

PIPE MODULAR LIFT SYSTEM



This Changes Everything!

Engineered Rigging has created a revolutionary game changer with its patent-pending Pipe Modular Lift System (PMLS). The PMLS eliminates the hazards of suspended loads by employing a platform that mechanically raises and lowers heavy cargo via a system of structural elements. It provides a safer and faster method of lifting equipment and materials up and into elevated equipment hatches. In addition, the PMLS has numerous advantages over traditional crane and gantry lift systems. It is proudly engineered, manufactured and load tested in the U.S.A.

Speed, Power & Versatility

Given its freestanding modular design, the PMLS's capacity and footprint can be configured to best accommodate site requirements.

- Lift Speed: 20 inches per minute, twice as fast as strand jack systems!
- Lifting Capacities: 400, 800 and 1,200 tons
- Vertical travel distance up to and exceeding 50 feet, with exact height customized to match project requirements
- Clear span openings configurable to 50 feet or larger
- Square, rectangular and round layouts
- 5 percent side loading

Minimizes Load Handling & Reduces Risk

The PMLS platform was designed to accept any mobile material handling equipment, such as Engineered Rigging's self-propelled modular transporter (SPMT), with the cargo in place. This approach eliminates the need for additional equipment and lifts to transfer components from one system to another. Once the PMLS reaches the desired elevation, the mobile material handling equipment transfers the cargo from the platform to the adjoining structure for delivery.



Easy Transport & Rapid Assembly

- Ships in 12 standard ground transportation trailers versus 25 to 30 trailers needed for cranes or gantries
- Assembles in 5 shifts, or fewer, compared to 3 to 4 weeks for comparable systems
- Requires no wide load or heavy load permits

Safe, Reliable Operation

Unlike traditional lift systems, there are no cable drums or strands that can fail or hydraulics that can leak. The self-locking PMLS provides perfectly synchronized lifting and positive mechanical engagement of the cargo and the platform – 100 percent of the time.

- Wind Load: 50 miles per hour (operating) and 120 miles per hour (high winds), which enables work to safely continue despite inclement weather
- Computerized Control: sets vertical travel distance based on user input
- Power Failsafe: load remains in place on the secured platform until power is restored
- Performance is not affected by unbalanced loads

The PMLS complies with the applicable sections of the following standards:

- AISC Manual of Steel Construction, 9th Ed. and 13th Ed.
- ASCE 7-10, Minimum Design Loads for Buildings and Other Structures
- AWS D1.1, Structural Welding Code
- ASME NQA-1-2004, Subpart 2.15, Quality Assurance Requirements for Nuclear Facility Applications
- ASME B30, Various Sections
- NUREG 0612, Control of Heavy Loads at Nuclear Plants
- 29 CFR 1926, OSHA Construction Industry Regulations

The PMLS has dynamic functionality and limitless capabilities. Shown at right is a PMLS and an SPMT upending a vessel weighing up to 1,200 tons. On the cover is a photograph of the PMLS being used to lift materials and equipment 50 feet above the ground to gain access to the building's only equipment hatch. Demonstrations are available via video or at Engineered Rigging's Arkansas facility.

