

# LEVELMASTER®

## Success story - Semisub Borgholm Dolphin

Kockum Sonics delivers level and draught gauging system LEVELMASTER® to Semisubmersible "Borgholm Dolphin" owned by Dolphin drilling.

Semisubmersible rig "Borgholm Dolphin" had an old purge type level and draught gauging system. The system was very old and unreliable with erratic manometer presentation. Swedish engineering company Smemec AB was contacted in order to find an optimal solution for the rig. Smemec conducted a survey of the present systems suitable for retrofitting the gauging system. After a careful investigation Smemec concluded that the best system from an operational as well as economical perspective was to install Kockum Sonics level gauging system Levelmaster H8.

Kockum Sonics level gauging system utilises the electro pneumatic principle. A principle that is very robust and keeps the sensors in a controlled area. Levelmaster H8 is an improvement of the typical way of measuring electro-pneumatically. By combining static pressure measurement and thereby avoiding expensive constant flow regulators in tandem with utilization of sensor multiplexing an unsurpassed accuracy is reached at the lowest possible cost.

In a retrofit case such as this when piping is already in place the project can be done in matter of days saving enormous amounts of money by avoiding expensive cabling. The Levelmaster H8 gauging cabinet was connected to a standard dual screen PC for presentation of levels, volume draughts etc. The software, Levelmaster Presentation, takes care of all level/volume conversion and in addition provides single tank/multiple tanks display as well as an overview picture with rig mimic implemented.

Our strength is your benefit!



## LEVELMASTER® system capabilities

LEVELMASTER level gauging system provides a complete overview of the loading and discharging of tanks. The system is totally independent and maintains its accuracy by constantly monitoring the ambient temperature to compensate for temperature shift and calibrates towards atmospheric pressure variations automatically at pre-set intervals. The system is modularized and is easily serviced by the onboard crew since all modules comes pre-calibrated.

LEVELMASTER® is of course compatible with other KOCKUM SONICS products such as LOADMASTER® and SHIPMASTER®.

## Operational benefits

The following benefits can be derived from LEVELMASTER® retrofit:

- High accuracy +/- 1cm
- Fast update rate for all tanks (7sec)
- Low air consumption approx. 0.5l/min.
- No electrical or moving parts on deck or EX-zone
- Automatical Calibration
- Total number of spare parts 9 pieces
- Low investment cost

## Project Management

The entire system was developed in Malmö, Sweden and was installed during a yard stay by Smemec AB. Kockum Sonics developed the system based on the documentation sent from Smemec AB to Kockum Sonics and the survey carried out by Smemec AB during the bidding period. The new system is fully modularised and makes for easy service and maintenance with readily available spares on a global basis.

*"The project went smoothly from end to finish. Kockum Sonics contacted us a few times in order to get hold of the necessary documentation. After that they carried out their work without drawing resources from our own in-house technical staff"*

Mr Christer Smedendahl  
CEO  
Smemec AB.

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