

VIGAN: FIVE POINTS TO SUCCESS

COMPANY NEWS

VIGAN offers mechanical and pneumatic solutions for unloading systems. But how do owners and operators choose between them? Here are the five main points that could help ports and bulk operators to make the right decision.

EFFICIENCY

Efficiency is calculated based on the ratio between the average capacity divided by the peak or nominal capacity. A pneumatic unloader has a high efficiency, the main reason being that it is sucking everything up from the very bottom of the ship. The total time to discharge the vessel "berth in – berth out" is then shorter with a pneumatic unloader compared with the same situation with a mechanical unloader of the same capacity.

POWER CONSUMPTION

Mechanical unloaders have a low nominal energy consumption at full capacity. Pneumatic unloaders are sucking up not only grain, but also a lot of air. However, for the past few decades, there has been much progress in pneumatic technology, resulting in a drastic decrease of energy consumption reaching between 0.7-0.8kWh/t. These progresses were mainly created by reducing the number of elbows, the use of multi-stage turbo blowers and the use of electronic inverters, allowing pneumatic unloaders to be programmed, according to required power.

INVESTMENT COSTS

In addition to the machine's budget, other factors to consider in investment costs are

extra fees to pay for quay construction or refurbishment, transport costs and downstream equipment sizing. Pneumatic unloader power consumption is largely compensated by lower investment costs and higher efficiency.

WEAR AND TEAR

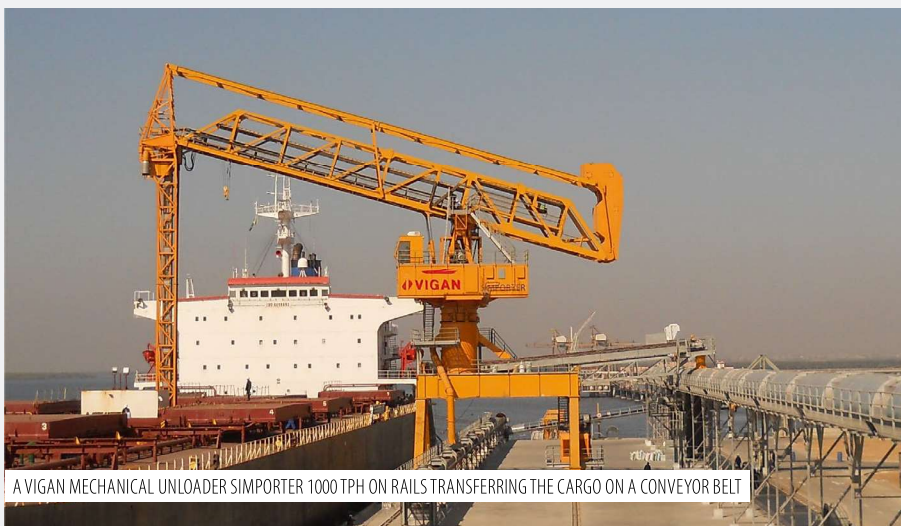
The use of electronics, high-wear resistant alloys and increased machine size (ratio surface volume decrease) makes wear on pneumatic unloaders less than on mechanical types.

FOOD SAFETY AND CLOSED CIRCUIT

Pneumatic unloaders are big vacuum cleaners. The discharge operation is generating no dust and no spillage on the quay, from the beginning of the hatch up until the end. Mechanical unloaders can guarantee very clean operations as well, most of the time, but the final discharge and cleaning might require more handling equipment, or lifting of big bags, increasing the risk of dust.

Other factors are also important in the customer's decision such as stoppage due to foreign materials, maintenance, weight, health and safety and necessary operators' skills.

For more information, visit:
vigan.com



A VIGAN MECHANICAL UNLOADER SIMPORTER 1000TPH ON RAILS TRANSFERRING THE CARGO ON A CONVEYOR BELT