

Plug & Abandonment | Light Drilling | Workover | Well Intervention

- Small foot print
- Light weight
- Modular
- High capacity
- Cantilever based or
Single lift to platform



CANTILEVER PACKAGE SPECIFICATIONS

TOP DRIVE AND PIPE HANDLING

Drillmec HH220 telescopic mast and hydraulic top drive. Complete with top drive retractable dolly to pick up pipe from well center and mouse hole.

Max pull 440 kips.

Max push 44 kips.

Max torque 24,456 lbf.ft.

ROTARY TABLE

Hydraulic driven.

Max opening 37.5".

WELL CONTROL EQUIPMENT

5000 psi rated C&K manifold. BOP controls & accumulators suitable for 13-5/8" 5000 psi BOP stack.

DRILLING INSTRUMENTATION

Siemens PLC, Complete Drilling Control System & Data Acquisition Package. Full Zone Management System & Anti-collision system integrated within Drilling Control package.

CANTILEVER & SKIDDING CAPABILITY

Cantilever - 50 ft longitudinal.

Drill floor - 12 ft port/starboard.

Skidding speed 2 ft/minute.

CRANE

Jib crane installed on mast to handle tubular or other equipment.

Lifting capacity 4 mT.

DRILL FLOOR AND SUBSTRUCTURE

Impact resistant flooring designed to resist penetration by a stand of 9 1/2" OD drill collars dropped from a height of 1m.

VERTICAL RACK (OPTIONAL)

Modular units to increase tripping performance and safety.

Racking capacity: 245 tubular API R3, 4.5" OD.

JACKING FRAME (OPTIONAL)

Rated 700 kips to pull heavier or stuck tubular.

VFD & MCC

The complete power control system is intended to control of both AC generator and the AC drilling motor of the drilling rig, installed inside a container. The PCR system will be capable to drive one (1) Hydraulic power unit of HH220 and two (2) Mud pumps 1000 hp.

MUD PUMP

Triplex single action piston, rated input 1000 HP (745 kW) at 150 SPM. Max stroke per minute 150 SPM. Continuous stroke range 50-150 SPM. Max delivery 2554 l/min (674 GPM) with 7" pistons at 150 SPM ; Discharge pressure at max delivery 2277 psi (157 bar) with 7" pistons.

MUD SYSTEM

Total mud tank capacity of 160 m3 (1004 bbl), consisting of one (1) treatment tank, one (1) intermediate tank, one (1) mixing tank, and one (1) suction tank. Each tank capacity 40 m3 (251 bbl). Mud system comes with mixing unit, centrifugal pumps, agitators, and mud guns.

POOR BOY DEGASSER

Mud gas separator 36" OD, with 8" vent line outlet, installed on the drill floor.

TRIP TANK

Trip tank with 3,2 m3 (20 bbl) total capacity, installed on the POD substructure.

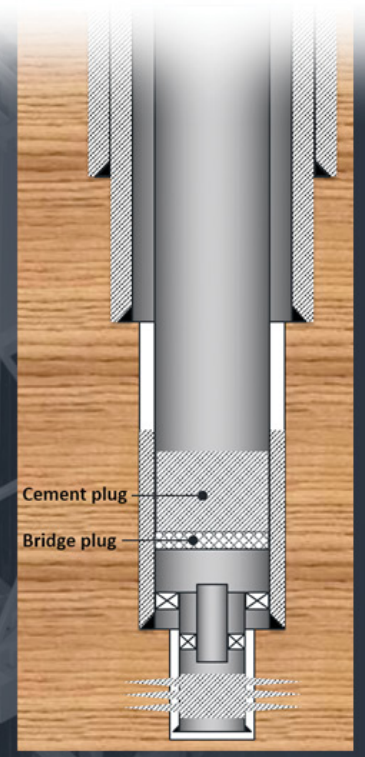
MUD TREATMENT SYSTEM

Mud treatment tank is divided into four (4) sections: Sand trap, degasser, desander, desilter. The system is equipped with one (1) shale shaker, one (1) mud cleaner with desander and desilter, and one (1) compact degasser.

