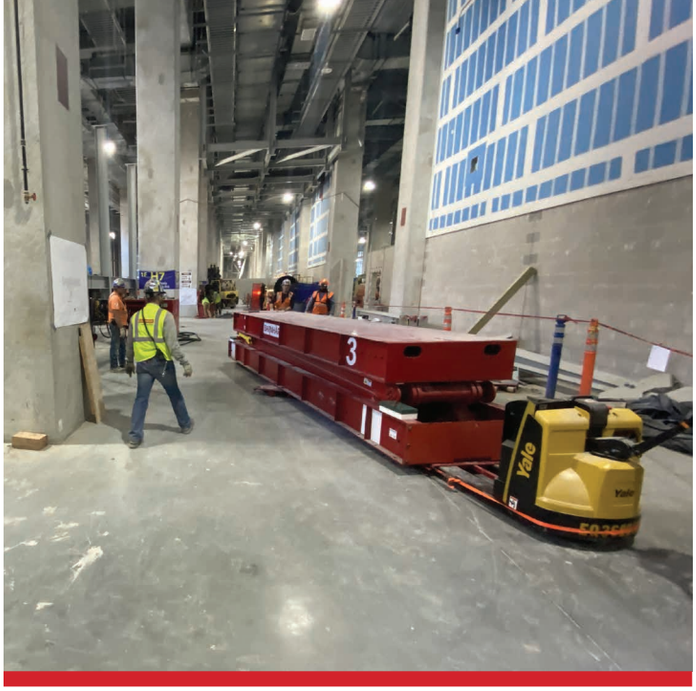
4 The cold box was tailed to an angle position and the front legs were set on mats before the tail rigging was removed from the cold box. This tripping technique was used so that the customer could install decks onto the cold box prior to the lift. By installing the decks prior to lifting the cold box into the vertical position, Barnhart saved the customer both construction time and cost.

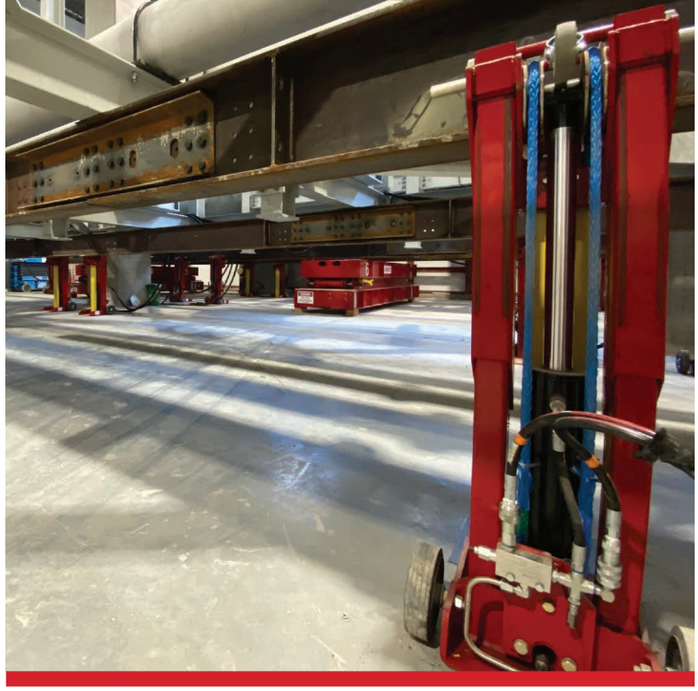
1 An agricultural processing facility in Iowa reached out to Barnhart with a project to replace three existing smaller vertical processing vessels with a single, larger horizontal one. The team mobilized a Liebherr LR 11000 heavy lift crane to the site to lift and install the new vessel. The pick took place over a railroad, so Barnhart worked closely with the client and rail representatives to fit within the limited timeframe for the vessel pick.

2 Additionally, the new vessel was 51' long and 13' in diameter and the roof opening was only 47.5' long. To fit the vessel through the opening it would have to be rotated to a 25-degree angle relative to the horizontal orientation, with the inlet end down. Barnhart attached the 251,000-pound vessel to its 300-kip Tip Stick. This beam-like tool adjusted the position of the lift point to tip the load.

