

SANVALUE

TANK LEVEL GAUGING SYSTEM



SANDERMARINE
MARINE + OFFSHORE EQUIPMENT

SANDERNAVY
NAVAL EQUIPMENT



FLEXIBLE. DURABLE. INTEGRABLE.

SANVALUE Tank Level Gauging System

SANVALUE allows safe and reliable tank management. It comes either separate or integrated as a part of SANSYS remote control valve system. Control tank loading and unloading, filling levels, and unauthorized discharge!



The complete technology from a single source

- / **Long lifetime – SANSSEN pressure type sensors come with ceramic membrane, double sealing system, duplex steel body, and 5-year warranty**
- / **Flexibility – Use any type of level sensor or switch**
- / **Versatility - Dry or submerged installation, up to 120°C, hazardous zone installation (ATEX group Ex ia IIc T6, Zone 0)**
- / **Simplicity - One SANSYS user interface for all systems: SANCONTROL remote control valve system, SANHEEL anti-heeling system, SANDRAFT draft measuring system etc.**
- / **Hardwired or Modbus RTU interface to loading computer, integrated automation system IAS or alarm monitoring system AMS**



We are certified according to
ISO 9001: 2015
ISO 14001: 2015

Upgrades and customization

- / **Add customized visualization and additional workstations**
- / **Optional upgrades:**
 - / Several levels of redundancy (power supply, network, PLC, work station)
 - / Mimic diagram visualization
 - / Integrated manuals, spare parts lists, drawings

SYSTEM LAYOUT AND VISUALIZATION



SANFUEL

The SANFUEL bunker alarm system allows safe and reliable bunker management. Control bunker operations and filling levels efficiently. Prevent unauthorized discharge!

SANSEN

The 5-year warranty proves the reliability of SANSEN tank level sensors and their resistance to corrosion attacks, pressure shocks, leakages and mechanical damage.



Sensor types

SANVALUE handles any kind of sensor type: pressure, radar or air purge type as well as level switches

INCREASE EFFICIENCY. REDUCE RISKS.

SANVALUE – Selecting the right options

/ Control cabinet

- / Inclination sensor
- / Tank volume and mass calculation (trim, list, density)

/ Dry or submerged tank level sensors

/ Data recording and trend analysis

/ SANFUEL bunker alarm system

/ Draught measurement sensors

/ Tank level switches for low and high level alarms

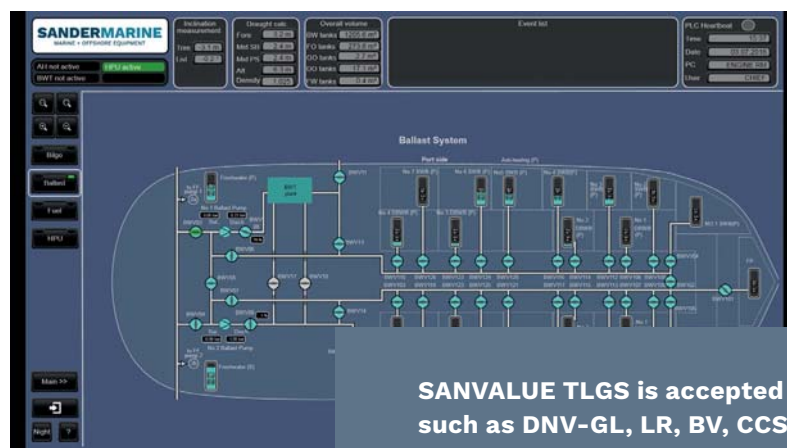
/ SANSYS Chief / SANSYS Master visualization

/ External workstations with interfaces to

- / IAS – integrated automation system
- / AMS – alarm monitoring system
- / Loading computer
- / Other SANDER systems

Involve SANSYS for perfect control

The SANSYS control and monitoring system is used to monitor the TLGS from the central control cabinet or decentralized locations such as bridge, cargo control room, pump room etc. The tank levels can be visualized with a tabular overview of the tanks or a customized graphic display of the complete piping and tank system. A connection to the vessel's integrated automation system (IAS) or alarm monitoring system (AMS) is possible.





A COMPLEX CALCULATION MADE EASY FOR YOU

High technology for the vessel's stability

A tank level gauging system (TLGS) monitors the filling levels of various tanks onboard a ship. Besides stock keeping of supplies such as fuel or bunker oil, freshwater and any liquid cargo, it provides important data to maintain the vessel's stability by monitoring the filling levels of ballast water tanks and bilges.

Various technologies can be used to measure the tank level, mainly pressure type sensors, radar sensors and air purge sensors. Some applications require an independent monitoring of dangerously high or low tank levels by level switches (e.g. float, vibration or magnetic type) to prevent overfilling or dry running. So called bunker alarm stations provide visual and acoustic signals for a safe refueling or bunkering of ships.