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Operational benefits

- Cap rock restoration may include the following operation:
 - Logging the formation behind the casing
 - Window milling to re-establish rock-to-rock sealing
 - Perforation
 - Washing
 - Setting bridge plug
 - Cement plug



- Drill floor comes with mud standpipe, cement standpipe, and C&K manifolds
- Combination of retractable top drive dolly, mouse hole, and jib crane, promotes offline activity
- Fast tripping speed 1600 ft/hr
- Top drive pulling capacity 440 kips
- High capacity drill floor able to sustain tubular weight up to 700 kips
- Optional high capacity jacking tool to pull heavier or stuck tubular
- Mouse hole capable to handle tubular up to 20" OD

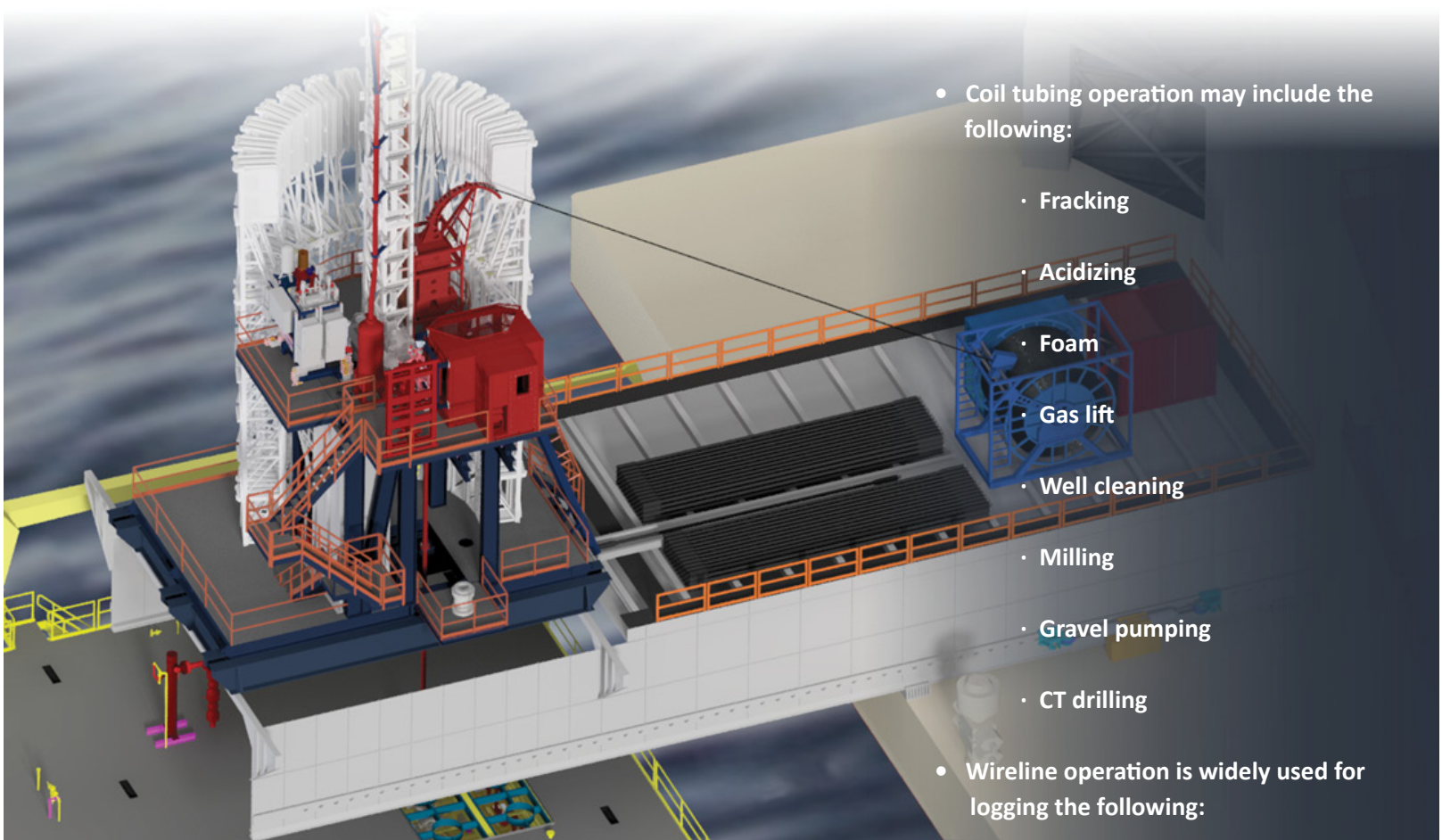


Top drive dolly extended to reach mouse hole



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Operational benefits



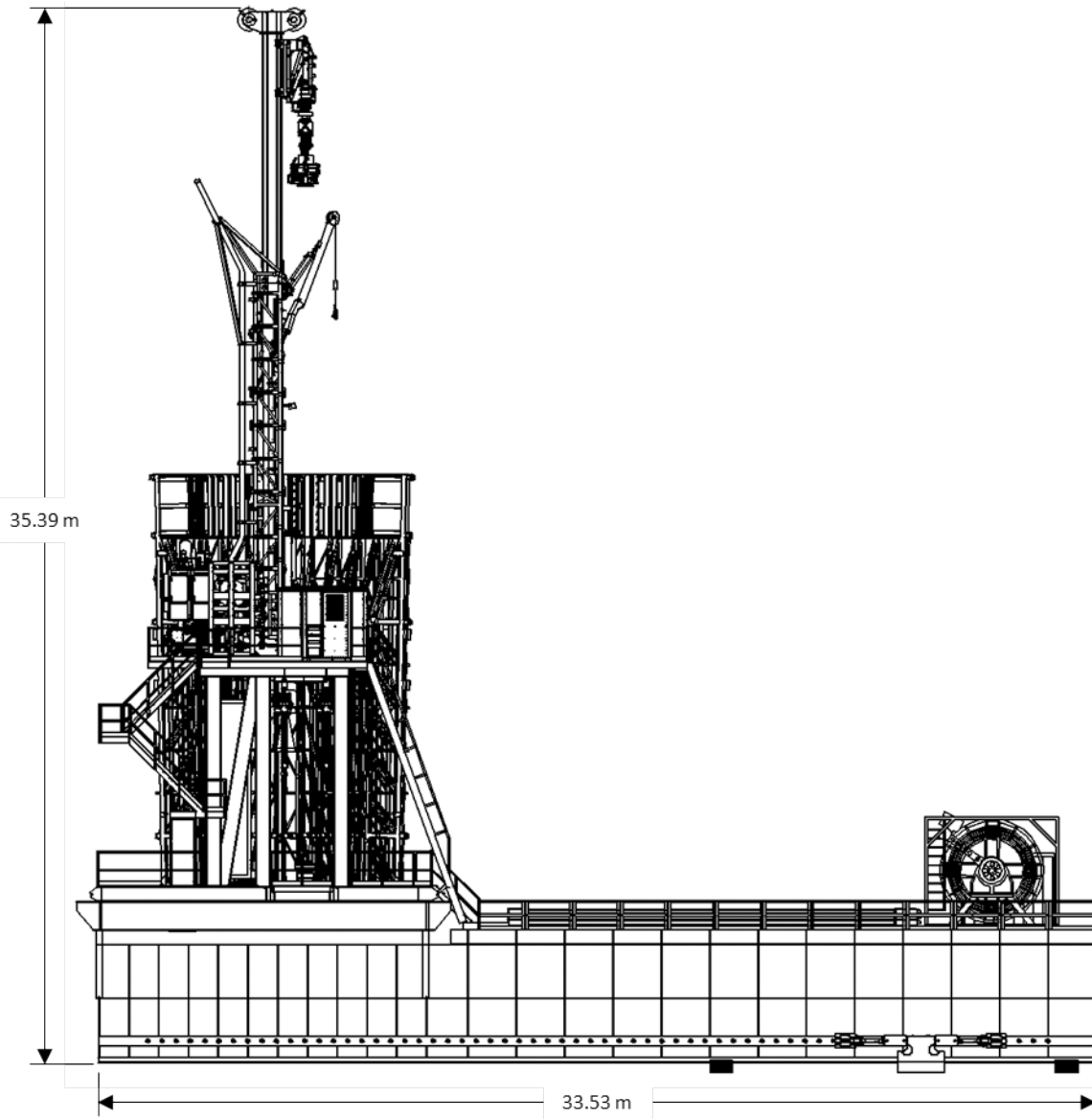
- Coil tubing operation may include the following:
 - Fracking
 - Acidizing
 - Foam
 - Gas lift
 - Well cleaning
 - Milling
 - Gravel pumping
 - CT drilling
- Wireline operation is widely used for logging the following:



