

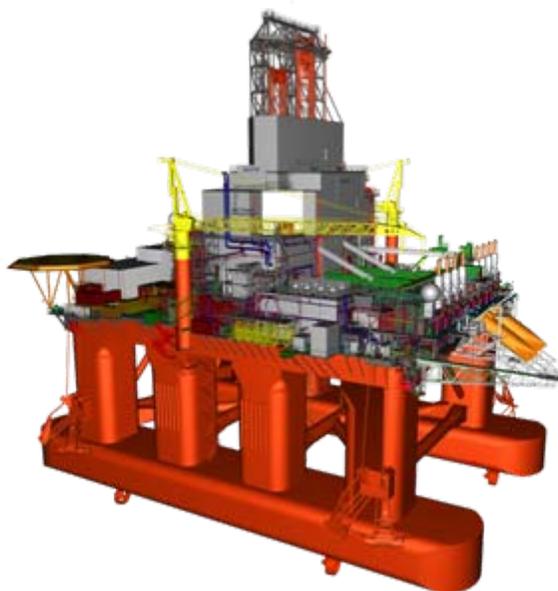
# Aker H-6e

The new H-6e is an enhancement of the existing Aker H-4.2 drilling semi submersible with transverse truss arrangement between eight columns. The design has its roots in the well known Aker H-3.

A total of 37 units of the H-3/H-4 design are delivered and have for 30 years demonstrated excellent performance on the seven seas. The H-6e is intended for world-wide deepwater operations and harsh environment. Configured for dynamic positioning to 3000 m water depth (WD) and mooring in 500 m WD

## Main features:

- Large payload and storage capacity
- Excellent and proven motion characteristics
- High drilling and completion efficiency
- Double RamRig®
- Vertical riser and casing racking
- Independent handling of BOP and X-mas trees
- Maximum parallel activities
- Large working space for safe and efficient operations
- Protected working and storage areas
- Ample bed capacity
- Low emissions to the environment
- Remote Drilling Diagnostic Capabilities
- Prepared for Riser Less Mud Return System
- Prepared for Full Winterization



III: Aft/ port Side

## OUTLINE SPECIFICATIONS

## H-6, DP 3000m WD

### Main dimensions

Length overall (pontoons)	120 m	393,7 ft
Breadth moulded (pontoons)	77 m	252,6 ft
Main deck length	90 m	295,3 ft
Main deck width	70 m	229,7 ft
Elevation drillfloor	63 m	206,7 ft
Elevation upper deck	43,5 m	142,7 ft
Elevation pipe rack	50 m	164 ft
Elevation lower deck	39 m	128 ft
Elevation double bottom	37,5 m	123 ft
Max freeboard survival	18,5 m	60,7 ft
Columns (L x W)	12,5 x 12,5 m	41 x 41 ft
Inner column (L x W)	12,5 x 12,5 m	41 x 41 ft
Pontoon height	10 m	32,8 ft
Pontoon beam	19,5 m	64 ft
Pontoon corner radius	2,5 m	8,2 ft
Draft survival, harsh environm.	19 m	63,3 ft
Draft operating, normal/tropical	23 m/27 m	75,5 ft/88 ft
Draft transit (ex. thrusters)	9,7 m	31,8 ft

### Displacements

Survival, harsh environment	59 600 mt	65 700 s. tons
Operating, draft 23 m	64 500 mt	71 100 s. tons
Transit	44 500 mt	49 050 s. tons

### Operating capacities

Water depth	3 000 m	10 000 ft
Drilling Depth	10 000 m	32 808 ft
Variable Drilling Load Operating	7 000 mt	7 716 s. tons
Variable Drilling Load Transit	7 000 mt	7 716 s. tons

### Classification

Det Norske Veritas 1A1. Column Stabilized Drilling Unit (N). DRILL(N). HELDK, CRANE, E0, DYNPOS AUTRO, POSMOOR ATA.

