

# ACT

The magazine for the crane, lifting and transport industry

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## ACT100

Exclusive listing of  
North America's  
leading crane  
companies

Sims' Tadano AT performs magic at Disney

# Cinderella story

Official domestic  
magazine of  
the SC&RA



10<sup>TH</sup> ANNIVERSARY ISSUE  
SC&RA  
10-year report  
P57

Engineered Rigging's new Pipe Modular Lift System eliminates the hazards of suspended loads by employing a platform that mechanically raises and lowers heavy cargo via a system of structural elements.

**ACT** reports exclusively that Engineered Rigging is unveiling an innovative pipe modular lift system.

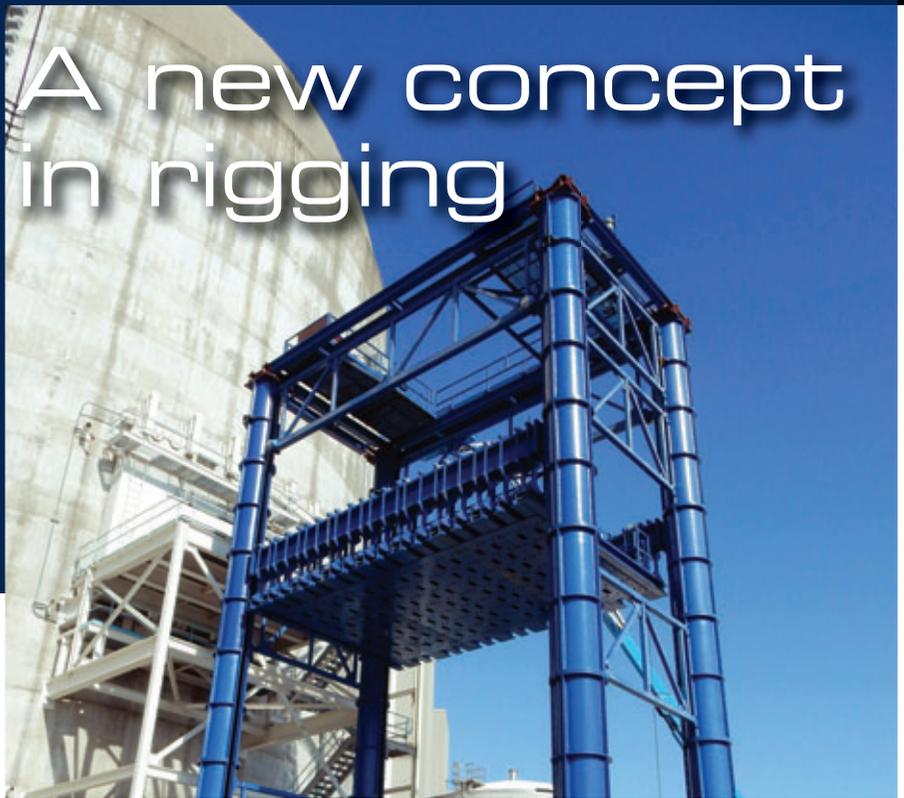
Since the ancient Greeks invented the first construction crane around the year 900 B.C., a certain amount of risk has always been inherent in the use of a hook to lift heavy objects. Engineered Rigging has created what it terms "a revolutionary game changer" with its patent-pending Pipe Modular Lift 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. To maximize safety, the self-locking PMLS provides synchronized lifting and positive mechanical engagement of the cargo and the platform, and its performance is not affected by unbalanced loads.

The PMLS's freestanding modular design enables customized capacity and footprint configurations. The system can accommodate lifting capacities of 400, 800 and 1,200 tons at a vertical travel distance exceeding 50 feet. The standard column section can be incrementally increased in 10-foot sections and it can be configured into square, rectangular and round layouts. It is designed for 5 percent side loading with clear span openings configurable to 50 feet or larger.

Designed to be safe and versatile, the PMLS is easy to transport, can be deployed quickly, has a high lift speed and high wind tolerance. It ships in 12 standard ground transportation trailers without wide or heavy load requirements.

With a lifting speed of 20 inches per minute, the PMLS is twice as fast as strand jack systems. There are no cable drums or strands that can fail or hydraulics that can leak. If the PMLS loses power, the load remains safely in place on the secured platform until power is restored.

# A new concept in rigging



The PMLS is designed to withstand 120 mph winds and operates in winds up to 50 mph, which is in excess of the 20 mph wind tolerance of many lift systems. Its wind capacity and enclosed structural elements enables work to safely continue despite inclement weather conditions, which is important in keeping critical path projects on schedule, the company said.

By eliminating high-risk lifting operations and safely handling critical components, the PMLS creates a minimal load handling environment. The platform was developed to accept any mobile material handling equipment, including fully loaded Self Propelled Modular Transporters (SPMT) with cargo in place. This approach eliminates the need for additional equipment and lifts to transfer the component from one system to another. Once the cargo is loaded on the platform, the computerized system controls the desired vertical travel distance based on the user's input.

Redundant safety limits have been incorporated into the system to eliminate travel beyond the required distance. When the desired elevation is reached, the mobile material handling equipment transfers the cargo from the platform to the adjoining structure for delivery. By

**The self-locking PMLS provides synchronized lifting and positive mechanical engagement of the cargo and the platform. Performance is not affected by unbalanced loads.**

minimizing the number of load-handling evolutions, the PMLS mitigates high-risk activities.

Engineered Rigging said the system is ideal for heavy rigging applications servicing the nuclear, aerospace, petrochemical, manufacturing, steel and other industries. The PMLS was recently utilized at a nuclear power generating station.

The PMLS complies with the applicable sections of some nine AISC, ASCE, ASME, ANSI and other standards. It was engineered, manufactured and load tested in the U.S. Demonstrations of its capabilities are available via video or at Engineered Rigging's facility in Russellville, AR.

To see a demonstration of the PMLS email [info@engineeredrigging.com](mailto:info@engineeredrigging.com).

