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## LOOKING BEYOND INITIAL INVESTMENT

As grain terminals continue to optimize both investment strategies and operational performance, the discussion around unloading technology has become increasingly important.

### THE GROWING POPULARITY OF PNEUMATIC UNLOADERS

Pneumatic ship unloaders are often selected because they offer lower initial investment, simplified integration into existing infrastructure and reduced structural requirements. In many projects, these factors can make pneumatic systems appear attractive during the early planning phase.

### LONG-TERM PERFORMANCE TELLS A DIFFERENT STORY

However, long-term terminal performance depends on far more than the initial CAPEX. Operational efficiency, energy consumption, material handling capability, and overall lifecycle performance play a critical role in determining the true value of an unloading solution over time.

### MECHANICAL UNLOADERS AND OPERATIONAL EFFICIENCY

Mechanical ship unloaders offer several operational advantages that directly impact terminal productivity. Higher digging forces enable more efficient handling of difficult cargoes, while stable material flow contributes to predictable unloading performance throughout the operation. At the same time, lower energy consumption per unloaded tonne can significantly reduce long-term operating costs.

### BALANCING CAPEX WITH LIFECYCLE PERFORMANCE

For terminal operators handling grain and other dry bulk materials, the challenge is therefore not simply choosing the solution with the lowest initial investment but selecting a technology that delivers reliability, efficiency, and operational resilience year after year.

### A NEW GENERATION OF MECHANICAL UNLOADING SOLUTIONS

This is where the latest generation of mechanical unloading technology is redefining expectations.

Modern mechanical unloaders are designed to combine high operational efficiency with flexible terminal integration, reduced environmental impact, and dependable performance across varying cargo conditions.

The result is a more balanced approach to terminal investment, in which productivity, sustainability, and lifecycle economics work together to support long-term operational success.