

Replacement of an engine on a cargo ship in Ferrol, Spain



Alternator being skidded along the top of a turning table



Motor exchange



ALE has performed the replacement of the auxiliary engine block of a cargo ship in Navantia Shipyard in Ferrol, Spain.

Prior to any work inside the vessel, it was necessary to make an incision in the side of the vessel.

The extraction of the old engine, weighing 67t, was carried out in the following sequence:

- The alternator, weighing 36t, was removed by skidding it along the top of a turning table, supported on 25t capacity skid beams, to a temporary landing area inside the engine room.
- To obtain additional space for the removal of the engine, the engine block was skidded transversally.
- The motor was raised using chains that had been installed in the upper cover. This enabled 2 turning tables to be installed, which were used to rotate the engine by 90°.
- The motor was skidded transversally to align it with the skid tracks coming off the vessel.
- As the ship was afloat, ALE needed to account for the effect of the tidal variations when moving the engine from the ship to the dock. Jumping beams were supported on hydraulic jacks, which enabled a constant level to be maintained for the installation of skid tracks. The old engine could then be smoothly skidded onto the dock.

The installation of the new engine was completed following this sequence in reverse.

The versatility of ALE's skidding equipment enabled them to complete these complex manoeuvres in a narrow space while overcoming numerous obstacles.

Project:	Skidding and jacking for the replacement of a cargo ship engine
Location:	Ferrol, A Coruña, Spain
Equipment:	25t capacity skidding system; 60t capacity climbing jacks; jumping beams
Weights:	Engine - 67t, alternator - 38t
Key Features:	Minimised disruption; short notice mobilisation; bespoke solution