

FISHMASTER®

“Trawling in comfort”



KONGSBERG

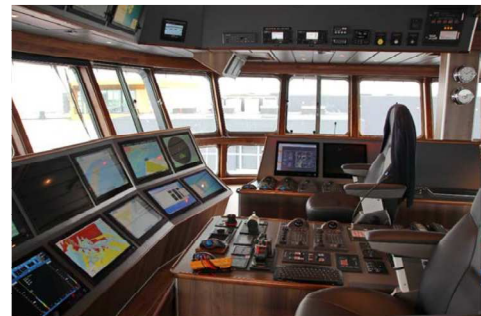
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Traditional bridge environment

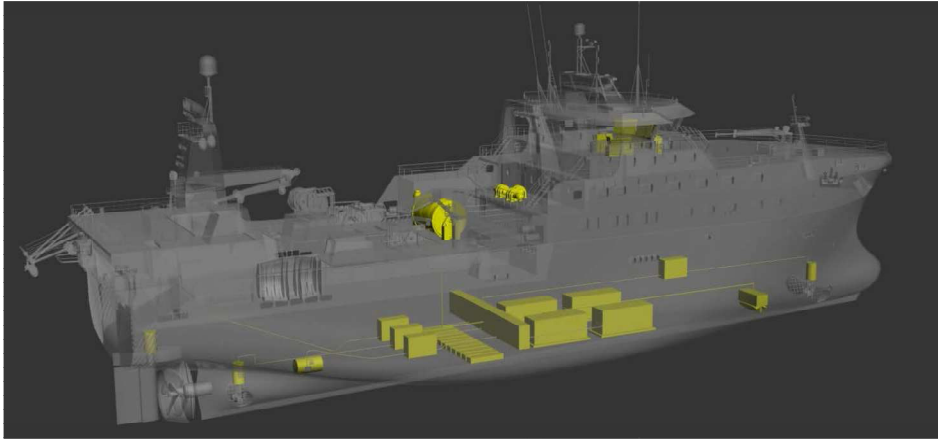


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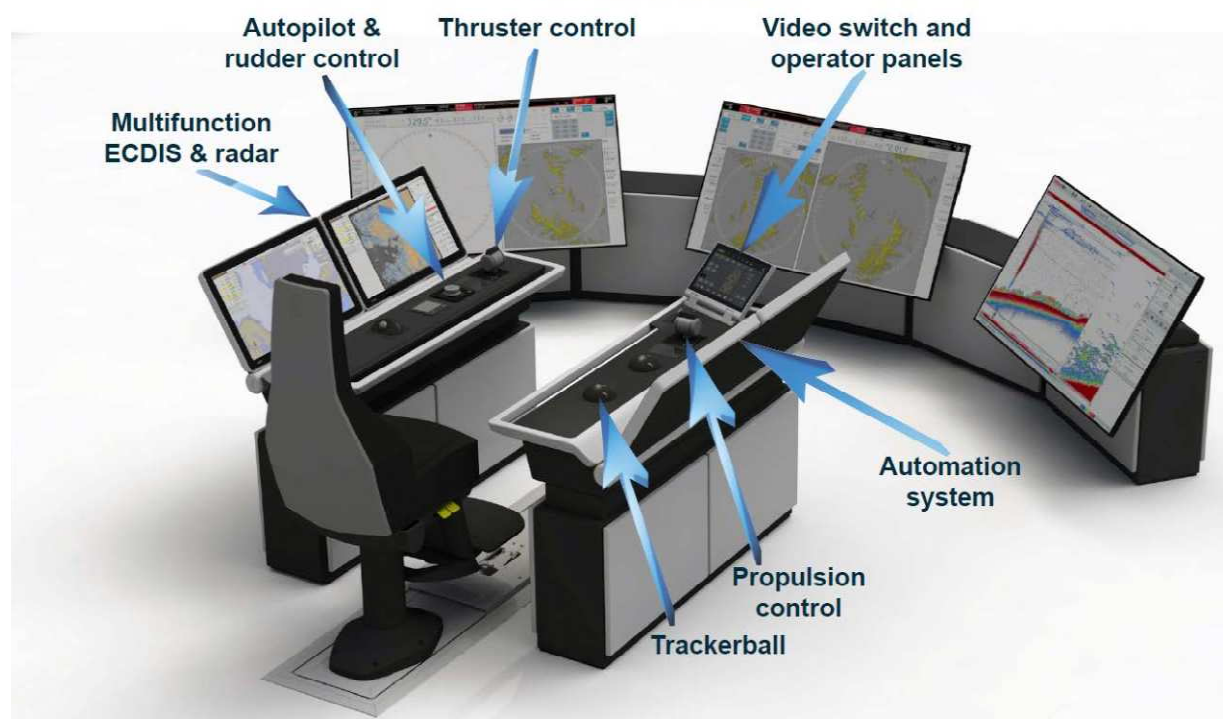
- ✓ SIMRAD - Fish search & catch instrumentation
- ✓ Operation environment (Bridge equipment, Consoles and Multi-monitor solution)
- ✓ Navigation system (Radar and ECDIS)
- ✓ Propulsion, thruster and rudder control
- ✓ Integrated Automation System (IAS)
- ✓ Fish process control system (RSW, factory)
- ✓ Electrical Power Solution (K-Power)
 - ✓ Switchboards
 - ✓ Hybrid solution with batteries
 - ✓ Drives
 - ✓ EI-motors
 - ✓ Power Management System (PMS)
- ✓ Winches and trawl control
- ✓ Vessel Management
- ✓ Remote Support

