



CONTAINER CRANE MARKET-2008

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THE CHINESE CONTINUE TO DOMINATE

Amongst all the hoopla surrounding Chinese crane manufacturer ZPMC, the world's leading crane producer continues to establish a remarkable record of ship to shore container gantry crane sales. The Shanghai based company has developed a production process that is manufacturing cranes beginning to be known for their quality, reliability and productivity, averaging over 200 dockside cranes per year.

It is difficult to remember that there was a time when terminals frowned upon the thought of a Chinese crane. It is also difficult at times to remember that there are other manufacturers out there producing ship to shore gantry cranes.

While their records have largely been established outside the North American market, manufacturers such as Konecranes, Liebherr C.C., Doosan, Fantuzzi Reggiane and Mitsui Engineering and Shipbuilding have completed deliveries in the United States and Canada over the last few years, keeping the door open. Regardless of the present state of the economy, the future will bring opportunities and new marine terminal projects are already in the planning stages. Anticipating new business around the corner, crane manufacturer Kalmar, to date absent from the North American market, is said to be showing interest on a case by case basis.

The fact remains, that ZPMC will continue to be a formidable competitor but the others expect to retain their present customers as long as they can remain reasonably competitive. Since 1992, the mix of manufacturers supplying cranes to the North American market has included Chinese, Japanese, Korean, German, Finnish and Italian producers. This has changed, however, and many Japanese manufacturers have not been seen in the market for sometime. Through July 2008, as example, the only recorded order for North America that was not won by ZPMC this year is an order to Mitsui for four cranes destined for the Yusen terminal in the Port of Los Angeles. The Mitsui cranes are scheduled for delivery in 2009.

Including the Yusen cranes, this has actually developed into a fair year for either delivery or new orders for ship to shore cranes in North America. ZPMC, has 14 cranes on their books to date. They will deliver one crane to DPW in Vancouver, BC, three cranes for TSI in Vancouver, four cranes for APM Terminals in Los Angeles and three cranes for Horizon Lines. The Chinese were also expecting an order for three ship to shore gantry cranes rigged for steel slab handling, that was confirmed in late July this year. In addition, the Port of Jacksonville is planning to purchase two cranes to replace the two they recently lost in a storm related accident, but a crane manufacturer has not been named. Most of the ZPMC orders are for delivery in mid to late 2009, however, the cranes for Horizon Lines, destined for the port in Anchorage Alaska, are to be delivered

late in 2010. The cranes for Jacksonville, depending up when they are ordered will most likely be delivered in 2011.

The *World Cargo News* annual survey of ship to shore container crane production dated July 2008, reports that the 389 cranes were ordered between July 2007 to July 2008. The total was split between ZPMC, 304, and non-Chinese manufacturers, 85. The survey listed a worldwide market that included 11 non-Chinese manufacturers participating. Liebherr lead this segment of the pack with 21 orders, Mitsui Engineering and Shipbuilding was close behind with 20 and Korea's Doosan HI&C with 15 cranes, third. Fantuzzi Noell Reggiane C&P and Konecranes were tied with 9 cranes each.

Last year a similar survey reported that 19 cranes would be destined for North America, with Konecranes and Mitsui the only non-Chinese manufacturers. This same survey reported that the total for these same manufacturers worldwide would be 82, three less than this most recent survey.

Other manufacturers include Paceco licensee Paceco Espana with three cranes for Spain, C Rokas with two and Hans Kunz, a barge and rail mounted yard gantry crane specialist with three, and Kalmar. The Kalmar projects, actually ordered last year are for the Rotterdam Shortsea Terminal (RST) in the Netherlands and the MSC Home Terminal, Antwerp, Belgium. These two customers have placed repeat orders and the four cranes, two each, are the result of long term relationships between the operator and Kalmar.

The RST cranes are wide-span monobox design ship to shore units, expected to be delivered in late 2008. The relationship of Kalmar and RST dates back to Nelcon days and RST has four cranes now in use, two purchased in 1999 and two purchased in 2002. Kalmar supports these cranes from its operation in Rotterdam.