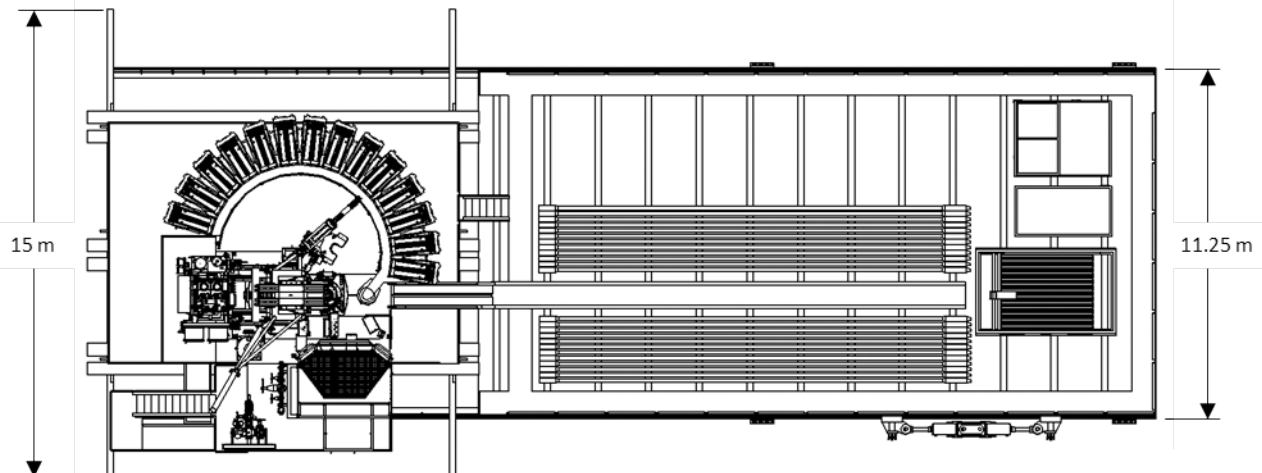
- Downhole temperature
- Formation pressure
- Wellbore dimension
- Casing-formation integrity
- Location of casing collars
- Fluid identification
- In some cases, wireline is also used to perform perforation, sample recovery
- Designed specifically to be used in conjunction with CT and other well intervention equipment. System can contain provision for quick fit of well intervention equipment