The actual liquid volume or mass is derived from a complex calculation involving tank level reading, liquid density, geometric tank data, trim and list values.

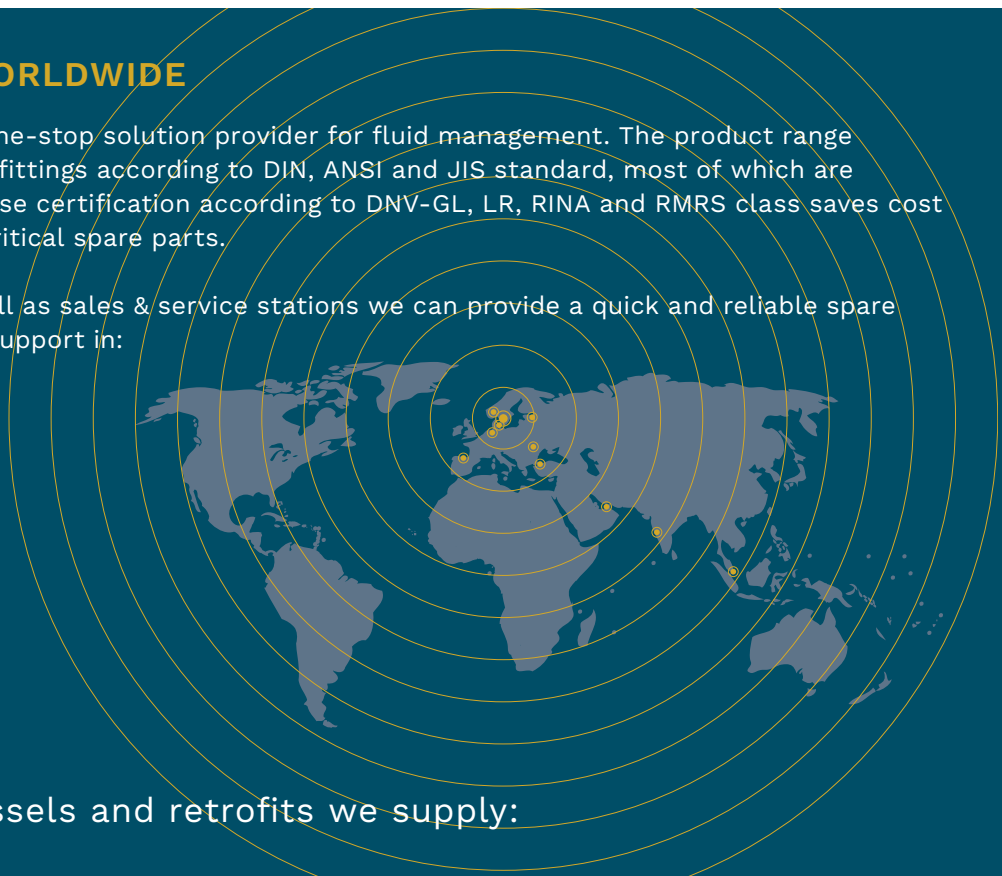
Variants of TLGS include draught measurement (calculating the ships position in water from pressure sensors attached to its hull) and inert gas pressure systems (monitoring the tanks' protective gas blankets on oil and chemical tankers).

SANDER MARINE WORLDWIDE

The Sander Marine is your one-stop solution provider for fluid management. The product range includes manual valves and fittings according to DIN, ANSI and JIS standard, most of which are available from stock. In-house certification according to DNV-GL, LR, RINA and RMRS class saves cost and reduces lead time for critical spare parts.

Based on warehouses as well as sales & service stations we can provide a quick and reliable spare parts supply and technical support in:

- / SWEDEN
- / GERMANY
- / SINGAPORE
- / DENMARK
- / NORWAY
- / DUBAI
- / INDIA
- / TURKEY
- / SPAIN
- / ROMANIA
- / RUSSIA



For new building vessels and retrofits we supply:

SANSYS

Customizable control and monitoring system

SANVALUE

Tank level gauging system incl. SOLAS flooding detection or bunker alarm system

SANHEEL

Anti-heeling system

SANDER NAVY

Valves and systems according to international Navy standards

SANCONTROL

Hydr./el.-hydr./pneum./el. remote control valve system

SANFAST

Pneumatic or hydraulic quick closing valve system

SANTORQUE

Hydraulic and electro-hydraulic actuators and accessories

SANDER MARINE

After sales support and services

SANDERMARINE
MARINE + OFFSHORE EQUIPMENT

SANDERNAVY
NAVAL EQUIPMENT

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