



Systems Overview

Cargo Level Gauging System for tankers and FPSO

- Integrated system measuring level, temperature, inert gas pressure, etc, for ballast and cargo tanks
- Provides a one-stop shop for integrated system
- Quick scan up to 2 sec for the whole ship, thanks to self-contained radar design

**Inclinometers
(Trim and list)**



TA3840C+TA3840S

Calculation racks



**CARGOBOSS
proprietary
monitoring software**

**Digital
communications**

**PL 3700
pressure
gauge**

**EM540
Radar
gauge**

atmospheric
pressure

**PL3700
manifold on
cargo lines**

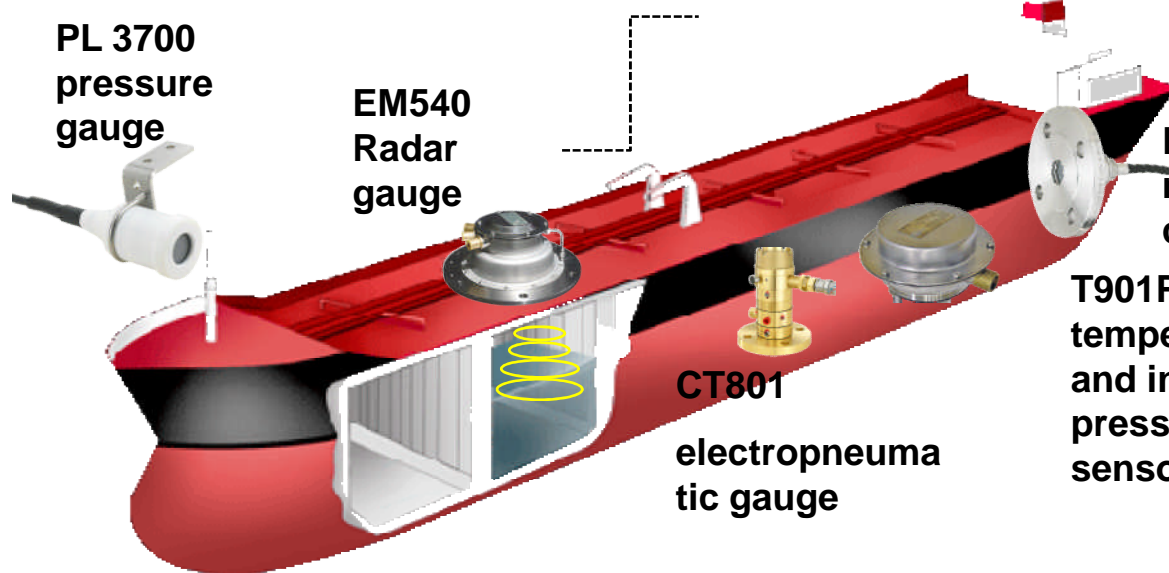


**T901P
temperature
and inert gas
pressure
sensors**