 It's all about INTEGRATION



Operational efficiency

- Consoles
- Electrical up/down/tilt
- 55" displays
- Split into 4 views
- Commando control



Operation with 13" touch control panel (TCP)



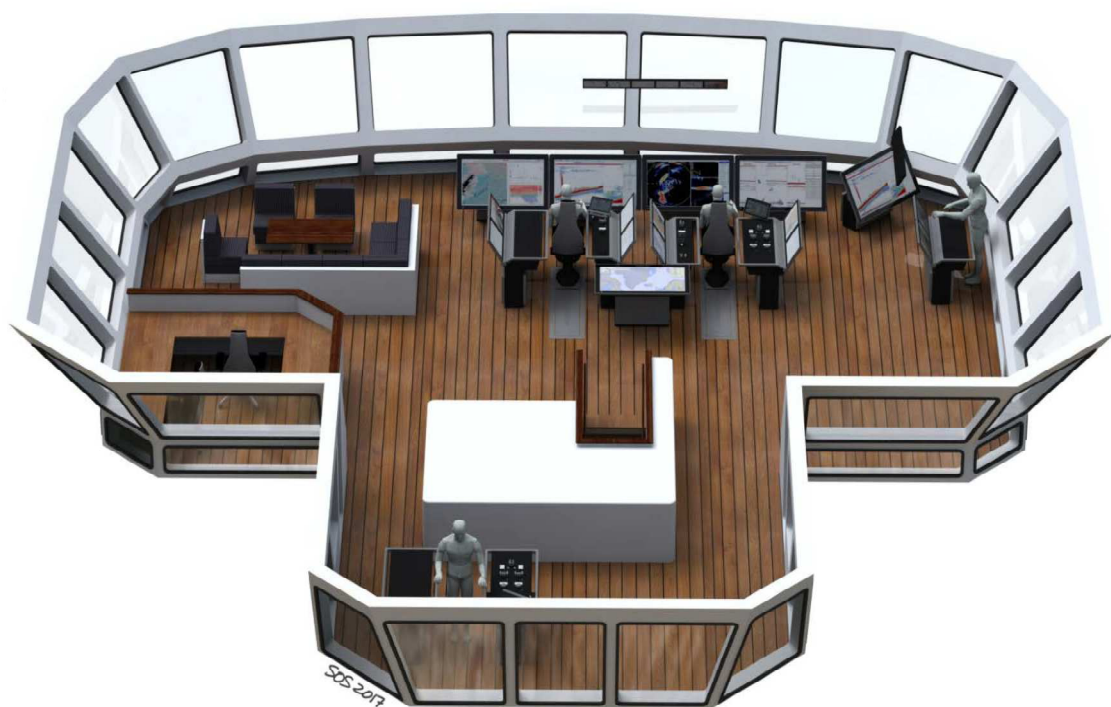
- ✓ Video-wall setup and selection
- ✓ Mode selection (transit, trawl, shooting, hauling, etc.)
- ✓ Common track ball for the video-wall
- ✓ Operator panels for all KONGSBERG/SIMRAD applications
- ✓ Common pallet changes / dimming
- ✓ Remote control for radio communication
- ✓ Application view with multi-touch for zoom functionality
- ✓ 2 x TCP for full redundancy