**MAIN LAYOUT
Cantilever and Drill Floor**

SIDE VIEW

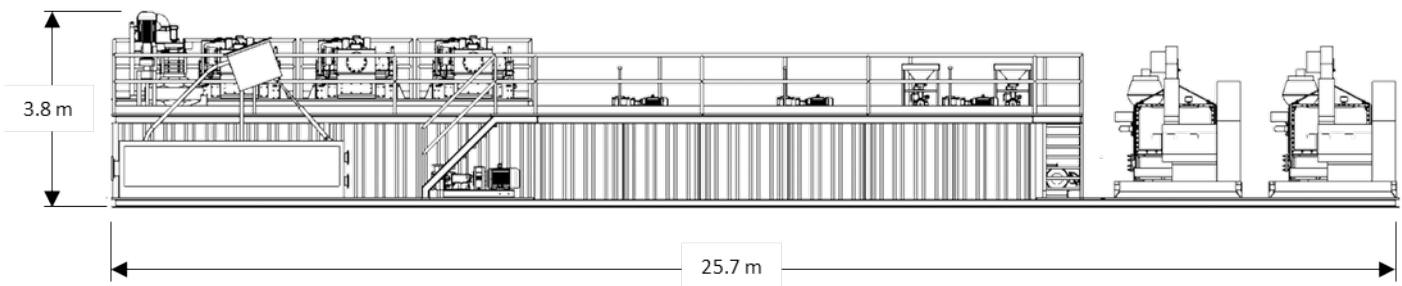


TOP VIEW

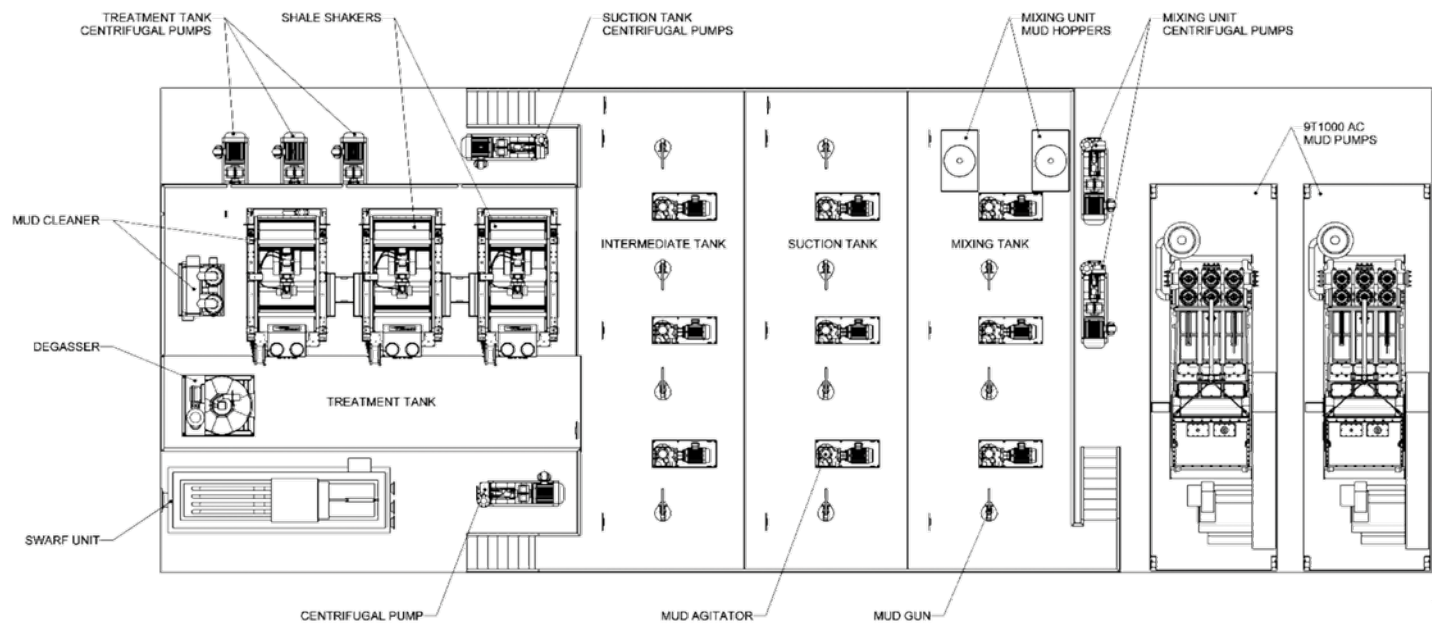