**CT801
electropneuma
tic gauge**

Narrative

F&B



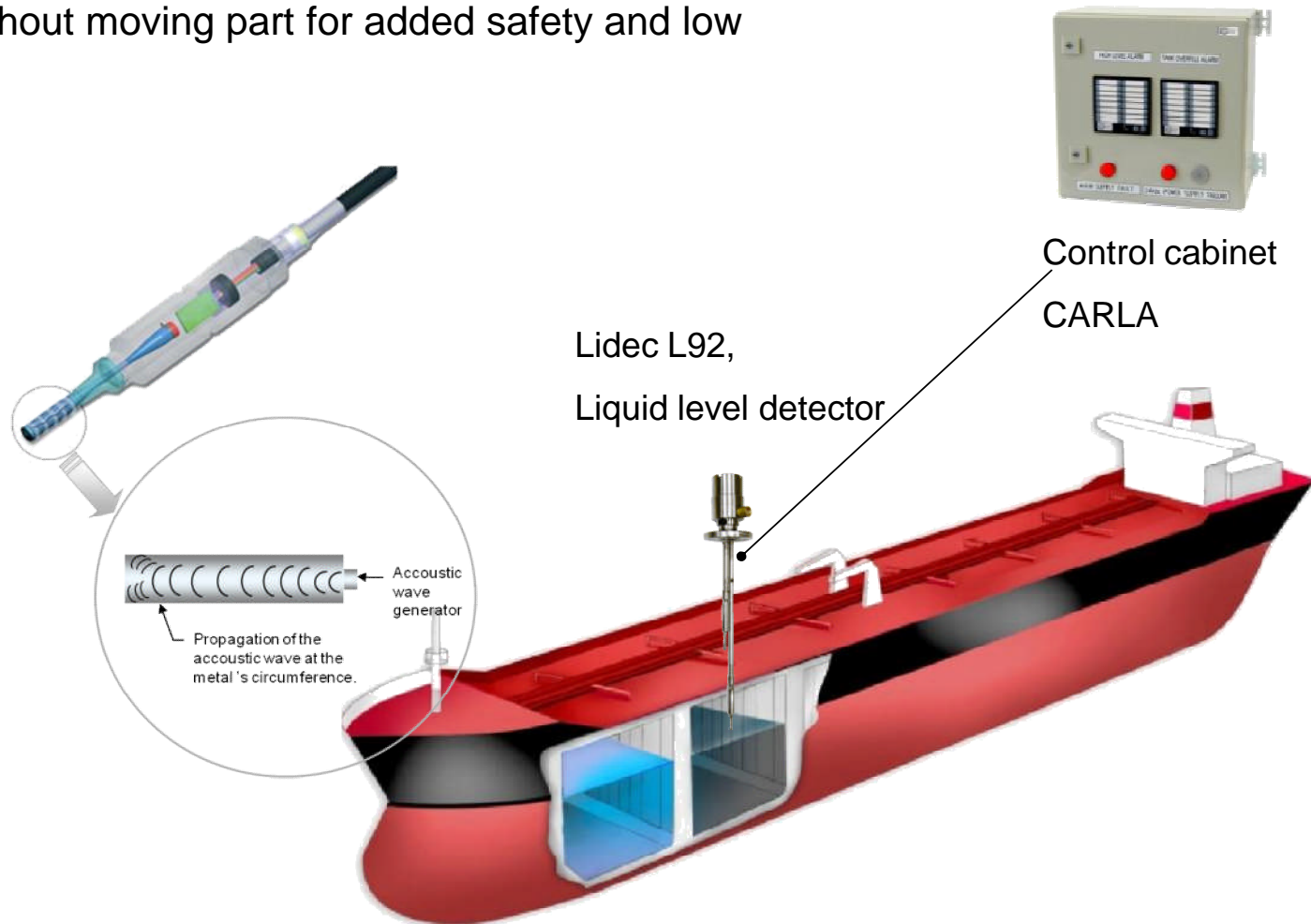
CARLA Cargo Overfill prevention

- Independant high-level and overfill alarm for cargo tanks
- Demanded for SOLAS compliance
- Uses LIDEC without moving part for added safety and low maintenance

Narrative

F&B

Principle



Gauging system for barges and river tankers

- A simple but powerful system for level and gas monitoring and alarm, achieving regulatory compliance for carrying liquids
- All instruments including portable gauging and sampling on a single 8" flange, lowest cost of installation and ownership
- "No moving part" concept for low maintenance and better reliability

