



Handling demand

As global demand for grains and other commodities has grown, and emerging grain export powers have sought to increase efficiencies in agricultural infrastructure and grow capacity in export systems, demand for ship loaders and unloaders has remained steady with brief lulls caused by political and economic instability. *World Grain's* annual survey of the world's major ship loader and unloader manufacturers has led to some interesting insights into the ebbs and flows of the global grain supply and demand system.

Most major projects in recent years have been in developing countries where growing demand for grain/food remains steady and in the regions seeking a larger place in the world's international grain supply system. While the lion's share of new

Cairo IIIA commissioned this Multiport M600 in Damietta, Egypt in January 2012. The 600-tph unloader was supplied by Melle, Germany-based NEUERO Industrietechnik. Photo courtesy of NEUERO.

by Meyer Sosland

Need for ship loaders and unloaders continues to grow in the developing world

installations are in the emerging markets, the more established markets in Europe and the North America are still investing in new equipment and updates. The developed countries' port infrastructure investments are about seeking efficiencies, updating inland canal/river port systems and investing in new equipment to meet stricter environmental and safety regulations.

One supplier noted that Latin America has many port de-

positioning of the telescopic arm in the ship's hold.

The projection system is equipped in its upper part with a slewing ring, as well as an electric geared motor allowing its orientation in the ship's hold. The total angle of rotation is 340 degrees.

VIGAN noted that the loading chute of the system is equipped with an overflow for the emptying of the vertical telescopic when stopping. The 800 mm-wide belt runs at a speed of 5 to 15 meters per second and can throw the product at a maximum distance of about 15 meters.

MIDDLE EAST INTENSIVE

The Cairo IIIA Company commissioned a ship unloader type Multiport M600 at the Damietta, Egypt port in January 2012. The 600-tph unloader, supplied by Melle, Germany-based NEUERO Industrietechnik, has been working full time ever since. The delivery time for the unloader was 10 months, with two months of assembly training and testing.

Cairo IIIA had already purchased two M600 unloaders in 2007 and 2009.

NEUERO also supplied the Venus International Company with a ship Multiport M600 and M500 (600 and 500 tph, respectively) at its facility in Dakheila, Egypt. NEUERO provided Venus International with two 500-tph ship unloaders in 1998 and two 600-tph ship unloaders in 2010.

Between 2009 and to 2011, NEUERO noted it has supplied eight ship unloaders (four 300 tph and four 600 tph) in the Port of Jeddah for Mansour Al Mosaid Co.

NEURO noted that since 2005 it has installed over 46 unloaders M300-M600 (26 unloaders type M600) in the Middle East.

The company also recently installed two Multiloader 800-tph ship loaders in Constanta, Romania for North Star Shipping, a partner of Toepfer.

NEUERO noted that the Multiport M600 (600-tph capacity) is its best-selling unloader. This unloader is available as rail mounted, stationary, or on rubber tires with its own genset. The equipment has a longer expected lifetime compared with standard pipes made of manganese steel.

BARGE UNLOADERS

In recent years, Nord Céréales in Dunkerque, France has experienced a large increase in the delivery of grain by barge. To handle this increase, Nord Céréales has reached out to Uzwil, Switzerland-based Bühler AG to install the Bargolink mechanical barge unloader.

Bühler said this Bargolink has a nominal capacity of 300 tph and can handle barges up to 3,000 DWT (dead weight tonnage) to handle the divergent barge sizes that Nord Céréales is receiving. The Bargolink travels on rails during the unloading process, which increased productivity significantly in combination with the feeding screws.

Bühler noted that installation of the Bargolink has more



The Bargolink's marine leg is equipped with a fixed mounted feeding screw that digs into the grain in the ship's hold and lifts it up onto a horizontal chain conveyor that carries the cargo to the port's storage units. Photo courtesy of Bühler.

than doubled the unloading capacity of Nord Céréales from the original nominal capacity of 2,500 tonnes per day up to 7,000 tonnes per day.

“The use of mechanical unloading was previously only feasible with larger ships. Bargolink's feeding screw brings the advantages of that approach — low energy use and less wear and tear — to barges,” Vincent van der Wijk, product manager, Bargolink, said.

Barge transport is increasingly seen as an ecological and cost-efficient alternative to railway and truck haulage. Bühler noted that the Bargolink was developed to aid the barge transport systems' efficiency.

A barge carrying one tonne of cargo can travel five times as far on five liters of diesel as a truck with the same freight — 500 km compared to the truck's 100 km of range overland. A ship carrying 3,000 tonnes of goods is equivalent to 50 railway cars or 100 trucks.

Three customers in China, Croatia and France have already purchase Bühler's Bargolink. “There is huge market potential in many countries all over the world. China, for instance, has been expanding its shipping infrastructure,” van der Wijk said. “A Bargolink system was shipped to Yihai Ltd., this summer. In Russia, like on the Mississippi in the U.S., river barges deliver most of the grain exports to port.”

WG

We want to hear from you — Send comments and inquiries to worldgrain@sosland.com. For reprints of WG articles, e-mail reprints@sosland.com.