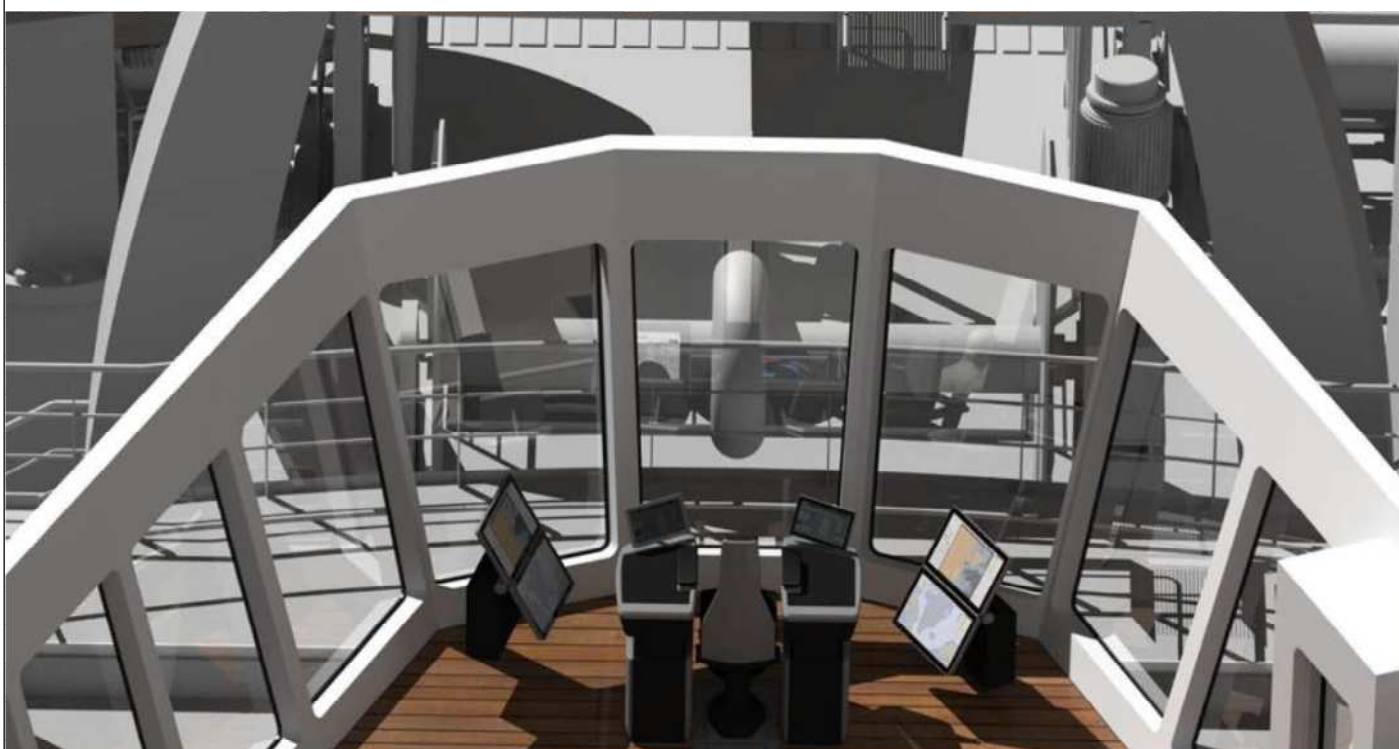
Forward bridge, two control positions



Forward bridge, two control positions



Aft bridge, winch and propulsion control

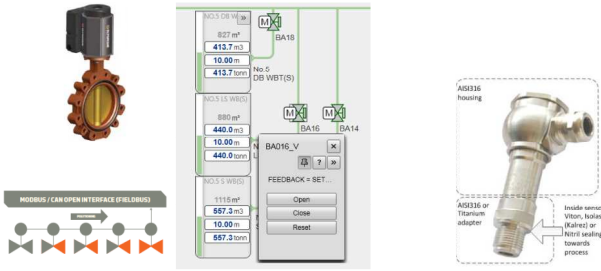


Automation system (K-Chief)

Alarm, monitoring, control and PMS



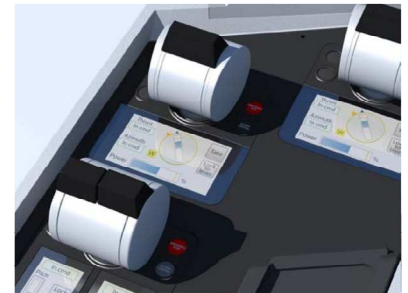
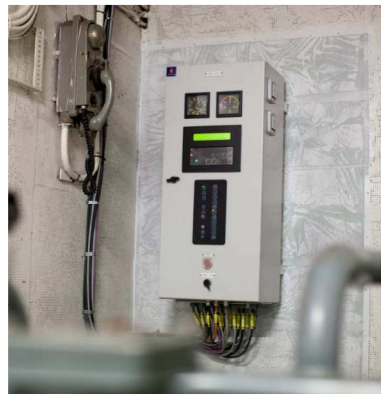
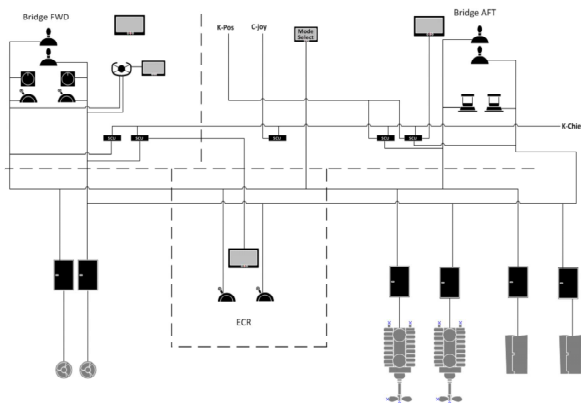
- ✓ Alarm system, E0 / UMS solution
 - ✓ Control of all ships processes
 - ✓ Control of navigation lights and window wipers
 - ✓ Winch control and auto trawl functionality
 - ✓ Propulsion, thruster and rudder control
 - ✓ Power management system
 - ✓ Tank gauging and monitoring
 - ✓ Interface to fish-handling processes
 - ✓ History storage / trending / report
- >2000 installed systems the last 4 years