Sound and light alarms



Display and alarm panel



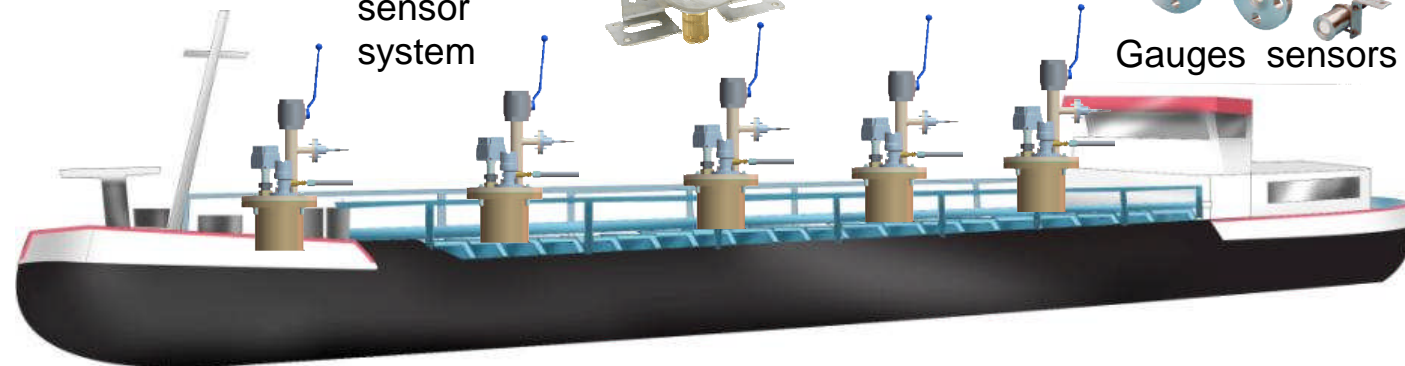
Gauges sensors



Eight-in-One sensor system



Log 3840 display unit



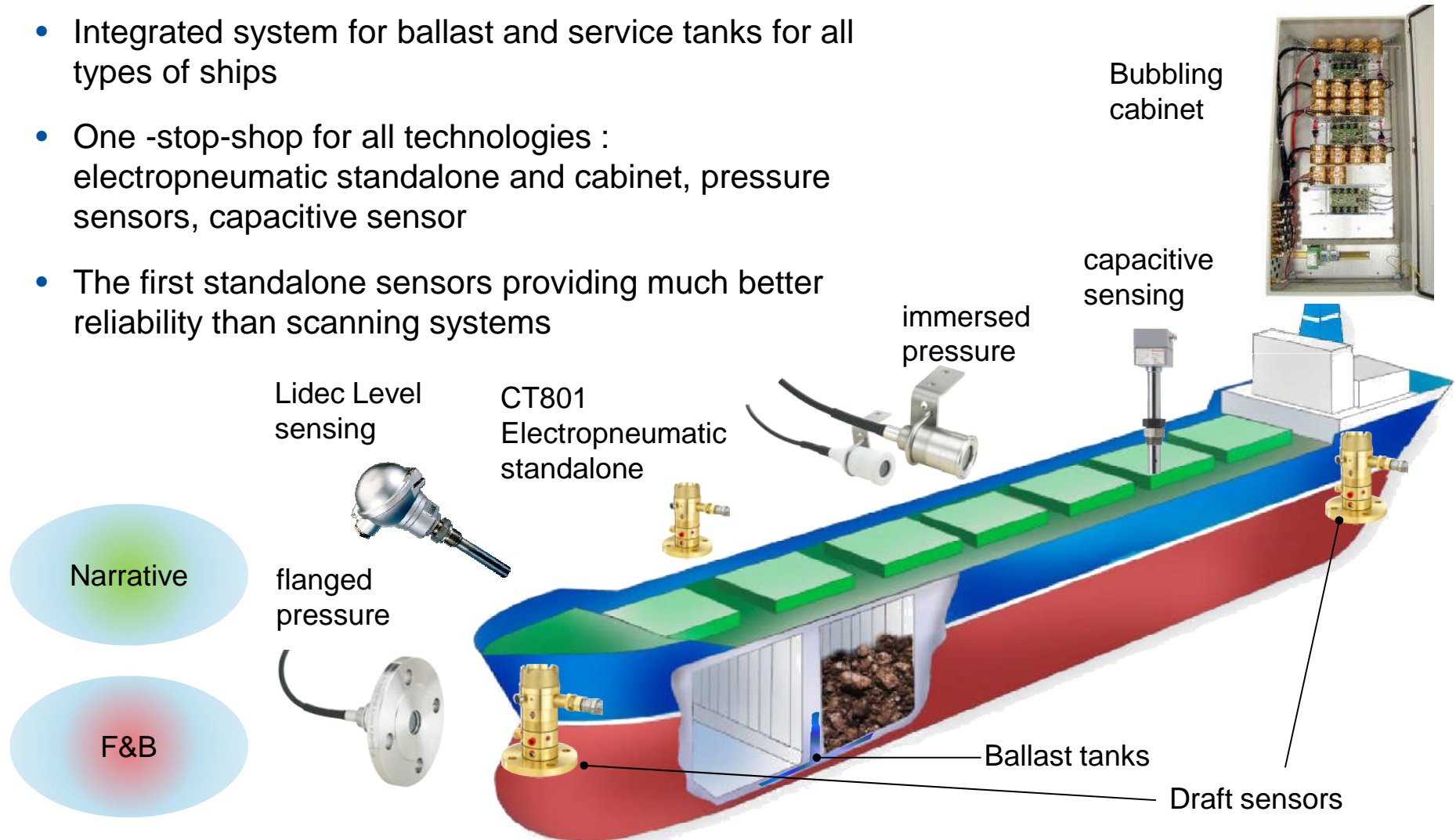
Narrative

F&B

Principle

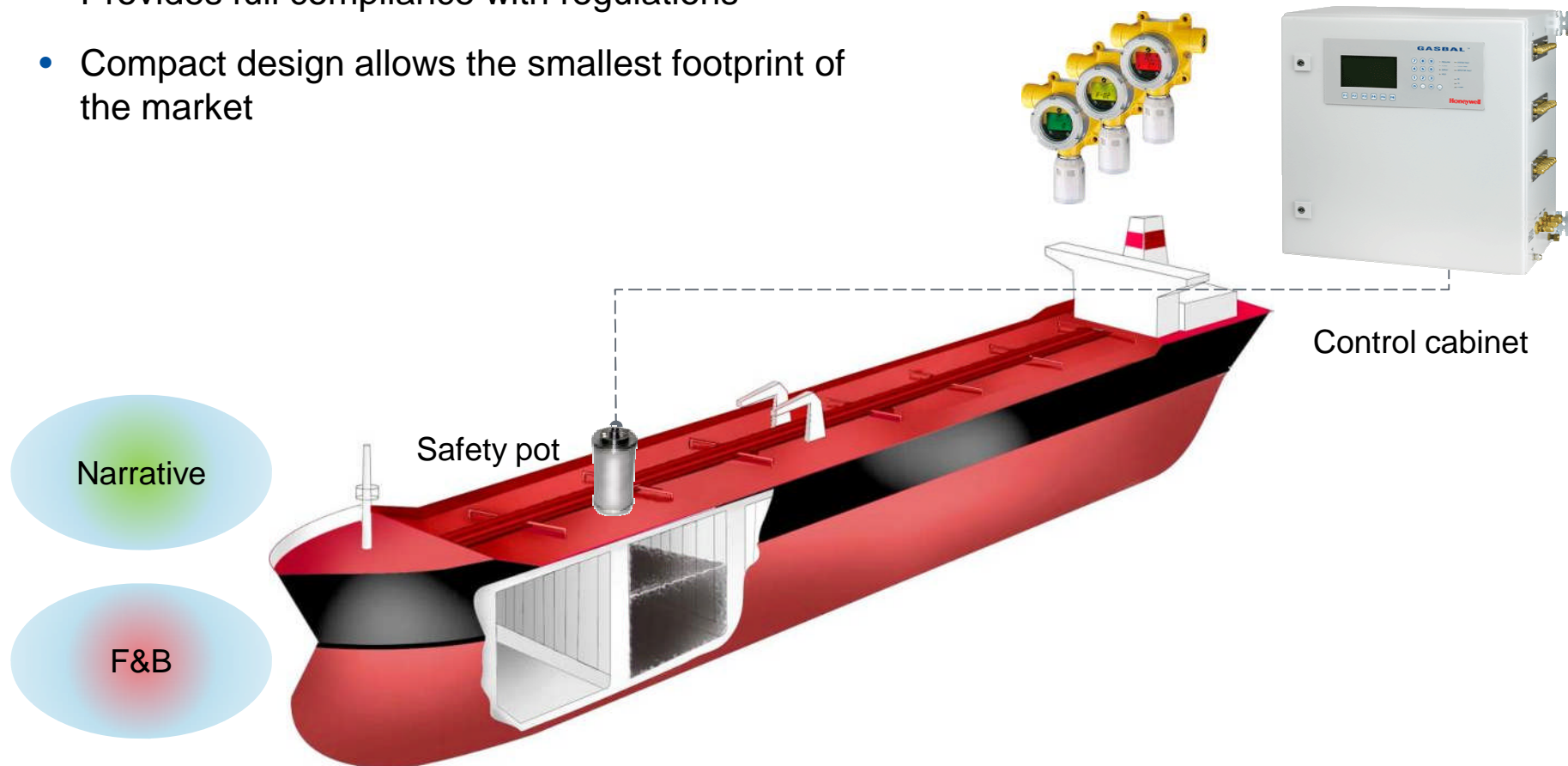
Ballast and Service tank gauging for all ships

- Integrated system for ballast and service tanks for all types of ships
- One -stop-shop for all technologies :
electropneumatic standalone and cabinet, pressure sensors, capacitive sensor
- The first standalone sensors providing much better reliability than scanning systems



Gas detection in empty spaces

- Complete system for detection of dangerous gases in empty spaces.
- Provides full compliance with regulations
- Compact design allows the smallest footprint of the market



