

// Project Experience

EMAL Taweelah Phase I & II

Location: United Arab Emirates

Scope: Engineering, Procurement & Construction (EPC)

Completion: 2013

SENET was responsible for the design, procurement, fabrication, erection assistance, and commissioning of the Phase II EMAL Smelter Complex, comprising a series of inter-plant conveyors for transferring 900 t/h of Alumina from the quayside to storage silos situated within the main plant. The conveyor system is comprised of three conveyors carrying material for a total distance of 5 334 m, and includes three transfer towers, dust collectors and a fully automated sampling building.

The first 675 m long conveyor interfaces with two traveling ship unloaders and includes a roof sealing belt to maintain an enclosed structure.

The second 4 200 m long conveyor negotiates a distance of 1 640 m alongside the causeway from the quayside and is elevated above the sea by means of supports placed in the sea and spaced at 40 m intervals. The final conveyor covers a distance of 600 m and includes a 220 m horizontally curved section, thereby eliminating the need for an additional transfer point.

All chute designs have been subjected to a flow modeling analysis in order to optimise the design for the transfer of the different material types.

In addition to the electrical and mechanical supply, a total of 1 200 t of structural steel was fabricated for this Phase II project.

