



Photo: Technip

Connect is Sonardyne's dedicated software application designed to support all stages of a metrology campaign. The software guides the user through the key stages of a spool measurement operation including planning, data collection, quality control, processing and reporting. A single interface for all tasks reduces the workload for operators, especially when compared with traditional spreadsheet methods. Data is collected and processed in less time and is of a higher quality. This reduces operational costs and minimises the risk of a spool not fitting.

Overview

During the planning stage, the spool metrology is defined with key data collection and operational steps entered into Connect.

Measurements can be directly collected from the metrology instruments including Sonardyne 6G transceivers and transponders, depth sensors and gyrocompasses. The data collection phase automatically configures the acoustic instruments with the optimum settings for metrology before checking the acoustic links with advanced Wideband 2 6G diagnostic measurements.

The user is then guided through the defined stages of the data collection with the software providing a virtual 'checklist' to ensure that each stage has been successfully completed and in the correct order before proceeding. Collected data can then be checked and edited if required, such as rejecting depth loop outliers.

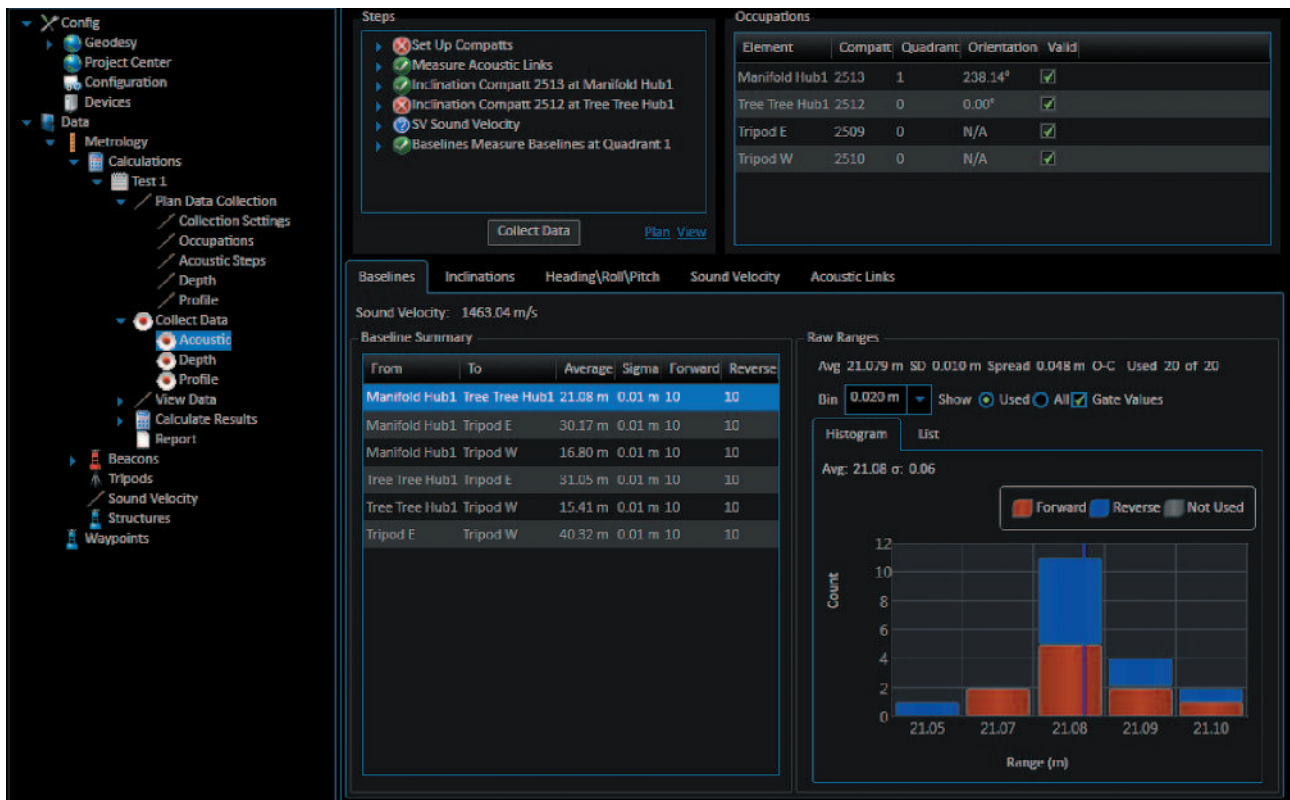
The results calculation stage follows the guided step by step approach with the user able to perform intermediate calculations such as depth loops and attitude determination before proceeding to the final metrology calculation. At each stage the user can check the calculations and reprocess as required.

