

CASTORO SEI





CASTORO SEI SEMI SUBMERSIBLE PIPELAY VESSEL

The Castoro Sei provides a safe, reliable and stable operating platform capable of laying subsea pipelines up to 60 inches in diameter, with additional facilities for offshore construction works and flotel capability. Optional piggyback and dual-lay configurations ensure that the Castoro Sei is capable of installing complex infield pipeline systems in addition to major trunkline systems. The Castoro Sei has an extensive track record of sustained high productivity in both shallow and deep water conditions on major trunkline projects, together with an impressive list of infield projects.

GENERAL

The semi-submersible hull construction with optional thruster assistance for enhanced position keeping enable

operations to continue in adverse weather conditions. The upper hull encloses the accommodation, main engine room and main store rooms. It is divided transversely by three watertight bulkheads. A large proportion of the main deck is used for pipe storage with a rotating gantry crane mounted on either side of the firing line. The equipment and control systems onboard have been maintained to keep up with current technologies.

CLASSIFICATION

The Castoro Sei is built in accordance with the rules of the Italian Marine Ministry and is classed A1 by the American Bureau of Shipping. The flag state is the Bahamas and the Port of Registration is Nassau. The Castoro Sei also holds a Letter of Compliance issued by the Norwegian Maritime Directorate.

FIRING LINE

The firing line comprises the fixed pipelay ramp, enclosed in the central housing, running along the longitudinal centreline of the vessel. It is connected to an internal and external ramp, both of which have adjustable inclination to facilitate pipelay in varying water depths.

A ramp extension unit is available for use in deep water or for severe seabed conditions.

Located along the fixed and internal ramps are three 110 tonne tensioners, nine work stations (Welding, X-ray and Field Joint Coating) and a number of support rollers.

DOUBLE JOINT LINES

The pipe double-jointing system with six work stations is located in the deckhouse

above the fixed ramp while the transfer and line-up station is enclosed within the superstructure at the stern.

POSITIONING

The vessel has a twelve point mooring system to facilitate accurate positioning and movement during operations with a fully redundant control and monitoring system. It also has four Azimuthal variable pitch thruster units which can be utilised for propulsion or to further enhance position keeping if required.

WELDING

A fully mechanised GMAW system known as "PASSO" is utilised for medium to large diameter pipe in the firing line whilst double joint line welding is accomplished using submerged arc equipment.

SUPERSTRUCTURE

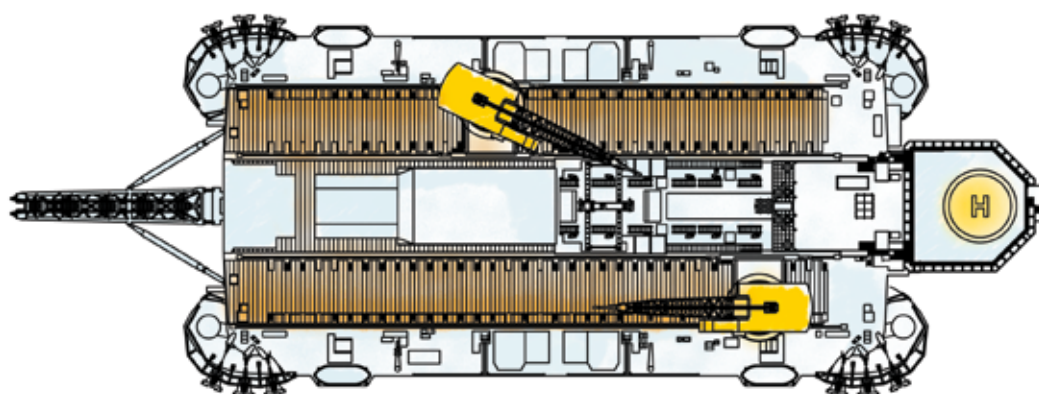
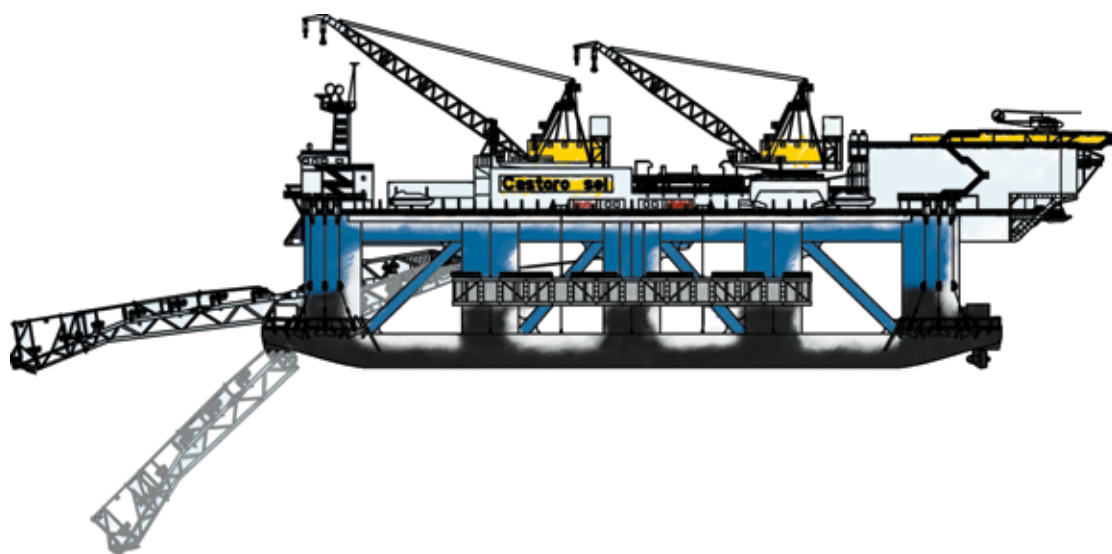
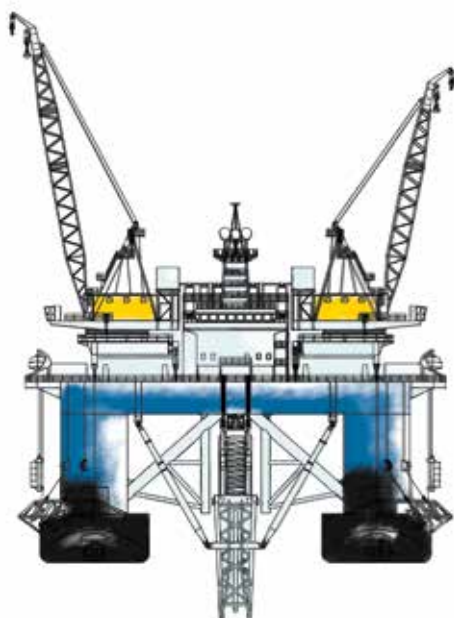
An aluminium helideck structure is located at the stern of the vessel.