3 Once the vessel entered the building, it needed to be rotated back in the opposite direction to its final operating orientation, with the inlet end up. With the Tip Stick, it only took minutes to achieve the precise final set angle.

4 Due to the planning and coordination by the Barnhart team, the project was completed faster than scheduled. This enabled the customer to increase production by mitigating an area of critical path.





1 Barnhart was tasked with lifting large mechanical, electrical and plumbing (MEP) modules at a Texas manufacturing site's utilities building. The modules needed to be attached to the building's ceiling and lifted over 25 feet for installation. The initial solution required the contractor to make hundreds of welded connections of up to 64" large-diameter pipes at elevation. This would extend the schedule, require more manpower working at height, increase congestion and impact safety risk.

2 Barnhart's engineers and fabrication shop worked with the contractor to devise a safer solution, which involved creating two new tools: Lift Tables and Jack Masters. These portable tools could be trucked in and set up at the site using machinery moving skates and a motorized pallet jack. The contractor's crews connected longer and larger areas of pipe and steel at grade before Barnhart lifted the modules. This approach increased safety and efficiency by allowing work to be done at ground level instead of at height.

3 The Jack Masters lifted the modules, weighing up to 300,000 pounds, to a height where the LT50 Lift Tables could be positioned to take over. They then lifted the units from 40" off grade to approximately 26' in one synchronous lift. Advanced laser sensors in the LT50 enabled precise height adjustments, ensuring accurate placement of each module. These tools not only minimized fall risk, but helped maximize the fabricator's efficiency.

4 Once elevated, the system safely held the component in place while it was connected to the ceiling. During the lifts, the fabricator worked ahead of Barnhart to ensure a constant flow of constructed areas ready to be lifted and connected. By working with the customer and leveraging Barnhart's expert engineering, the team maximized safety, improved schedule and introduced new tools to market.

Barnhart's 15 Kip Jack Master, with a minimal toe height of 5", lifts heavy loads effortlessly, even in tight spaces.

The precision and coordination of the 15 Kip Jack Master showcases the expertise of Barnhart's team, providing a seamless lifting solution in a challenging industrial setting.

15 KIP JACK MASTER

When precision and safety are paramount in industrial environments, Barnhart's 15 Kip Jack Master delivers unmatched performance. This versatile tool is designed for operations where space is tight and reliability is critical. With a minimal toe height of just 5", the 15 Kip Jack Master excels in lifting loads with limited jacking space above grade, making it the perfect solution for challenging environments.

The Jack Master offers a stroke of 3'4" and can reach a maximum toe height of 3'9", allowing it to easily lift loads from ground level to trailer height. With a capacity of 15 Kips per unit, this system becomes even more powerful when used in conjunction with Barnhart's Unifier System, which allows for synchronous lifting with up to 32 Jack Masters. This level of precision is vital in large-scale operations where coordinated lifting ensures safe and accurate handling.

Safety is woven into the design of the 15 Kip Jack Master. The built-in kickstand enables secure load positioning, and the ability to disconnect hydraulics ensures a safe environment for operators. This attention to safety, combined with the ease of maneuverability, allows the Jack Master to be wheeled into place by hand, streamlining the setup process and enhancing efficiency on the job.

Barnhart's 15 Kip Jack Master isn't just about the equipment—it's about the expertise behind it. With Barnhart, you're not just getting a tool; you're getting a dedicated team that ensures your project runs smoothly from start to finish.

SCAN THE QR CODE TO SEE OUR JACK MASTER ANIMATION

The Springdale branch setting bridge girders at night handling weights of up to 126,000 pounds per beam and lengths of up to 230’6”.

LITTLE ROCK, ARKANSAS

Barnhart’s Little Rock branch is one of its most longstanding locations, with a legacy of service that spans more than 25 years.

