Case Study: How Robson Handling Technology succeeded in Egyptian Sugar import Facility.

The Customer:

Sokhna Port is a container, bulk, and general cargo port logistics operator located in the Gulf of Suez, Egypt. Close to Cairo and in one of the world’s busiest waterways, the logistics company is well-placed for trade between Egypt, the Middle East, and Asia.

Introduction:

SPDC, a logistics company and port operator, wanted to expand their port operations to include the refining of raw cane sugar for distribution and sale in the local Middle East markets. SPDC needed a solution to transfer the raw cane sugar from a container ship to a bulk storage warehouse approximately 400m away. The conveyor system needed to achieve a peak throughput rate of 1,000 tonnes/hour (TPH).
The Solution:

Working with the client appointed Engineering contractor, Robson Handling Technology supplied a raw sugar conveying solution to transfer the sugar from the ship under loaders into the raw materials warehouse, the solution included supply of conveyors, shipping, installation, commissioning and spares.

Action:

Robson Handling technology built the head and tail ends of the conveyors in the UK to ensure high quality and reliability standards were met, the support structures and intermediate sections were supplied locally.

The reason for the split manufacturing was twofold, firstly to keep shipping costs to a minimum and secondly, to provide economic stimulus to the local supply chain.

This was a key element in Robson winning the contract. Robson has built a project management team with the international capability to successfully manage overseas fabrication projects to rigorous quality standards and project timelines. This coupled with our ability to supply installation and commissioning ensured a smooth installation process that was on time and exceeded the client’s requirements.

Results:

Robson designed, delivered and installed a 370m long, 1,400mm wide trough belt conveyor system that included a magnet separator to remove tramp ferrous material and an inline weighing solution, 200kW drive and sugar fines filtration at the transfer point.

The filtration system was a specific requirement due to local regulations and nuisance dust generated by previous port operations.

The whole conveyor raised the raw sugar from dockside level to a height of 22m so that the material was presented at a suitable height for onward transfer into the warehouse.
Robson also provided the warehouse internal tripper conveyor system, this conveyor was able to discharge the raw sugar within the rectangular warehouse at various positions to ensure even stockpiling of the raw materials.

To ensure disruption to on-going port operations was kept to a minimum, the initial conveyor section was elevated to 6m height to provide vehicle access under the conveyor which allowed normal operations to continue. The whole scheme was designed considering the local climatic conditions with a wide temperature and humidity range, along with being in a saliferous atmosphere.

The complete conveyor was supplied with a covered walkway to allow maintenance access and prevent external raw sugar contamination.