**MAIN LAYOUT
Mud System**

SIDE VIEW



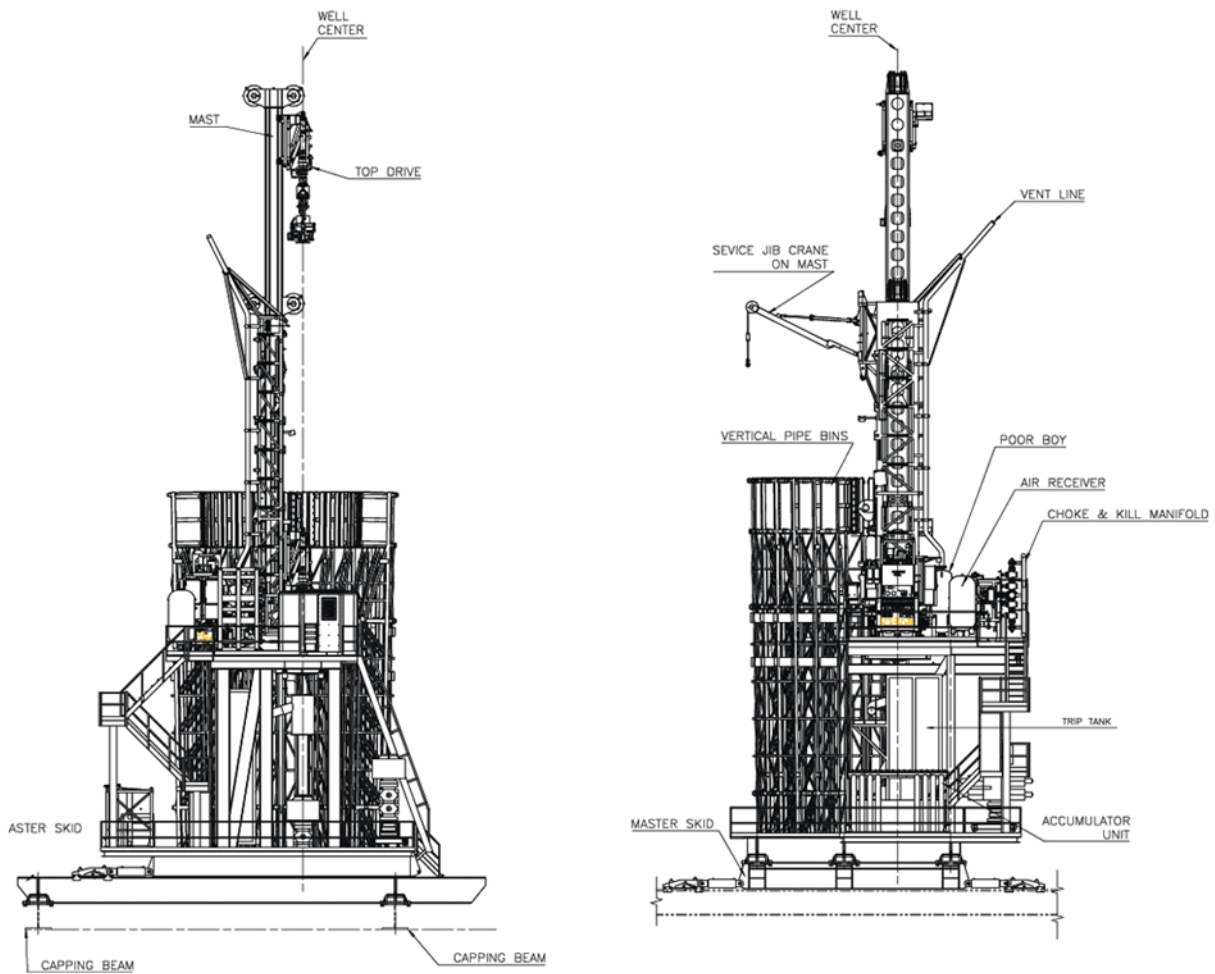
TOP VIEW



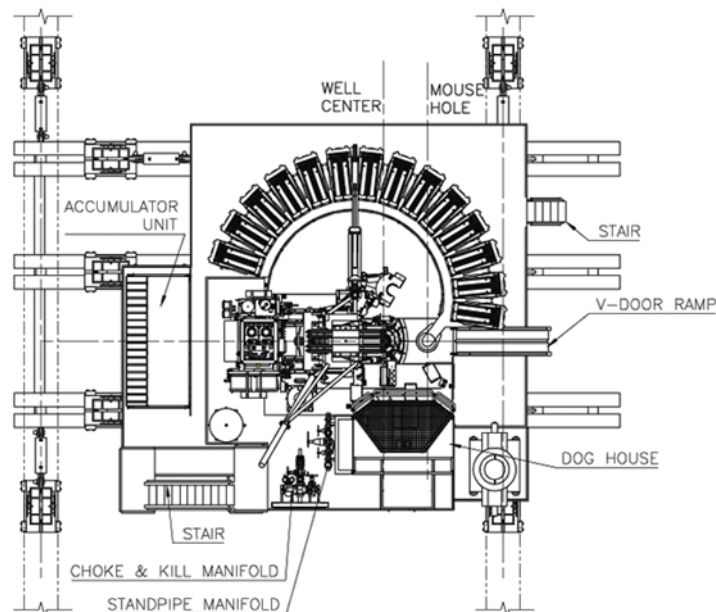
MAIN LAYOUT

HH220 POD - Operations on platform capping beams

