HANDLING AGRIBULK WITH EASE

COMPANY NEWS

Belgium-based VIGAN Engineering S.A. designs and manufactures a complete range of pneumatic and mechanical conveying systems for products in bulk, not only through the supply of equipment, but also by managing complete turnkey projects.

While offering both mechanical and pneumatic solutions, VIGAN is widely recognised throughout the world as an expert in pneumatic agribulk handling technology.

MARKET TRENDS

Over the past decade, the global grain industry has slowly but constantly evolved revealing the following market trends:

- The growth in worldwide population and grain production has led to increasing demand for grain storage solutions and silos with larger storage capacities.
- Increased capacity and speed required by industry players continue to have a huge impact on the grain trade, the main reason why larger-sized equipment is required for unloading increasingly larger vessels.

These trends came to evidence throughout various projects and requests that VIGAN has faced over the past few years. Consequently, VIGAN has adapted its equipment to worldwide industry changes and new standards.

The VIGAN NIV 600 pneumatic ship unloader has now become the standard, representing on average 60% of NIV-type pneumatic ship unloaders sold by VIGAN over the past five years.

Each machine is customised and optimised according to customer’s technical requirements and site specifications: gantry type (stationary, self-propelled on rubber wheels or on rails); unloading capacity (from 160 to 800 tons/hour); boom length (up to 30m); diesel/electrical power unit, and many other specific optional devices.

FOCUS ON EFFICIENCY

VIGAN NIV-type pneumatic ship unloaders are typically suitable for medium size vessels up to post-Panamax, mainly due to their boom length, which can reach up to 30m.

VIGAN’s pneumatic equipment will handle most free-flowing products with densities between 0.5 and 0.9 and a natural angle.
of repose of less than 40°. These include all kinds of grains (corn, wheat, barleys), oilseeds, raw materials for animal feed, wood pellets, specific chemicals such as soda ash and alumina, and also slightly compacting products such as soy bean meal. With its optimised and gentle handling process, VIGAN’s equipment does not damage the products.

As each case is specific, VIGAN helps customers make the right choice. It is important to ensure that the selected machine is the most suitable for the required job, which is generally a rather complex matter. To unload, for example, up to five million tons of seeds per year, VIGAN usually recommends the use of one or two pneumatic ship unloaders on a gantry. For higher unloading rates, VIGAN recommends a mix between NIV and SIMPORTER (mechanical ship unloader). In this case, the pneumatic ship unloader would also be dedicated to assist in the cleaning of ship holds, which is the least efficient phase during the unloading of seeds, especially for mechanical unloaders.

The main advantages of the pneumatic unloaders are efficiency, reliability and cost-effectiveness. Pneumatic systems offer:
- The most efficient cleaning of the vessel or barge hold
- Low energy consumption (0.7 kWh per ton unloaded), thanks to the direct drive of VIGAN high-pressure multi-stage centrifugal turbo blower(s) and its frequency steering
- Very low breakage/damage of the products
- No spillage or contamination, thanks to the totally closed design
- No dust: filter with sleeves and automatic self-cleaning
- Low noise thanks to acoustic insulation

NEW PRE-ASSEMBLY HALL
VIGAN continuously invests in research and development and larger manufacturing facilities to offer handling equipment in line with the market demand. We invest in the design of even higher capacity equipment, such as 800 tons per hour pneumatic ship unloaders.

In order to serve our customers better and to be prepared for the future, VIGAN has expanded its manufacturing facility in Nivelles, Belgium, with a major extension of an even larger pre-assembly hall, adding 2000 m² to its existing 10,000 m² factory based here. This means that pre-assembly of all ship unloaders in VIGAN’s factory guarantees quality and shortens erection time locally, thereby cutting expenses to the minimum.

For more information, please visit: vigan.com