As the third branch in Barnhart’s nationwide network, Little Rock has played a pivotal role in the company’s growth and success in the central Arkansas region. Over the years, the branch has solidified its reputation as a trusted provider of crane, rigging and transport services, particularly in industrial plant outages and machinery moving. These specialties have made Little Rock an essential partner for industries like power and pulp and paper, where precision, safety and timeliness are paramount.

With decades of experience, the Little Rock team handles some of the most demanding projects, especially in industrial settings. Whether it’s facilitating a large-scale outage at a power plant or navigating tight quarters at a pulp mill, the branch is equipped with the expertise and tools necessary to get the job done right. One standout piece of equipment is the branch’s EVO remote control system, a cutting-edge rigging tool that allows operators to control machinery with handheld remotes. This innovation, the first of its kind within Barnhart, has added a new level of efficiency and precision to the branch’s already impressive capabilities and serves as a testament to the branch’s commitment to utilizing innovative solutions to meet customer needs.

In addition to its industrial focus, the Little Rock branch also serves the commercial sector, handling projects that range from HVAC unit replacements to cell tower work. The team regularly tackles projects like unloading tanks, stacking or removing cell towers, and setting commercial equipment. While these commercial jobs may differ from the larger industrial outages that are the branch’s specialty, they remain a core part of the day-to-day operations for the branch.

SPRINGDALE SATELLITE

No discussion of the Little Rock branch would be complete without mentioning its satellite location in Springdale, Arkansas. Launched in 2023, the Springdale branch was established to serve the booming Northwest Arkansas market, an area known for its rapid growth in construction, infrastructure and manufacturing. While Springdale focuses more on commercial and civil projects, such as bridge work and food processing, and has its own equipment readily available, it benefits from the shared resources and leadership of the Little Rock team. This collaboration allows Barnhart to seamlessly manage both small and large-scale projects across the state, providing customers with the high level of service and expertise they expect.

"Our focus has always been creating a culture of excellence," says Branch Manager Chris Sorvillo. "We want to be the undisputed leader in service, offering professionalism and quality from the office to the field. Our goal is to provide safe, efficient work and build lasting relationships with satisfied customers. This dedication to service has allowed the Little Rock branch to retain long-term customers and build lasting relationships in the industry."

With its long-standing presence, expert team and innovative tools, Barnhart Crane's Little Rock branch continues to set the standard for lifting and rigging services in Arkansas. Whether in the heart of central Arkansas or the rapidly growing Northwest, Barnhart is equipped to tackle the most challenging projects and provide solutions that save time, money and resources for its clients.

The crew working at 280' elevation servicing rooftop chillers with a 600-ton crane in downtown Little Rock.

The Little Rock branch at the Hot Springs Convention Center removing and replacing an escalator using a Mobi-Lift and 18K forklift.

BARNHART

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- KENT, WA
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- SPOKANE, WA
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BARNHART EQUIPMENT

ALTERNATIVE LIFTING

- FULL FLEET OF HYDRAULIC JACKING
- GANTRY TO 800 TONS
- LIFT TABLES
- STRAND JACKS
- TEMPORARY OVERHEAD CRANES
- EXTENSIVE SPECIALTY RIGGING

TRANSPORTATION & LOGISTICS

- DUAL LANE TRANSPORTERS
- SUSPENSION GIRDER SYSTEMS
- HYDRAULIC PLATFORM TRAILER
- PROJECT CARGO BARGING
- RAMPS AND TEMPORARY BRIDGES

MARINE HEAVY LIFT

- 1,250 TON MS RIVER DERRICK – MEMPHIS

TELESCOPIC BOOM CRANES

- FROM 7 TO 900 TONS

LATTICE BOOM CRANES

- CRAWLERS 100 TO 1,375 TONS
- 1,760 TON RINGER

SERVICE SPECIALTIES

- OVER 700 OPERATED CRANES
- RIGGING ENGINEERING
- LASER SCANNING
- STORAGE FACILITIES
- TURNAROUND OPERATIONS
- ENGINEERED LOAD TESTS
- LOAD WEIGHING
- MOCK LIFTS