



## **PINTO TERMINAL CRANES ARRIVE IN THE PORT OF MOBILE**

### **Vessel Arrives Carrying Three New Gantry Cranes First of Its Kind Barge Haul System Also On Board**

**November 19, 2008, Mobile, Ala.** – Today Alabama State Port Authority officials welcomed the M/V ZHEN HUA 25 as she delivered three ZMPC gantry cranes that will support a new \$100 million dollar steel terminal at the Port of Mobile. The Alabama State Port Authority management and consulting engineers oversaw the arrival of the new cranes, a barge haul system and offloading components, some of which will set a new standard for marine terminals. “We believe we are deploying the latest technological standard for marine terminal operations seen nowhere else in the world,” said, Jimmy Lyons, director and CEO for the Port Authority. Pinto Terminal is scheduled to open in early January.

The three Post-Panamax ship-to-shore cranes were manufactured by ZPMC in Shanghai, China, and delivered on ZMPC’s heavy lift ship designed to carry fully assembled cranes and other large components. Each crane in its operating position is 200 feet high with a rail gauge (spread between the crane’s legs) of 120 feet. The cranes’ boom will have an outreach of 150 feet and a back reach of 165 feet. The cranes carry a 78 metric ton maximum capacity and will be equipped with magnet lift devices capable of lifting steel slabs weighing up to 36 metric tons. These magnets are the first to be utilized in any ship-to-shore cargo handling operation in North America.

In addition to the new lift technology, the new Pinto Terminal cranes will deliver a greener footprint to the Port of Mobile and its community. The cranes are equipped with the latest generation crane drives, which eliminate emissions and lower noise levels. These cranes are operated by AC vector or electric powered drives that are connected to an alternating current (AC) line. Noise levels are also greatly reduced when using electric power. To illustrate, the crane operator sitting in the cab below the electric motors will experience a noise level similar to today’s newer vacuum cleaners. As you move away from the crane, the already low noise levels from the power system are ultimately eliminated altogether. Many older generation cranes powered by diesel fuel and deliver significant noise levels associated with very large combustion engines. “We went into terminal development and design with an eye toward reducing the overall carbon footprint and setting new technological standards for marine terminals,” Lyons said.

That technology is also extended to the use of Radio Frequency Identification (RFID) technology at the terminal. The RFID system is capable of identifying and recording each slab, which can vary in size, weight and metallurgy. The RFID technology allows the crane operator’s computer to communicate directly with the customer to identify steel slab bound for the steel mill. “This technology really streamlines cargo handling operations as it allows for inventory tracking and providing extremely efficient delivery to the plant,” said Lyons.

In addition to the cranes, the M/V ZHEN HUA 25 also carried into port one-of-a-kind bridge beam units that will be used to offload the cranes. Typically, marine terminal cranes are rolled off of ships and placed on rails located along the dock. In this case, the Pinto cranes will roll

off the ship then travel across the body of water located behind the ship's dock. That body of water, by design, supports a uniquely designed automated barge haul and loading area; whereby the gantry cranes can discharge cargo direct from ship to barge. The Port Authority's engineers, Shaw GBB LLC and ZMPC collaborated on the engineering and design of the bridge assembly, reinforced dock and the temporary pile support system installed in the barge slip that will allow the cranes' rear legs to travel across the ship dock, over water to the land side rails. "Our challenge was to deliver a terminal designed to accommodate the efficiency and low cost concepts developed by the Port Authority during the ThyssenKrupp recruitment process," said Stan Gottlieb, Senior Vice President of Shaw GBB LLC. "Our challenge was to develop an engineered solution for getting the cranes across open water." The cranes' transition from ship to the landside rail over a body of water has never before been attempted making this operation an engineering marvel.

Another key feature of the Pinto Terminal is the uniquely designed barge haul system. This system is another first for the marine terminal industry as the slip will be equipped with three units that will independently or simultaneously control three barges during cargo loading operations. Today's barge haul systems require barges be lashed or tethered during loading or unloading; and simultaneously move through the barge haul system. Pinto Terminal's independent action will allow the cranes to load barges independently creating a more efficient system of loading.

Pinto Terminal is a public terminal owned by the Alabama State Port Authority. The Port Authority is currently seeking through a proposal process a private sector partner to operate the terminal. The qualified company would lease the facility, perform day-to-day operations, handle staffing and maintain the equipment. The terminal already has a standing commitment to transfer from ship to barge inbound steel slabs for the ThyssenKrupp Steel USA (TK) plant set to open in north Mobile County in early 2010. About 80 percent of the facility's storage space will be used by TK, but the rest is open for public use.

### **About the Alabama State Port Authority**

The Alabama State Port Authority, headquartered in Mobile, Ala., owns and operates the State of Alabama's deepwater port facilities. The Port of Mobile is currently ranked 10<sup>th</sup> largest U.S. port in total volume. The Authority's container, general cargo, bulk, and heavy lift terminals have immediate access to two interstate systems, five Class 1 railroads, four-day rail service to Mexico and nearly 15,000 miles of inland waterway connections. Learn more at [www.asdd.com](http://www.asdd.com).

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#### Contacts:

Judith Adams, Vice President of Marketing  
Alabama State Port Authority  
251-441-7003  
251-751-3497  
[jadams@asdd.com](mailto:jadams@asdd.com)