

# Offshore



Saipem

Saipem 7000

# Saipem 7000

With its state-of-the-art J-lay tower, upgraded dynamic positioning capability and fast ballasting system, the Saipem 7000 semi-submersible crane vessel has the capacity to handle the entire workscope of offshore construction developments worldwide, encompassing pipelaying in water depths greater than 2,000 metres and heavy lift operations up to 14,000 tonnes.

The vessel's Class 3 DP system of 12 thrusters ensures that the vessel maintains good station keeping in the most difficult of weather conditions. Additionally, because the Saipem 7000 has accommodation facilities up to 725 people, the vessel can assist hook-up and commissioning as well as initial platform life support activities.

Altogether, this high specification means that the Saipem 7000 can be counted on to provide the highest level of reliability for conventional, deep and ultradeep water development projects.

In support of its underwater works, the Saipem 7000 operates two state-of-the-art Innovator type of working rov's, which are an essential part of the vessel's equipment that complement and integrate surface and subsea operations of the Saipem 7000.









## Semisubmersible derrick and pipelaying



# (J - lay) DP vessel

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## Hull type

Self propelled dynamically positioned semisubmersible

## Vessel features

- Length overall  
197.95 m
- Upper platform  
175 m x 87 m x 8.5 m
- Lower pontoons  
165 m x 33 m x 11.25/15.25 m
- Depth to main deck  
43.5 m
- Free deck area  
9,000 sq.m
- Deck load  
15,000 tonnes
- Operating draft  
27.5 m
- Survival draft  
18.5 m
- Transit draft  
10.5 m
- Transit speed  
9.5 knots

## Flag

Bahamas

## Classification

Lloyds Register and R.I.Na.

## Compliance

NMD, HSE, USCG rules.

## Special features

Designed for tropical (+ 45° C) and arctic conditions (-20° C)

## Dynamic positioning

DP (AAA) Lloyds Register notation. IPD 3 R.I.Na. Class 3 Norwegian Maritime Directorate notation. First vessel to receive LR highest DP (AAA) notation. SDPM 31 system and standby additional back-up of SDP 11 control station with separate computer, UPS, gyros, environmental sensors position reference systems.



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## Mooring system

14 x 1,350 kw single drum winches,  
each 3,350 m x 3<sup>3</sup>/<sub>4</sub>" mooring line and 40 tonnes  
Norshore III high holding power anchor.  
Fully redundant SDPM system.  
2 anchor windlasses, each 550 m x 5<sup>1</sup>/<sub>8</sub>" chain  
and 34.5 tonnes anchor.

## Propulsion and thrusters

4 aft x 4,500 kw propulsion azimuthing units, fixed pitch  
4 fore x 3,000 kw retractable azimuthing units, fixed pitch  
2 fore x 5,500 kw retractable azimuthing units, fixed pitch  
2 x 2,500 kw bow tunnel units, fixed pitch.