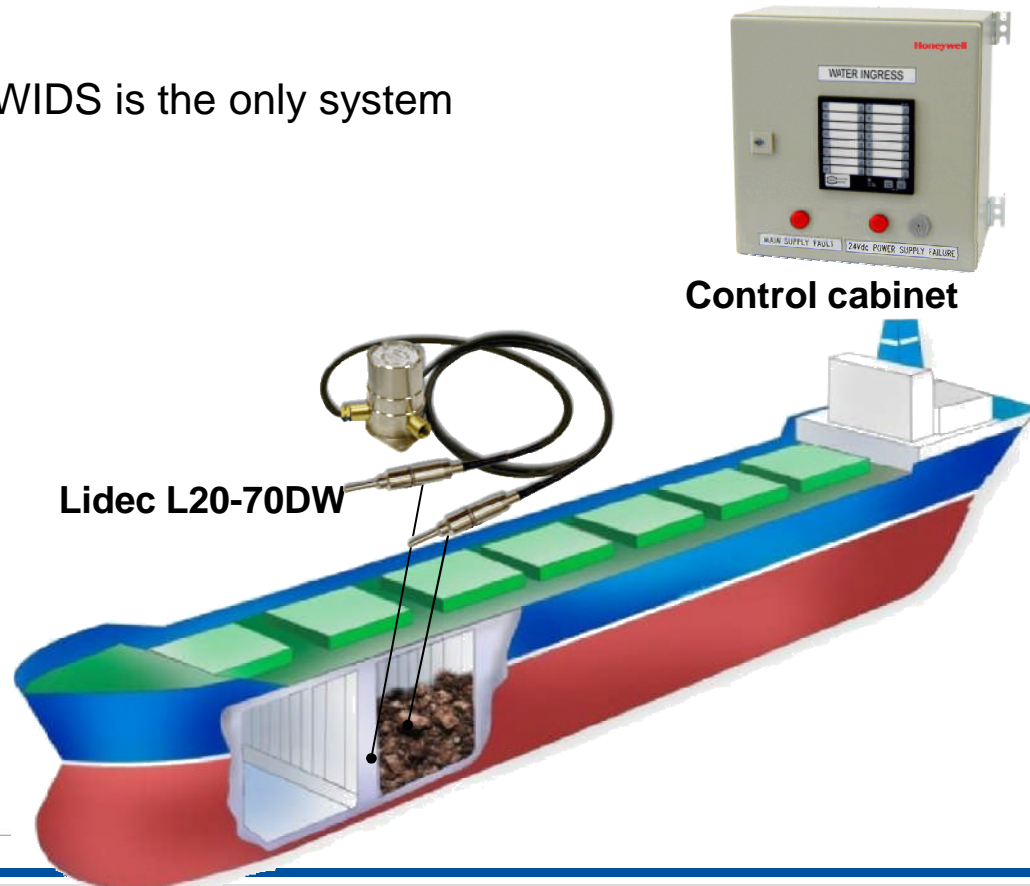
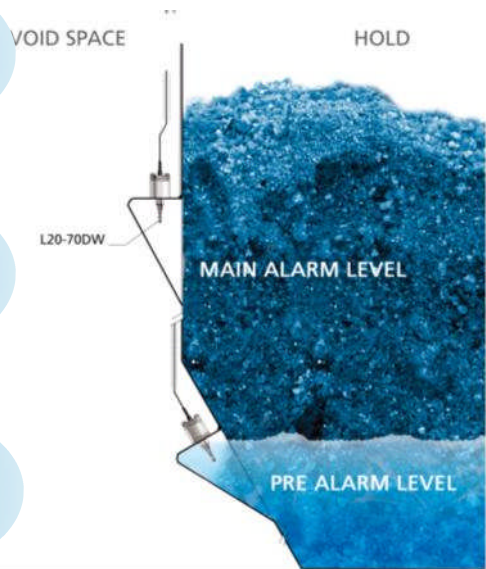
Water Ingress Detection system

- Independent system of water ingress alarm for bulk carriers and dry cargo
- Provide full compliance with the demands of SOLAS Chap XII reg12
- Based on no-moving parts detection, WIDS is the only system which is not affected by clogging

Narrative

F&B

Principle



Fuel Consumption Optimisation



- A unique system combining monitoring, consumption modeling and remote communications
- Provides full accountability for fuel usage as well as consumption reduction algorithms
- Quick payback thanks to throttle optimisation and theft detection



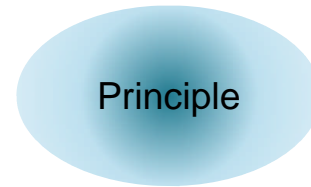
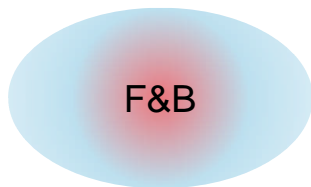
Iridium Satellite
Once Per Day