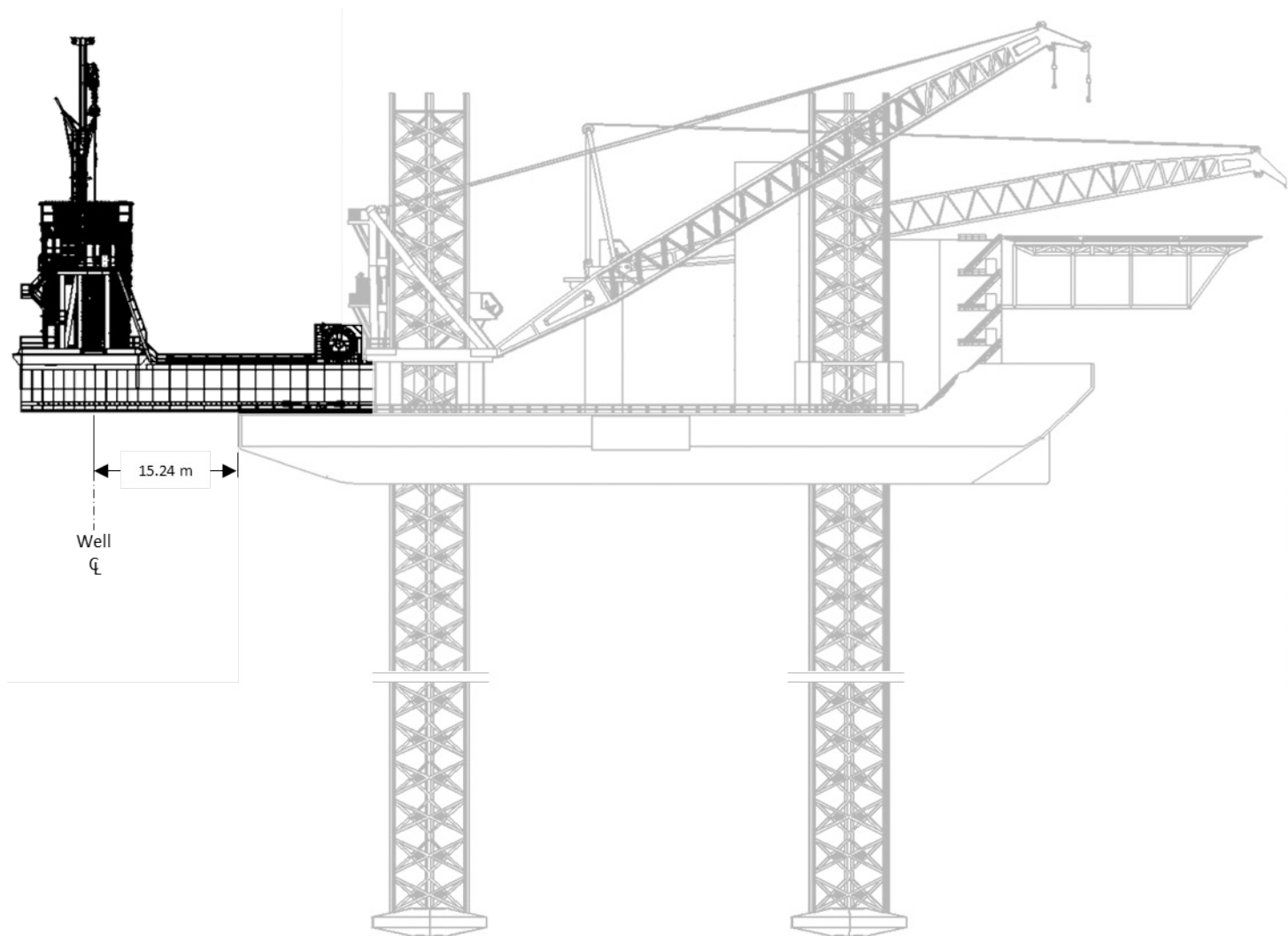
SIDE VIEW



TOP VIEW



GENERAL ARRANGEMENT

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