

Automation pipehandling system.

Allseas' Lorelay.

Eekels delivered and installed:

Automated Pipe handling control system, existing of:

- Control cabinet with Siemens safety PLC
- New cargo hold control desk with 15" touch screen.
- Several sensors and switches.
- Control of a 2nd cargo hold pipe elevator.
- Control of additional flip-flops.
- Led floodlights on crane beam
- Laser pointers for spreader pipe alignment.

CCTV system, existing of:

- 16 Heavy duty camera's in cargo hold.
- 19" CCTV cabinet.
- 3 x 32" HD screens.
- AVCA control panel.
- Fibre optic communication modules.



Description:

Eekels Ship Repair & Service department together with Eekels Automation department recently automated the pipe handling system on board of Allseas' pipelay vessel Lorelay. Primary goal of this upgrade was to speed up the pipe handling process and get a safer workspace. Secondary goal was to get a better overview of the system and minimize downtime. Pipes will be routed trough the system automatically by an attached destination. Several routes can be active together. Control of the complete system can be done by one man.

A complete overview on the pipe handling is shown on three 32" HD CCTV screens placed in the control room. 10 heavy duty camera's are positioned in the cargo hold. 6 camera's are placed on the crane beam and spreader. Led lights ensure a good picture, and laser pointers are used to align the pipes in the spreader.



General data of the vessel:

L.o.a:	183 mtr (excluding stinger)
Max speed:	14 knots.
Accommodation:	216 persons
Bow thrusters:	2 x 2,600 kW tunnel and 1 x 3,000 kW retractable Azimuth
Stern thrusters:	1 x 6,000 kW propeller and 2 x 5,000 kW Azimuth thrusters
Cranes:	Pipe transfer crane of 16 t (35 kips) at 33 m (108 ft) Mast crane of 300 t (661 kips) at 14 m (46 ft), heave compensated
Working stations:	7 (single joint) welding stations, 1 NDT station and 2 coating stations
Tensioner cap:	3 x 55 t (363 kips) at 20 m/min (66 ft/min), optional 4th tensioner of 100 t (221 kips) aft of coating station
Pipe diameter:	2" till 36" O.D
Class:	Lloyds register of Shipping

