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# Mobil Offshore Drilling Unit (MODU)

**MODU** is a generic term for several classes of self-contained floatable or floating drilling machines such as jackups, semisubmersibles, and submersibles.

A **JACKUP** Modu is a self-contained combination drilling rig and floating barge, fitted with long support legs that can be raised or lowered independently of each other. The jackup, as it is known informally, is towed onto location with its legs up and the barge section floating on the water. Upon arrival at the drilling location, the legs are jacked down onto the seafloor, preloaded to securely drive them into the seabottom, and then all three legs are jacked further down. Since the legs have been preloaded and will not penetrate the seafloor further, this jacking down of the legs has the effect of raising the jacking mechanism, which is attached to the barge and drilling package. In this manner, the entire barge and drilling structure are slowly raised above the water to a predetermined height above the water, so that wave, tidal and current loading acts only on the relatively small legs and not the bulky barge and drilling package.

A **Semisubmersable** is a particular type of floating vessel that is supported primarily on large pontoon-like structures submerged below the sea surface. The operating decks are elevated perhaps 100 or more feet above the pontoons on large steel columns. This design has the advantage of submerging most of the area of components in contact with the sea and minimizing loading from waves and wind. Semisubmersibles can operate in a wide range of water depths, including deep water. They are usually anchored with six to twelve anchor chains, which are computer controlled to maintain stationkeeping. Semisubmersibles (called semisubs or simply semis) can be used for drilling, workover operations, and production platforms, depending on the equipment with which they are equipped. When fitted with a drilling package, they may be called semisubmersible drilling rigs.

A **Drillship** is a maritime vessel modified to include a drilling rig and special station-keeping equipment. The vessel is typically capable of operating in deep water. A drillship must stay relatively stationary on location in the water for extended periods of time. This positioning may be accomplished with multiple anchors, dynamic propulsion (thrusters) or a combination of these. Drillships typically carry larger payloads than semisubmersible drilling vessels.
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