Data & Support
Center
24 Hours



Data



Management Reports

Fuel Theft Notification

Global Vessel Logistics

Measure Speed
& Location



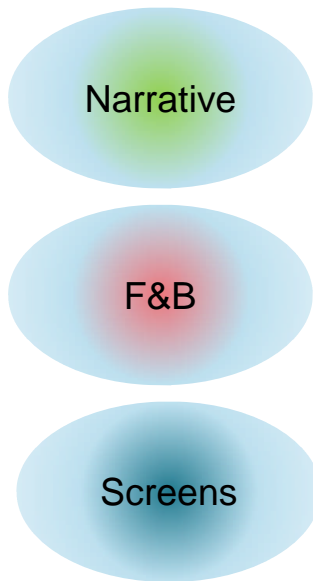
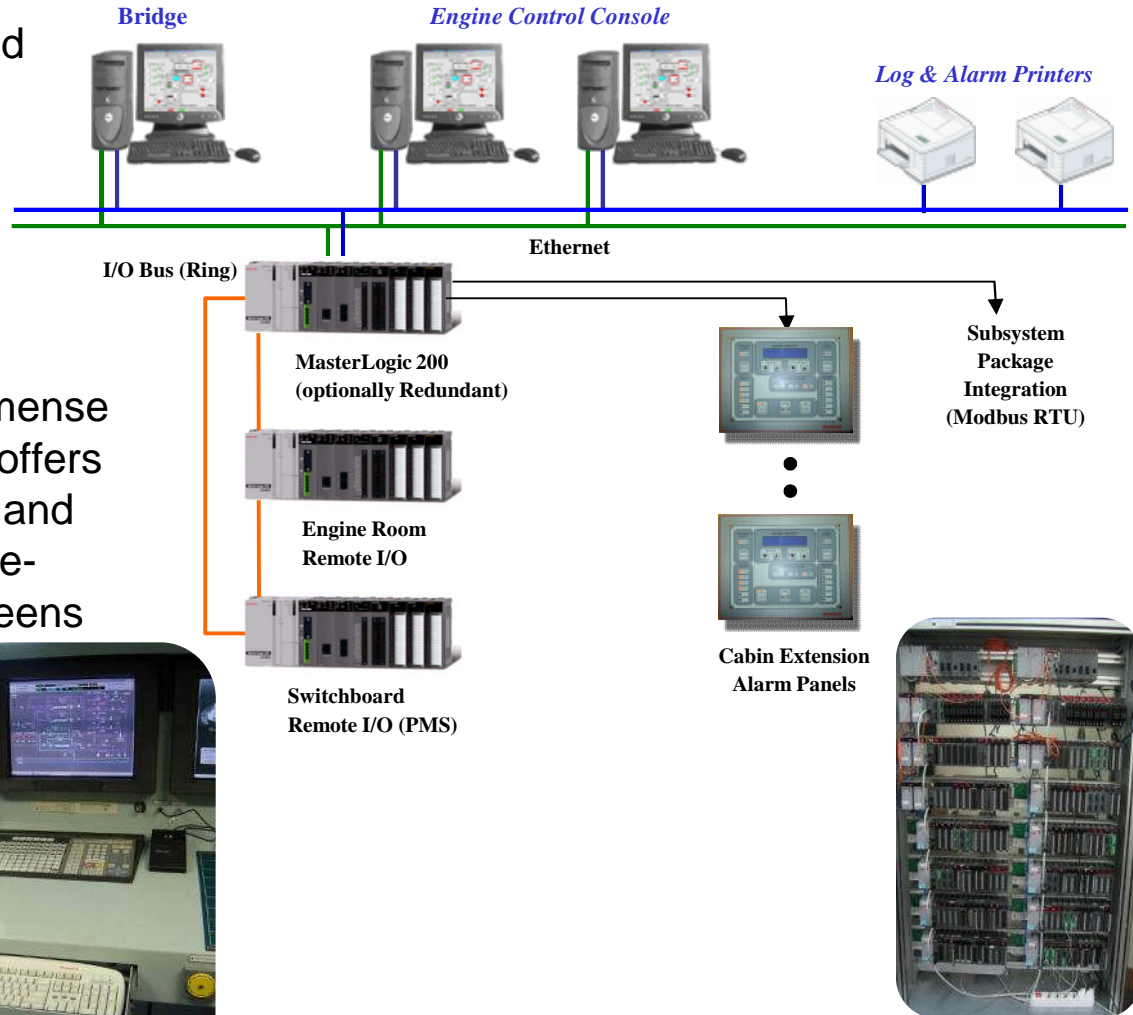
Record Fuel
Refills



Alarm Monitoring System

- A simple and powerful Alarm and Monitoring System for all types of ships
- Excellent complement to Tank Gauging and Valve Remote Control Systems