Connect – What you need to know

- Supports all stages of metrology including planning, data collection, quality control, processing and reporting
- Vertical, horizontal and implied metrology supported
- Faster setup, calibration and operation using latest Sonardyne 6G® instruments
- Provides a direct interface to metrology instruments including Sonardyne 6G hardware, depth sensors and gyrocompasses
- Supports data export
- Online and Desktop versions available

CONNECT SOFTWARE

COLLECT, PROCESS, QC AND REPORT LBL METROLOGY DATA



Following the calculation of results customer reports are generated containing the final results with supporting data and QC. The final metrology report contains summaries of the calculations to support the results which will include Hub-to-Hub horizontal distance, slant range, depth differences, attitudes and more.

The software improves the speed and integrity of data processing for acoustic metrology techniques, shortening spoolpiece or jumper installation.

Connect supports both traditional horizontal and vertical metrologies. In addition, the software can provide results for points on the structures that are not directly measured using 'implied' metrology techniques.

All raw data can be exported for external quality control or processing. In addition to the online version, a desktop version of Connect is available to allow off-line quality checks and reprocessing.

Connect Software

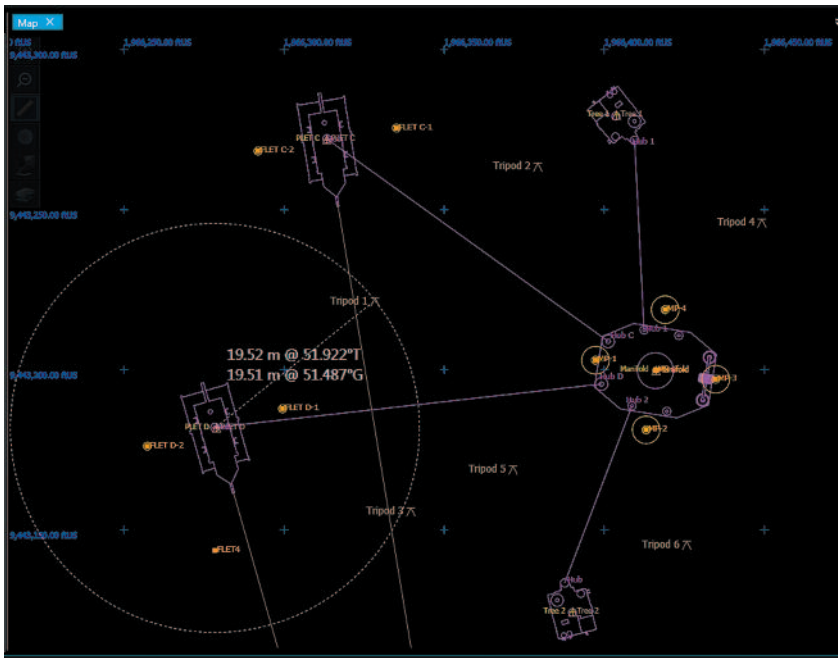
Feature

Operating Systems	Windows 7 (32 & 64 bit)
Sensor Interfacing	Serial, UDP and TCP
Time Synchronisation	NMEA GGA + 1PPS (CTS / CD)
External Sensors	Pressure depth, sound speed and other external inputs
LBL Calibration	Batched simultaneous baseline collection
Compatible Transceivers	All Sonardyne 6G Transceivers
Compatible Transponders	Sonardyne Compart 6 and Lodestar GyroCompart 6



Depth Sensor Logging

Users can review and control data logging in real time during depth loops.



Map View

Connect provides a graphical representation of the metrology setup.

Time	AL	Address	Quality	Noise	Strength	Interference	Error
	S_1703 H1	1703	89	56	-38	0	0
	S_1704 H2	1704	89	55	-38	0	0
	T_1702	1702	89	56	-18	0	0
	T_1705	1705	89	56	-58	0	0

Below the table is a 'Measure Link' button. At the bottom, the 'Command Console' shows the following log entries:

```

16/10/2013 14:28:17 - Requesting Acoustic Link from 1/05
16/10/2013 14:28:19 - Acoustic Link Measured for compatt
    
```

Acoustic Link

Connect will automatically assist operators in optimising and checking acoustic settings.

