

Delph INS

Post-Processing software for iXblue's INS-based navigation

Delph INS is the post-processing and batch productivity tool for the iXblue's INS subsea product range (Phins Subsea, Rovins, Rovins Nano and the Phins Compact Series).

In real-time, it helps you closely monitor your navigation systems (iXblue's and third-party sensors). In post-processing, along with all its previous features, the new version now allows you get the most of a day's work with various enhancement tools like INS/DVL post-mission calibration or QA/QC reports generation. Not only do you have the insurance that you obtain the best from your navigation, but you also get the ability to fix any problem encountered during the survey.

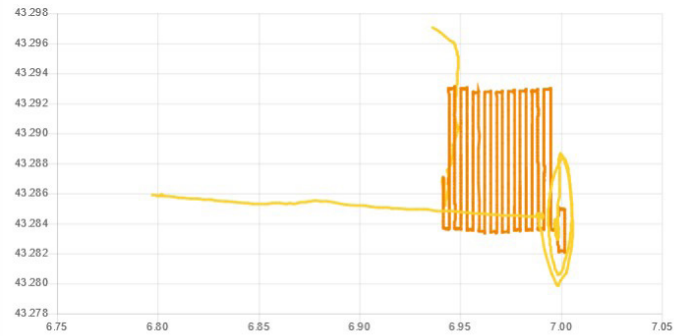
Delph INS will:

- Allow you to post-process your data with custom INS settings
- Integrate data from external sensors that could not be connected to the INS during the survey or provided by a third-party processing tool
- Enhance the quality of the data using dedicated algorithms
- Help you evaluate different positioning scenarios
- Generate QA/QC report for real-time and post-processing navigation
- Allow you to conduct INS/DVL calibration offline and fine tune the results

Available in several versions specifically designed for subsea applications such as ROV, AUV and tow fish applications, Delph INS offers powerful data editing and processing functions together with data export capabilities.

SENSOR General overview (POST-PROCESSED) (POST-PROCESSED)

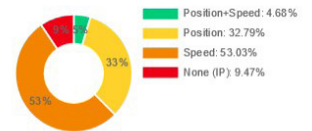
Trajectory (Pairing mode)



Aiding sensors

<input checked="" type="checkbox"/>	GPS ₁
<input type="checkbox"/>	GPS ₂
<input type="checkbox"/>	GPS ₃
<input checked="" type="checkbox"/>	USBL ₁
<input type="checkbox"/>	USBL ₂
<input checked="" type="checkbox"/>	LBL
<input checked="" type="checkbox"/>	DEPTH
<input checked="" type="checkbox"/>	DVL(bottom track)
<input checked="" type="checkbox"/>	DVL(water track)

INS Pairing mode



MAIN FEATURES

- QA/QC reports generation (new)
- INS/DVL post-mission calibration (new)
- Customizable map projections (new)
- Automatically computed UTM projections (new)
- 2D plan view (new)
- Specific "Out-of-straightness" data smoothing option (new)
- Export INS configuration (new)
- Forward/backward data processing, edit/modify data, add/remove aiding sensors
- Powerful export tools
- Intuitive and user-friendly man machine interface (MMI)
- Several versions tailored to various market applications

BENEFITS

- Easy and intuitive navigation improvements
- Smooth post-processing integration of your other navigation sensors (GPS, USBL, LBL, DVL, pressure and others)
- Quick and easy integration in processing workflow
- Does not require in-depth INS knowledge
- Cost effective and scalable solution for all applications

REQUIREMENTS / COMPATIBILITY

Minimum workstation configuration

Microsoft Windows XP SP2, Vista, Windows 7, Windows 10
Intel Core i5 – 2 GHz – 4 Gb RAM

Input file formats

Phins Post-processing protocol | Industry standard protocols (GPS, USBL, LBL, DVL, etc)