The new RST cranes will have a 52 ton capacity under the spreader, an outreach of 122 feet, a rail span of 158 feet and a back reach of 70 feet. The hoisting height will be 79 feet and the operating speeds will be 131 feet per minute hoisting with a load and 329 feet per minute empty. Trolley speed will be 690 feet per minute and gantry travel speed will be 395 feet per minute.

The two cranes ordered by the MSC Home Terminal will be super post-Panamax Ship to Shore cranes also due for delivery in late 2008. These cranes will have an outreach of 24 containers and will bring the total cranes that this terminal has ordered from Kalmar to 19 (a number also being Nelcons). Kalmar's Ship-to Shore Cranes division indicates that their solid relationship with MSC has included short delivery times, excellent performance from the present cranes and solid support from the factory.

MSC's two newest cranes will feature a lift capacity of 80 tons on the ropes and 65 tons under the spreader. They will also have an outreach of 194 feet, a rail span of approximately 100 feet, and a back reach of 82 feet. The hoisting height will be 138 feet and operating speeds will be 296 feet per minute loaded and 592 feet per minute empty.

During 2008, Finnish lift equipment manufacturer Konecranes delivered a Finnish manufactured ship to shore crane to Stevedore's marine terminal, Vuosaari, located in Helsinki, Finland and accepted a follow-up order. The first crane was manufactured at the Konecranes facility in Hanko, Finland, assembled, tested and then barged to Vuosaari twelve months after order. The crane was ordered in July of 2007 and delivered in July, 2008. The second crane will have similar specifications.

Both cranes have a 50 metric ton lifting capacity and an outreach of 125 feet. The cranes are both Boxhunter models equipped with unique Active Load Control System, which prevents loads from swaying. The Boxhunter also features Konecrane's Crane Management System, which monitors the crane's productivity and condition. Konecranes dedicated AC drive system powers the crane resulting in low energy consumption. An additional feature of the Boxhunter crane is the advanced operator guidance feature, which includes a container guidance and positioning system that communicates with terminal container handling machines to optimize container placement and movement.

The second crane was ordered in February 2008 and will work along side the recently delivered crane. It will be delivered in the spring of 2009. Steveco's Vuosaari Terminal is scheduled to open in November 2008.

Liebherr Container Cranes has enjoyed past success in the Eastern part of North America, particularly in Canada. They have placed cranes in the ports of Montreal and Halifax, Nova Scotia. In addition, they have cranes in the United States at the New York Container Terminal, Port of New York.

Their market reportedly has expanded to places such as Gdansk, Poland; Durban, South Africa; Turkey; Slovenia; Odessa, Ukraine, and Novorossiysk and they report operating in 40 countries around the world. Liebherr also recently announced delivery of one Super-Post Panamax ship to shore crane to Port Point Lisas, Trinidad. This is the second Liebherr ship to shore crane at Port Point Lisas.

This crane features an outreach of 164 feet, a rail span of approximately 77 feet and a back reach of 40 feet. The safe working load is rated at 50 metric tons under the spreader and 60 metric tons on the ropes. Hoist speed is 230 feet per minute with a load and 575 feet per minute empty. Gantry speed is 131 feet per minute. The crane features Liebherr AC crane drives and the Liebherr Visuscan crane management system.

Liebherr has also signed two new contracts, one with Luka Koper dd, in Slovenia for the supply of two super post panamax cranes and the second, with Container Terminal, NUTEP in Novorossiysk for one crane. The Luka Koper cranes will be delivered fully erected to the Port of Koper. These are the first two cranes delivered by Liebherr to Slovenia. They will feature the Liebherr AC drives and Liebherr's Visuscan crane management system. The NUTEP crane will also be a post panamax crane scheduled for delivery in the 3rd quarter of 2009.

Note: Data Source: World Cargo News, July 2008