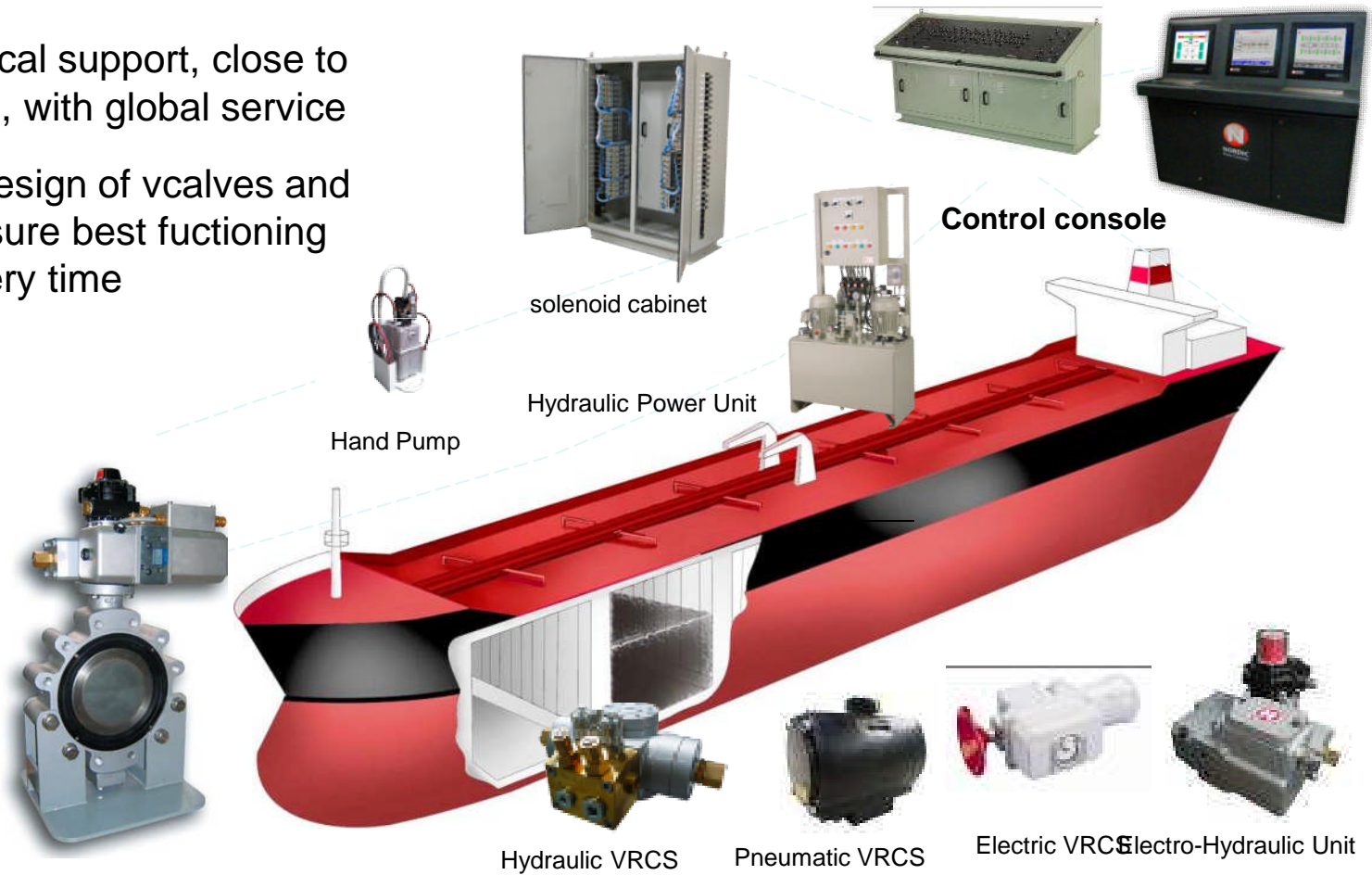
- Experion® immense installed base offers global support and hundreds of pre-configured screens



Valve Remote Control System



- Complete system for all types of ships
- Combining local support, close to the shipyards, with global service
- Proprietary design of valves and actuators ensure best functioning each and every time