The helideck is designed to accommodate single main rotor helicopters up to and including the Sikorsky S61N type and is approved for use by the UK, Norwegian, Danish, German and Netherlands Civil Aviation Authorities.

Offices and stores are located on either side of the central housing at main deck level. A separate superstructure mounted at the bow of the vessel encloses the bridge, offices, computer room and radio room.







HULL TYPE

Column stabilised semi-submersible

VESSEL FEATURES

Length overall excluding ramps	152.0 m
Breadth overall	70.5 m
Depth to main deck	29.8 m
Transit draft	9.5 m
Operating draft (typical)	14.0 m
Survival draft	12.5 m
Dedicated pipe storage space	1,195 sq.m
Additional deck space	1,525 sq.m
Deck load	3,600 tonnes

CLASSIFICATION

American Bureau of Shipping

COMPLIANCE

NMA, HSE

PROPULSION / POSITIONING SYSTEM

Four 37 tonne Azimuthal thrusters
Twelve 25 tonne anchors
Twelve 124 tonne anchor winches
3,000 m anchor wire on each winch of 76 mm

PIPELAY EQUIPMENT

2 Rotating gantry cranes 134 tonnes capacity
Longitudinal conveyor, gantry transfer conveyors, line-up station
Three 130 tonne pipe tensioners
Fixed ramp, articulated ramp, mini ramp extension
Bevelling stations
Double jointing system
Welding stations utilising a semi automatic system
X-ray or AUT equipped NDT stations
Field joint coating system

Abandonment & recovery winch (400 tonnes)

Piggyback lay welding line facility

Dual-lay welding line and ramp

HELIDECK

Suitable for helicopters up to and including the Sikorsky S61N type

NAVIGATION & COMMUNICATIONS

Fully equipped radio room GMDSS
Satellite communications & TV
2 ARPA radars
GPS / DGPS navigation & positioning
Echosounder

POWER GENERATION

6 Main generators	20.5 Mw total
1 Emergency generator	800 Kw

BUNKER CAPACITY

Ballast capacity	11,518 cu.m
Lube oil capacity	138 cu.m
Fuel oil capacity	3,123 cu.m
Potable water capacity	1,000 cu.m
Fresh water generators	
180 tonnes / day	

CREW FACILITIES

Accommodation for 347 people
Client offices
Conference rooms
Hospital
Gymnasium
Galley mess room
Coffee bar
Cinema
Recreation rooms
Satellite television

