

// Project Experience

SNIM Iron Ore

Location: Mauritania

Scope: Engineering, Procurement & Construction Management (EPCM)

Completion: 2005



SENET designed, manufactured and supplied a 40 m long stacker, complete with a 5 m extending stinger and all ancillaries and auxiliary equipment, with a belt width of 1 200 mm and belt speed of 3.9 m/s, and a throughput 800tph.

Given the extremely arduous operating conditions, the structural design was checked by means of a Finite Element Design Analysis to ensure that no extreme stress situations occurred.

A wing conveyor feeds the tail end of the stacker. An access platform runs along one side of the stacker for its full length. The feed chute is fitted with skirts and VRN500 liners and is so designed to minimise material hang-up and to achieve maximum volumetric capacity.

The stinger conveyor extends and retracts 5 m beyond the stacker head by means of a hydraulic cylinder under the main conveyor so that the main conveyor can discharge directly if the stinger is incapacitated. The hydraulic cylinder has a 5 m travel and produces a force in each direction to a maximum of 10 t.

Slewing of the stacker is carried out by four hydraulically powered wheels slewing about the tail pivot at speeds of 45 mm/s (extension) and 90 mm/s (retraction). The slew wheels are lifted vertically when towing up the pad.