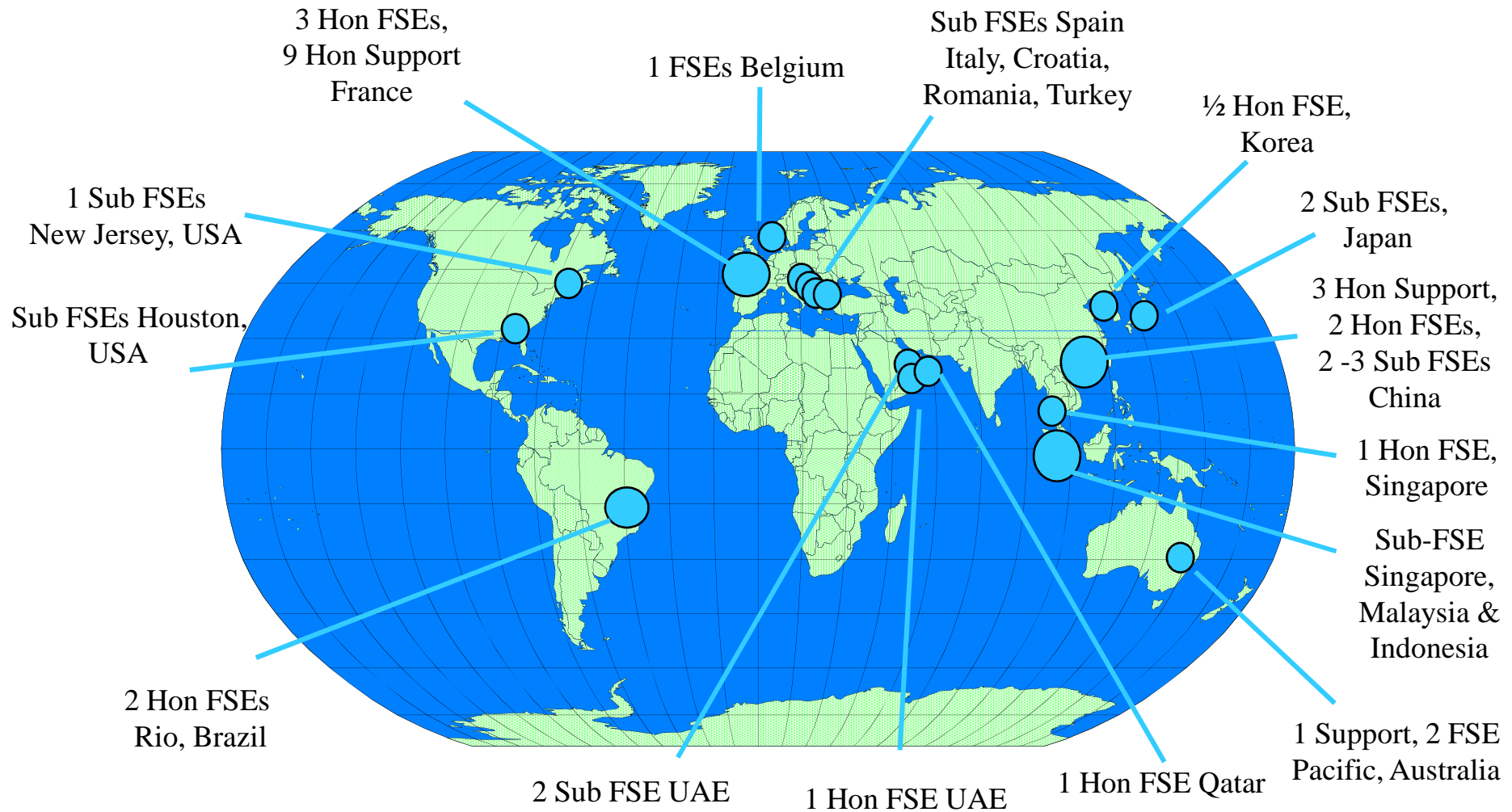
Service and support 1/2

- Honeywell's global presence and structure gives access to a Global network of experts who can answer requests and diagnose difficult issues.
- Remote stocks of certified parts in strategic locations around the planet allowing quick delivery times.
- All Honeywell sites are ISO 9001 certified
- Service stations are regularly audited on site
- Trainings for in-house technicians and service stations::
 - Staged in the manufacturing premises for hands-on practice
 - Taught by experienced trainers, subject to a final exam and certification

24/7 Local service, local spare part inventory

FSE : field Service Engineer
Hon ; Honeywell employee
Sub : sub-contractor

Service and support 2/2



Solutions Overview

Comprehensive Scope of supply

- Tank gauging & monitoring.
- Valve Remote Control.
- Alarm and Monitoring System.

Commissioning, Sea Trial

- Local service team, 4 hours notice.
- Quick response.
- Local engineer Shanghai
- Local inventory, 24 hours response time.

Before & during vessel construction

- Local skilled project support team, based in Shanghai
- Full FEED and project coordination
- Project manager can be located at the yard facility.

During vessel operation

- Single point of contact for after sales support.
- Local spare parts inventory in the major locations globally, 24 hours response time
- Local service team and service station major locations globally.

Honeywell – 1 Stop Shopping

Thank You, Any questions?

