Centre Grains, a member of the Axereal Group, recently extended one of their quays in the Port of Sète, France, and equipped its terminal with a pneumatic unloader for barges of 5000 tonnes and a ship loader for 25,000 tonne vessels, both designed, manufactured and installed by Vigan Engineering.

Designed for vessels of 5000 tonnes capacity, the pneumatic barge and coaster unloader supplied by Vigan has a round suction nozzle which sucks the product into the hold, allowing to reach the maximum capacity in full heap of grain with a guaranteed minimum breakage.

Depending on the products discharged, the rate reaches 400 tonnes per hour for wheat, corn or barley.

The rail-mounted gantry is moving along the quay, and supports all unloading equipment: an electric transformer group, the cabin with turbo-blowers, the unloading tower, the cable reels for power and control and a manual rail clamps (for securing the device in a parking position).

The unloading tower is mounted on a slewing ring with hydraulic motor. It supports automatic cleaning filter by compressed air injection equipped with a vent explosion, the 400 liter airlock and the 15 metre boom supporting the piping system, which can lift from 15 to 54 degree is by a hydraulic cylinder.

The Ship Loader

The second equipment delivered by Vigan to Centre Grains is a mechanical ship loader for vessels of 25,000 tonnes maximum. The rail-mounted gantry moves along the quay and supports a bucket elevator (which receives the goods from a conveyor belt equipped with a platform tripper) and the ship loading system itself. The unloader can reach a capacity of 800 tonnes per hour on grain with a density of 0.75. Its total height is 19.7 metres.

A slewing ring allows the orientation of the loading arm to a maximum angle. A beam supports a chain conveyor and the telescopic loading chute at the end. This beam can be hydraulically raised by two jacks to enable the positioning of the telescopic arm in the ship's hold.

The projection system is equipped in its upper part with a slewing ring, as well as an electric geared motor allowing its orientation in the ship's hold. The total angle of rotation is 340 degree.

The loading chute of the system is equipped with an overflow for the emptying of the vertical telescopic when stopping. The 800 millimetre wide belt runs at a speed of 5 to 15 metres per second and can throw the product at a maximum distance of about 15 metres.