

Construction Support & Positioning Survey Services

Construction Support

Horizon provides survey and geotechnical services from the initial engineering phase of construction projects, offshore installation activities through to the final 'as-built' surveys. The initial pre-engineering phase involves geophysical route or site surveys and may also require geotechnical investigations. After the engineering is complete and prior to installation, Horizon will perform pre-installation surveys to verify that the route/site is clear and the area safe for the deployment of anchors from the installation barge. During installation Horizon will position the barge and vessels involved in the installation activity as well as assets that are being installed whether it be a pipe line, jacket, PLEM etc.

Horizon will provide tailor made solutions to fulfill the client's requirement on a project by project basis. Horizon provides turn-key survey solutions including pre-engineering, pre-installation, construction support and as-built surveys. Horizon realises the projects we are involved in are costly exercises and as such we look to provide time and cost saving solutions with zero downtime to ensure project success.



Positioning Services

Precise positioning is required for numerous activities offshore. For such requirements Horizon can mobilise personnel and positioning equipment in a timely manner. During critical subsea installation or when a rig is located next to an existing subsea template, Horizon can offer highly accurate underwater acoustic positioning systems (LUSBL), subsea gyrocompasses and inclinometers in order to achieve the tolerances required. ROVs can also be supplemented to provide visual confirmation.

During barge construction support for activities such as pipelay and jacket installation, Horizon can provide a Tug Management System (TMS). The system is mobilised on to anchor handling vessels so that the vessels position, speed and direction can be monitored from the main barge or rig during the activity. Commands for anchor deployment and recovery are also relayed through this system.

Horizon provides a comprehensive range of positioning and construction support services for the following activities:

- **Barge positioning (pipe lay)**
- **Jacket / Platform installation**
- **Rig moves**
- **Subsea installations**
- **Vessel positioning**
- **Diver positioning**
- **ROV positioning**
- **Other construction support activities**
- **Survey support during pipe lay**
- **Survey support during jacket and topside installations**
- **Survey support during PLEM and SPM installations**
- **Survey support during hook work**

