



**Company Name of Equipment:**

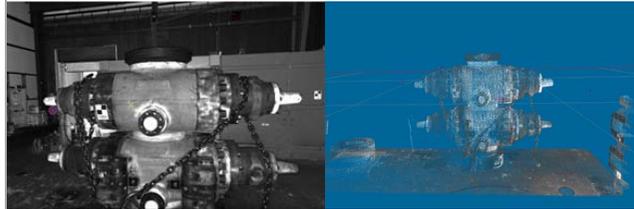
Zoller + Fröhlich

**Equipment Type:** Z+F

**Software:** LFM SERVER

**Project description:** Typical example below is initiated by Rig Engineering for the purpose of permanent records for subsequent checking, comparison and dimensional interrogation such as in the case of the Sedco 704 BOP prior to rework. DIDON Tanker bow was laser scan since there is no up to date as built to do detail engineering design and conversion to convert standard mooring system to Tri Catenary Mooring System (TCMS). Kitty Knutsen was laser scan before she departs to Singaporean Shipyard to be converted to FPSO. Point Cloud data from the laser scan allows Rig Engineering to be ahead and produce design and fabrication drawings while the vessel is en route to Shipyard. Trident 14 helideck was laser scan for detailed modification and feasibility study done for relocating existing helideck to the new location.

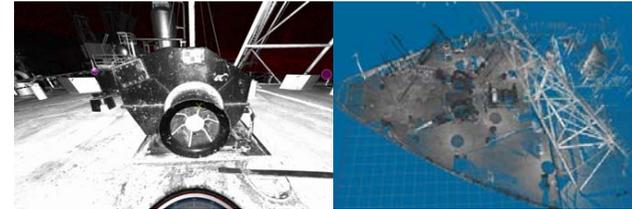
### Sedco 704 BOP Mechanical Revorks



Bubble View

View 3D

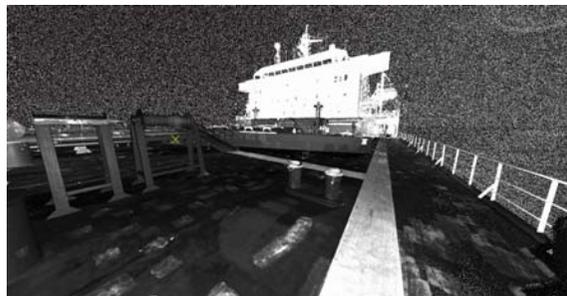
### Didon Tanker Modification



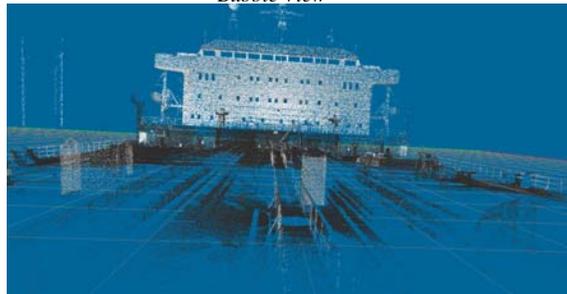
Bubble View

View 3D

### Kitty Knutsen Tanker Conversion

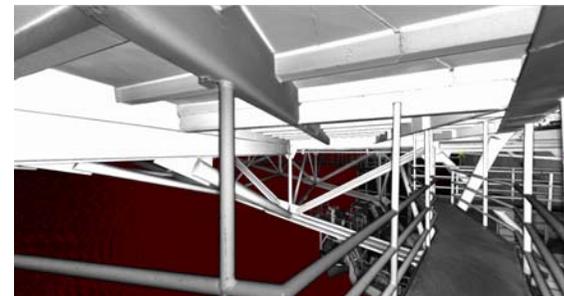


Bubble View

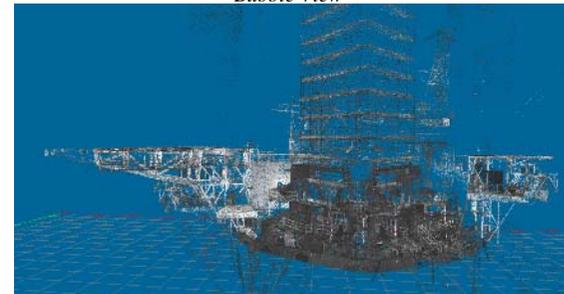


View 3D

### Trident 14 Helideck Relocation



Bubble View



View 3D

Rig Engineering operates LFM LASER SCAN POST PROCESSING SERVER perpetual license from Zoller + Frohlich to post process scan files (Point Clouds). Our trained personnel uses this software to interrogate clash check, extract data for dimensional detailed design, creating Finite Element Assessment (FEA) Model etc..from it Although we do not supply scanning service, we arrange this facility on behalf of clients to allow for data to be available without the needs for scaffolding , access etc. that prohibits the use of conventional surveying method. We can also receive a free issued selected type of scan files if this is available. We provide Contract Review for the laser scanning company outlining specific data that is required and specific application that is driving the needs, to have the laser scan done.

### **Engagement Condition**

*Send us description of your problem and we can tailor solution to meet your need.*

*We require Point Cloud, Data scan file in IPM form for subsequent post processing.*