

NEUERO's M600: efficient ship-unloading at Port Said's new terminal

Egypt's General Company for Silos and Storage (GCSS) has launched a state-of-the-art terminal at Port Said to bolster the country's grain storage and distribution infrastructure. With Egypt importing around 14 million tonnes of wheat annually from major suppliers such as Russia, Ukraine, France, the US, and Australia, efficient and reliable unloading systems are crucial for maintaining supply chain stability. A key component of this new terminal is the integration of two NEUERO MULTIPORT M600 pneumatic ship-unloaders, each capable of handling up to 600 tonnes per hour. These advanced systems ensure smooth and efficient unloading of essential agricultural commodities such as wheat, soybeans, barley, and corn.

THE ROLE OF NEUERO'S M600 IN PORT SAID'S OPERATIONS

NEUERO, a leader in pneumatic ship-unloading technology, has supplied two M600-30-SF-MV-HHW15 unloaders to the Port Said Terminal. These high-capacity machines are mounted on rails and powered via power cable drums, ensuring seamless operation along the quay. The new facility is designed to handle Panamax-class vessels, efficiently transferring grain to two quay conveyors or directly onto trucks for further distribution. The M600's role in streamlining logistics is pivotal to Egypt's strategic initiative to maintain robust grain reserves, mitigating the effects of market fluctuations and securing food supply for the nation's 100 million people.

UNLOADING BEGINS: STEP-BY-STEP PROCESS

The unloading process starts with the deployment of the M600's 30-metre horizontal boom, which extends over the ship's hold. The Auto Dipping System



(ADS) ensures precise control of the suction nozzle, optimizing its depth for maximum efficiency. As the nozzle is lowered into the grain cargo, the pneumatic suction system draws the material through the pipeline, minimizing dust emissions and ensuring a clean operation.

The system's partially automated

operation enables efficient movement within the hold, systematically covering all areas to achieve complete unloading. Operators monitor the process via the fully electronic control system, adjusting parameters as needed to maintain optimal flow rates.

THE SUCTION NOZZLE: PRECISION AND EFFICIENCY

At the heart of the M600's performance is its specialized suction nozzle, designed for both high efficiency and operational flexibility.

The ADS feature allows the nozzle to automatically adjust its position based on real-time material flow data, reducing operator intervention and ensuring continuous, even unloading. This automation enhances speed while preventing blockages, which is especially crucial for high-volume grain handling.

As the grain is lifted, it travels through the unloader's pneumatic system and is



discharged onto the designated conveyors or directly into trucks. This process ensures minimal grain loss, reducing handling time and maximizing throughput. The system's design also prevents grain degradation, preserving quality from ship to storage.

ADVANCED FEATURES FOR OPERATIONAL SAFETY AND MAINTENANCE

The M600 is equipped with several innovations that enhance both safety and maintenance:

- ❖ **Boom-to-ground feature:** the horizontal boom can be fully lowered to the ground, facilitating easy and safe maintenance. This also serves as a high-wind protection feature, securing the equipment during extreme weather conditions.
- ❖ **15-tonne auxiliary winch:** this allows for easy handling of auxiliary equipment and components, further enhancing operational efficiency.
- ❖ **Partially automated control:** the ADS and intelligent movement system enable optimized unloading with minimal manual intervention, improving both safety and speed.

A STRATEGIC INVESTMENT IN EGYPT'S GRAIN SECURITY

The Port Said Terminal, funded by the Government of Egypt (GOE) & OPEC Fund, represents a critical step in Egypt's long-term strategy for food security.

By incorporating cutting-edge technologies such as NEUERO's M600 pneumatic unloaders, the facility ensures efficient handling of bulk grain imports, safeguarding reserves against price volatility and supply chain disruptions.

NEUERO's expertise in ship-unloading solutions continues to play a key role in global grain logistics. The deployment of the M600 at Port Said is yet another testament to the company's commitment to providing high-performance, sustainable unloading systems that meet the growing demands of modern bulk handling operations.

With its advanced automation, high efficiency, and focus on operational safety, the NEUERO M600 is set to make a lasting impact on Egypt's grain import infrastructure, ensuring a reliable food supply for years to come.

