Installing an Offshore platform

Let's now build a platform from the seabed up! Construction starts with the installation of the jacket, the structure that sits on the seabed and supports the topsides structure and modules.

This is sometimes installed on a pre-drilled manifold to reduce time to production. The jacket is towed out to sea by tugs and can be lifted vertically into position, skidded off the edge of a transport barge, or floated into position and up-righted by selective de-ballasting.

Once temporarily located in position on the seabed, the jacket is secured using preinstalled pile guides on the main legs, or alternatively, if the seawater depth is not significant, internally through the jacket legs.

There are other alternative installation types, notably Gravity Base Structures (GBS), Tension Leg Platforms (TLP), Spar Platforms, and Semi Sub to note a few. Now with the jacket in position, the installation of the topsides modules takes place.

Newer platforms usually have a large, partially commissioned, and integrated deck that is lifted on top of the jacket that are temporarily secured into place with stab-in guides on top of the jacket legs, providing horizontal restraint to allow weld-out of the topsides for the permanent conditions.

After the integrated deck is in place, the accommodation and drilling modules can be lifted into place followed by the flare tower.

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