Trans/action

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Central Gulf LASH vessel departs New Orleans enroute to the Middle East.

Long-distance shipping via Central Gulf LASH ships helps Vulcan Iron Works customers meet the tightest schedules with cost-effective, on-time delivery. Using a scale model, Vulcan chairman Henry G. Warrington shows how one of these mammoth pile drivers operates.

LASH knocks out heavyweight delivery problems

A 125-year old manufacturer of pile drivers knows how to build them and how to ship them — to arrive on site on time.

Vulcan Iron Works knew they spotted a good thing 20 years ago when they started supplying heavy-duty pile driving equipment to the soon-to-boom offshore oil industry.

Capitalizing on the offshore industry's growth, Vulcan has become the only U.S. manufacturer of these highly specialized products and, internationally, now enjoys a domineering 80 percent of the world market.

As a major manufacturer of on-shore pile driving equipment since 1852, Vulcan seized the opportunity by beefing up the design of its shore-bound equipment to meet the rigors of offshore applications. Headquartered in West Palm Beach, Florida, the Company now markets a full line of hammers, caps and leaders to meet these tough offshore specifications.

"Because we've literally grown up with the industry, we're thoroughly familiar with all its particular wants and needs," said Vulcan chairman Henry G. Warrington. "We know we're dealing with very, very expensive operations and equipment, plus battling the weather. Obviously, reliability is a must, from both an equipment and a delivery standpoint."

Vulcan's line of specialized gear reflects this concern for rugged reliability. In fact, the first Vulcan

hammer ever sold for offshore application is still in use.

Tight delivery schedules

Besides being reliable, the hammers have to be at the right place at the right time. Warrington estimates that every hour of downtime during construction costs the installer over $5,000 that can never be recovered. And because Vulcan's customers often need this heavy, bulky equipment in remote overseas locations, shipping can be a major problem.

To solve the shipping problems, Warrington believes that LASH (Lighter-Aboard-SHip) services offer many advantages over conventional types of ships.

To illustrate, he describes a recent shipment destined for the Mid-East in which the cargo, consisting of a hammer, cap and leader with a combined weight of 176,000 lbs., was booked on a LASH vessel operated by Central Gulf Lines, an affiliate of Trans Union Corporation.

The cap and hammer were manufactured in Vulcan's Chattanooga, Tennessee foundry, and shipped by rail to Savannah, Georgia. At the same time, the leader section was sent to Savannah from Vulcan's fabricating plant in West Palm Beach, Florida. The three pieces of equipment were marshalled at the Savannah dock and loaded into a Central Gulf LASH barge which, in turn, was lifted aboard the LASH mothership by the vessel's own gantry crane.

Trouble-free LASH delivery

"As far as pure logistics go, this LASH system performs a delivery job that nothing else can," Warrington explains. "And with our heavy, bulky product, we find some very specific benefits in shipping via LASH.

"Because of the size and weight considerations, we've traditionally been locked into off-loading only at ports with heavy lift cranes. In many remote, small ports, such heavy lift equipment simply isn't there.

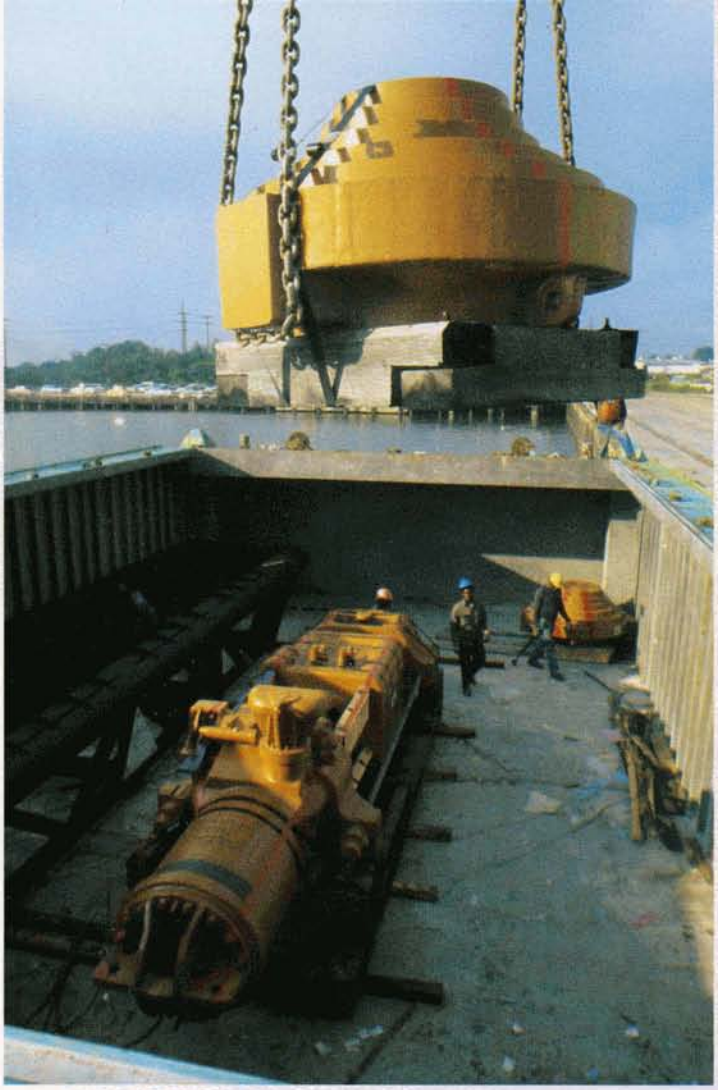
"Even in ports equipped with heavy lift cranes, there is often a long delay waiting to dock and unload, such as in the Mid-East today, where two to five month delays are common. On top of this, there are tugs, pilot, handling and docking fees to consider with conventional shipping," Warrington adds.

LASH vessels eliminate these problems. Central Gulf LASH barges are lifted and stowed aboard ship in a matter of minutes and off-loaded just as quickly, all the while being out of the port and away from its associated costs.

Once in the water, the barges can be moved by tug alongside the offshore rig and unloaded by the rig's crane. It's a smooth system for transporting Vulcan's pile driving equipment and works equally well for other supplies needed at offshore construction sites.

"We're dealing with construction projects that are gigantic in size and in dollars invested," Warrington concludes. "It's a 'high rollers' game, for sure, and extra demanding on men and materials. LASH is the way to make sure the materials are there when the men need them."

At a dock in Savannah, Georgia, a Vulcan leader is loaded aboard a Central Gulf LASH barge.



Next, the pile driver cap is lowered into the LASH barge, alongside the hammer section.

In operation, Vulcan hammer drives pile through leg of off-shore platform, securing it to the ocean floor.

The pounding hammer is guided to the stationary cap by a leader, shown here being inspected prior to shipment.