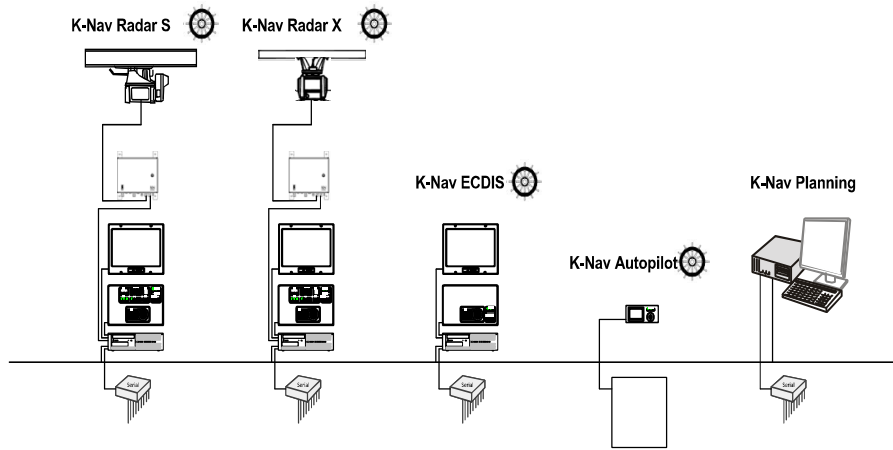
Main Propulsion, Thruster and Rudder control



- ✓ Same HMI for Main propulsion (RPM/Pitch/Combinator), thruster and rudder
- ✓ Easy command transfer from single button (forward, aft, bridge wings and ECR)
- ✓ Remote support, detailed overview and advanced diagnostic through K-Chief (IAS)



