



## Design and Engineering of SCITT Handler: Korea and Singapore

Chevron engaged the Pacific Bora Drillship and required a specialized rack back and handling system for their Surface Controlled Intervention Test Tree (SCITT). Chevron commissioned K2 to design a system that could be fully parked in the Pacific Bora derrick, ready for use in the shortest amount of time available.

### Project Scope

The system had to be installed accordingly to key design considerations:

- Trolley and hoist footprint.
- Ease of engagement/disengagement.
- Personnel Access
- Umbilical travel.
- Vessel motion criteria.
- SCITT movement between parked positioned and handovers to TDS.

### Challenges

- The entire modification had to be designed to allow the SCITT handler and all components to be removed from the derrick, and derrick returned to the original equipment arrangement, with minimal downtime.
- SCITT handler & modifications needed to complement, not conflict with the existing drilling and drill floor equipment.
- The design required additional access to ensure personnel safety when handling the SCITT.
- Coordination between K2's satellite offices – survey in Korea, engineering and fabrication in Singapore.
- Pressure to carry out the installation in the shortest possible time to minimise rig downtime.

### K2 Approach

The design solution prioritized safety and ease of use with minimal impact on rig operational requirements. It took into account the environmental considerations of a ship travelling large distances in potentially rough weather.

### K2 Comments

“The Pacific Bora project fully utilized our transcontinental capability. The survey team deployed by K2 Korea fed information to our engineering department in Singapore.”  
David Griffin, K2 Director

### Client Feedback

“K2 has shown professionalism throughout this project. Chevron are very happy with the way K2 have managed this and the level of detail and quality of the engineering.”

## Lifecycle Services for the Oil & Gas Industry

### Asset

Pacific Bora, 2010 R & B Drillship

### Owner

Pacific Drilling Company

### Location

Korea and Singapore

### Client

Chevron

### K2's team

Project Management

Structural & Design Engineers

Draftsmen

Site Supervisors

Rope Access Qualified Riggers

### Engineering

STAADPro & FEA Analysis

API 4F Certified