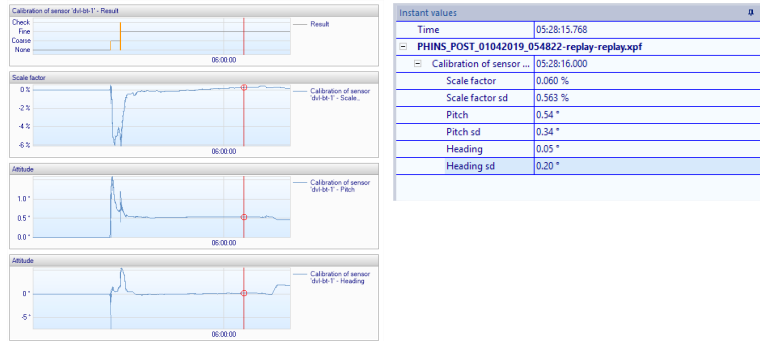
Output file formats

Industry standard file format (KML, ESRI Shapefile, GML)
Plain text file | Specific file format on request

MAIN FEATURES

INS/DVL calibration

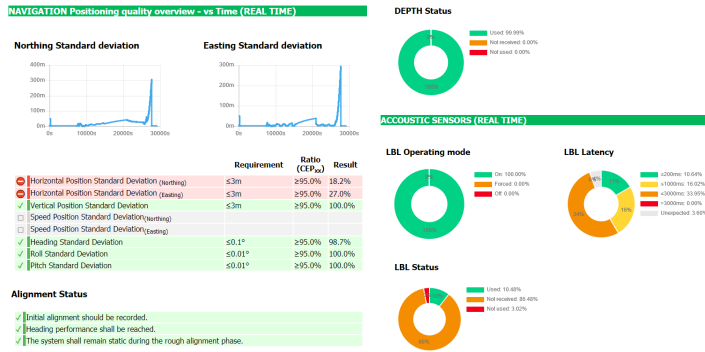
Allows you to make an offline DVL calibration



QA/QC report generation

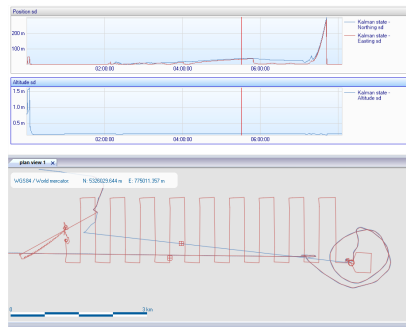
In one click, during or after the mission, generate a full report about the navigation quality and sensors use:

- Report can be generated in real-time and in postprocessing mode
- Quickly get access to a full overview of your mission's quality
- Get a focused report on specific points: USBL, LBL, DVL



2D plan view

- Easily display vehicle trajectory within Delph INS GUI
- Synchronise time view and plan view for an easier analysis
- Spatial References may be changed
- Distance Travelled by the vehicle
- Position WGS84 or projected



INS configuration

Easy access to the different INS setups throughout changes

INS configuration log

This document is produced by processing the configuration changes embedded in a post-processing file recorded from an INS file.

It displays the configuration of the equipment and changes made during the operation. The changes are highlighted using the following:

- Green - new value added in the current configuration
- Blue - value changed from the previous configuration
- Red - value deleted in the current configuration
- Black - the value is identical to the previous configuration value.

Click on headers to expand or collapse sections.

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INS configuration 2019-04-01T05:48:22.274

System identification
Equipment phins7s
Operation 01
Description phins3
Date 198703
Manufacturer 6670
SerialNumber 198703
Unit 01
Version CIP 8.41
Version DVL 8.41
Version Algorithm 12

System configuration
Display mode intermediate
ZUPPT mode none
Initial mode initial
Rough management RML-Algorithm
Rough management heading set (off)
Primary lever arm [x1, x2, x3] [2.424, 0.008, -0.282]
Secondary lever arm [x1, x2, x3] [0.424, 0.008, -0.282]
Secondary-C lever arm [x1, x2, x3] [1.971, 0.388]
Center of gravity lever arm [x1, x2, x3] [0, 0, 0]

Rough management heading set (off)
Primary lever arm [x1, x2, x3] [2.424, 0.008, -0.282]
Secondary lever arm [x1, x2, x3] [0.424, 0.008, -0.282]
Secondary-C lever arm [x1, x2, x3] [1.971, 0.388]
Center of gravity lever arm [x1, x2, x3] [0, 0, 0]
    
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