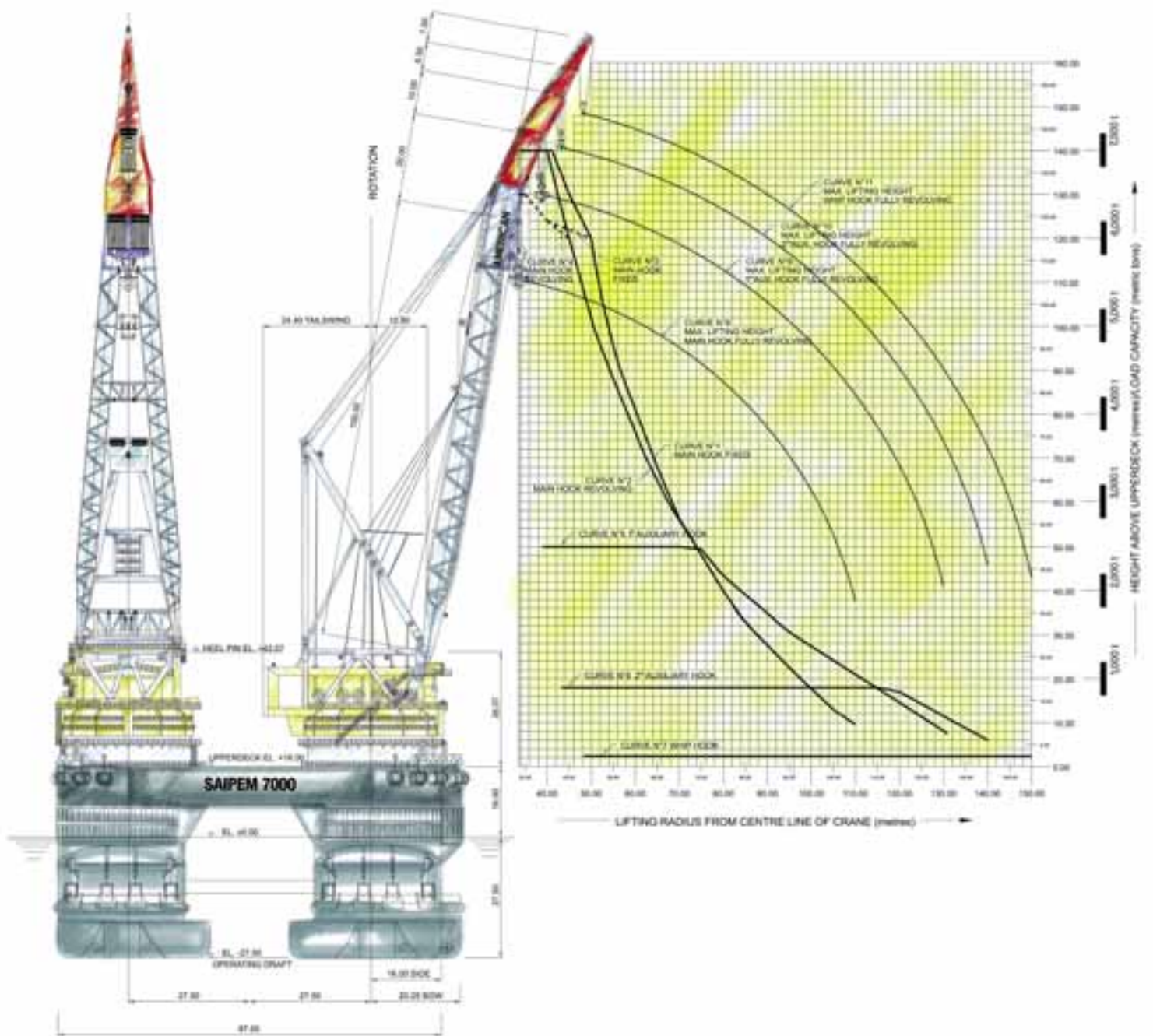
## Ballast system

Computer controlled system with simulation capabilities comprising  
4 x 6,000 tonnes/h ballast pumps  
40 ballast tanks - Total 83,700 cu.m  
14 rapid ballast tanks - Total 26,000 cu.m

## Lifting facilities main crane

2 twin Saipem 7000 model fully revolving bow mounted  
Amhoist cranes.  
Main blocks tandem lift: 14,000 tonnes  
Main block single lift: 7,000 tonnes  
6,000 tonnes revolving at 45 m rad./50 m tieback  
Aux. 1 block: 2,500 tonnes  
Aux. 2 block: 900 tonnes  
Lowering capability to 450 m below sea level  
Whip hook: 120 tonnes







## Saipem 7000







#### **Pile driving/handling equipment availability**

2 Menck MHU 3,000 hydraulic hammers.  
 2 Menck MHU 1,700 hydraulic hammers.  
 2 Menck MHU 1,000 hydraulic hammers.  
 2 Menck MHU 600 hydraulic hammers.  
 1 Menck MHU 220 hydraulic hammer.  
 1 Menck MHU 195 hydraulic hammer.  
 2 underwater/surface power packs.  
 1 hydraulic hammer compensator.  
 "Slim" and "Free" riding mode capability.  
 Full spread of internal/external lifting clamps ranging from 20" to 102" i.o. dia.  
 2 levelling systems range 66" - 72" dia. - 900 t. capacity.  
 2 external levelling systems 1,000 tonnes

#### **Handling deck equipment**

1 x 150 tonnes Amhoist 9299 Crawler crane  
 1 x 35 tonnes hydraulic tyred deck crane  
 2 x 5 tonnes fork lifts

#### **Power plant**

Total power plant 70,000 kw, 10,000 Volt  
 12 diesel generators on heavy fuels divided in 6 fire segregated engine rooms classified UMS

#### **Crew facilities**

388 fully AC single or double cabins for 725 persons  
 Gym, cinema, internal radio/TV,  
 400 seat main messroom  
 70 seat officers messroom, recreation room, bar-cafeterias



# Saipem 7000

## Helideck

Suitable for two BV234 LR Chinook helicopters (one parked).  
Classified helicopter refueling system.

## J-lay system

Pipe diameter range from 4" to 32"  
Main laying tension system 525 tonnes with tensioners, up to 2,000 tonnes with friction clamps  
Laying tower angle 90° - 110°  
Abandonment/Recovery system double capstan winch with 550 tonnes capacity (up to 2,000 tonnes with clamps)  
1 welding station  
1 NDT and field joint station  
Pipe string quadruple joint  
Pipe storage capacity up to 6,000 tonnes.  
The tower is self erecting and removable by the Saipem 7000 own cranes.









**Saipem**

**People, ideas, energy.**

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