### Design temperatures

Air -25 deg C (min) / + 35 deg C (max) Structural  
Air -20 deg C (min) Equipment and Systems  
Water -2 deg C (min) / + 32 deg C (max)

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III: Aft/port side

## Drilling equipment

Double RamRig®	10 000 m drilling depth
Hook load capacity:	
main	907 mt / 1000 s. tons
auxiliary	454 mt / 500 s. tons
Drill floor elevation	24m above lower deck
Riser storage capacity	2537 m vertical
Setback capacity	785 mt / 864 s. tons
Casing racking capacity	1377 m of 13 3/8"
Motion compensation	1000/500 s. tons
Topdrive, main	1000 s. tons. Torque 78 kNm at 0 -165 rpm
Topdrive, auxiliary	500 s. tons, Torque 78 kNm at 0 -160 rpm
Rotary table, main	60 1/2"- 1000 s. tons
Rotary table, auxiliary	60 1/2"- 500 s. tons
Iron Roughneck	2 off. 2 7/8"-9 3/4" tubulars. Make-up torque: 135 kNm
Pipe handling	Fully mechanised, remote controlled, dual system w/full redundancy
Riser tensioners	6 units, In-line type. Stroke: 55 feet. Total capacity: 1 435 mt / 3 200 000 lbs.

## Well control

BOP	Cameron 18 3/4" - 15 000 psi, 5 rams, 2 annulars Multiplex
BOP control system	Multiplex
Diverter	60", 2x12" Diverter line
Marine riser	AKS Clip Type 21"- 75 ft joints, 500 psi
Slip Joint	AKS 21"- 60 ft stroke

## Mud system

Shale shakers	4 x Axiom triple deck
Degasser	2 x MI Swaco vacuum
Cuttings disposal	2 x MI Swaco Blower syst.
HP mud pumps	4 x Wirth 2 200 hp -7 500 psi
Mud Gas separator	23000Nm <sup>3</sup> /h, 7m liq. seal
Mud Mixing	Automated mud mix and chemical additive system. 3 Hoppers, high rate barite mixers. Sack cutters, big bag unit. Liquid additive skid

## Service equipment

Cementing Unit	BJ Services, Electrical AC Powered, 15 000psi
Burner Booms	2 off.

## Storage capacities

Bulk barite/bentonite	400 m <sup>3</sup>	14 126 ft <sup>3</sup>
Bulk cement	400 m <sup>3</sup>	14 126 ft <sup>3</sup>
Liquid mud, columns	930 m <sup>3</sup>	5 864 bbls
Mud pits on deck	813 m <sup>3</sup>	5 106 bbls
Fuel Oil	4 200 m <sup>3</sup>	26 388 bbls
Drill Water	3 100 m <sup>3</sup>	19 525 bbls
Potable water	540 m <sup>3</sup>	3 391 bbls
Brine/completion fluid	1 340 m <sup>3</sup>	8 375 bbls
Base oil	1 460 m <sup>3</sup>	9 115 bbls
Drilling drain tanks	369 m <sup>3</sup>	2 306 bbls

## Power generation, main machinery

8 Rolls Royce diesel generators, each 5300 kW, 720 rpm. Nameplate rating 6235 kVA, 11kV, 60 Hz. Steam boilers.

## Thrusters

8 Rolls Royce, AC powered variable speed azimuthing thrusters for main propulsion and station keeping. Nameplate rating: 4500 kW, 11kV, up to 60 Hz. Bollard pull each unit: 800 kN/179 856 lbf.

## Windlasses/Mooring system

8 point anchor line system, 84 mm chain, 15 mt anchors. 4 Pusnes Windlasses

## Deck cranes

2 Kenz Figee 85 mt capacity – max. reach 51 m

## Living quarter

140 beds, single bed cabins, extendable to 160 beds. Dining and recreation facilities, separate office section with conference room, hospital, provision stores etc. The living quarters are fully heated and air-conditioned.

## Lifesaving equipment

200 % of bed capacity, 4 free fall lifeboats, enclosed. 1 high speed water jet pick-up boat. Liferrafts.

## Heliport

Sikorsky S92, S-61N, Superpuma AS332L2, EC225, EH 101,