Navigation products



- ✓ K-Nav Radar
- ✓ K-Nav ECDIS
- ✓ K-Nav Autopilot
- ✓ K-Nav Planner

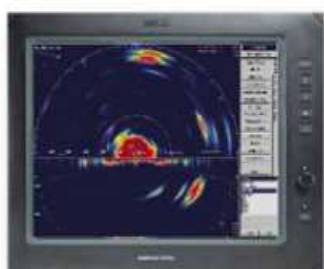
SIMRAD products



Search

Evaluation

Catch



SONARS



SONAR TRANSDUCERS



ECHO SOUNDERS



ECHO SOUNER TRANSDUCERS



TRAWL SONAR



CATCH MONITOR

Fishing fleet management software



Fleet and vessel performance analysis tool, K-Fleet



Fuel performance and environmental voyage



Handling of memos and sharing information, K-Fleet



Marine electronic logbooks, K-Fleet Logbook



Planned maintenance system, K-Fleet Maintenance



Procurement and cost control system, K-Fleet Purchase



Vessel spare part inventory system, K-Fleet Spares

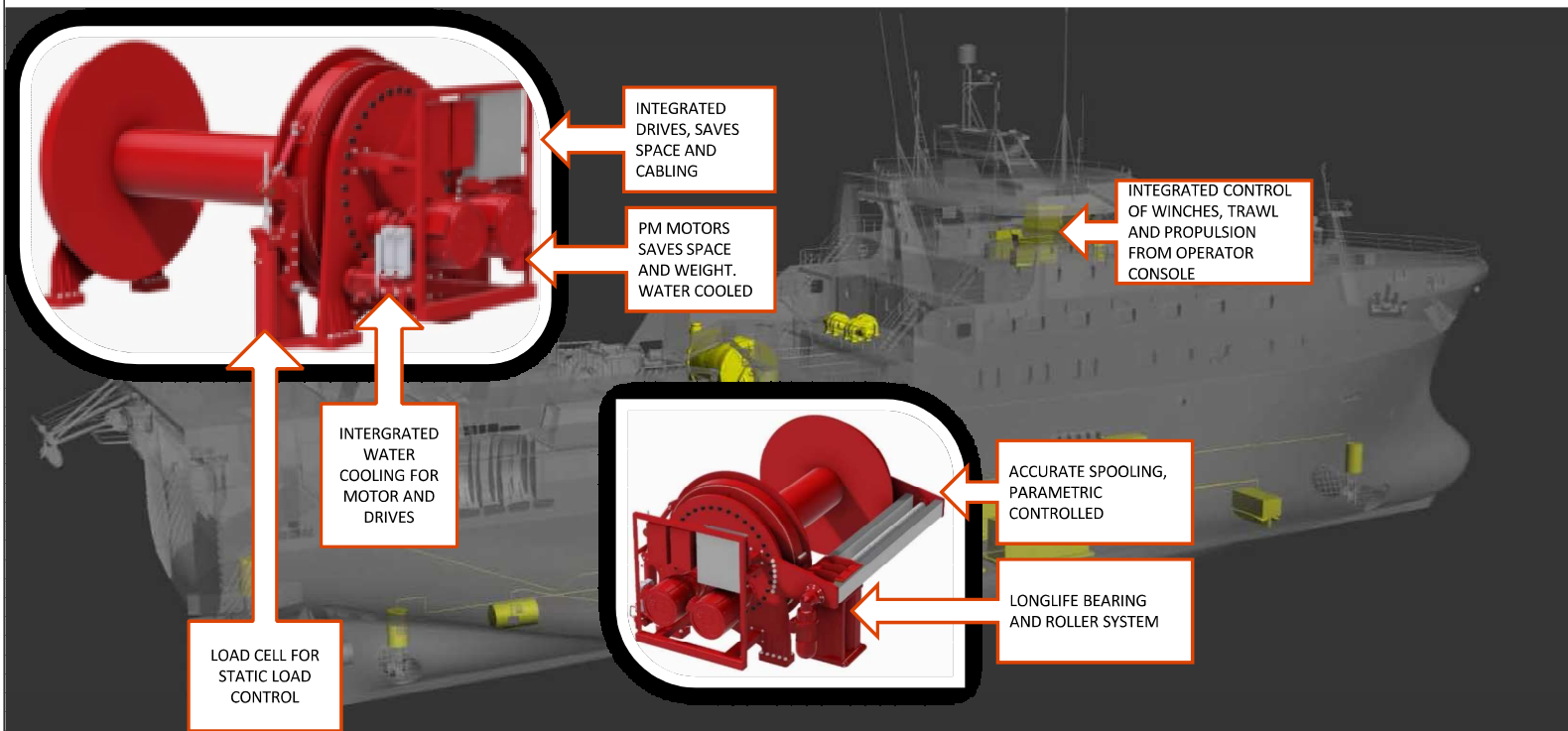


Account plan, budget and voucher system, K-Fleet



Vessel provision inventory system, K-Fleet Provision

Winches, winch control and auto-trawl functionality



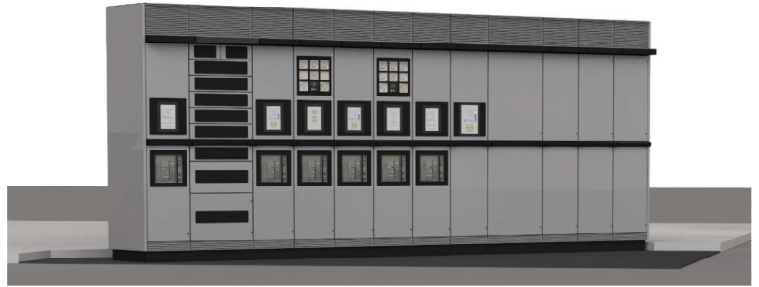
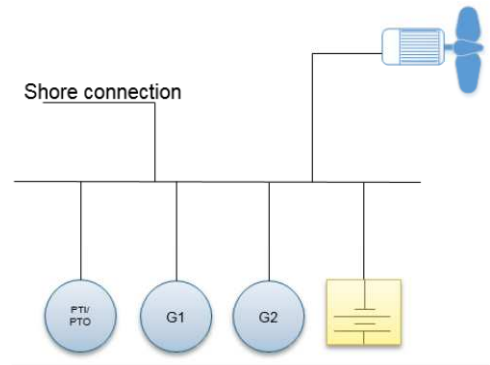
Energy solutions



The electrical solution with shaft generator suitable to run with variable RPM supported by a small battery package will reduce the operational cost and bring the safety aspect to a new dimension.

Applications

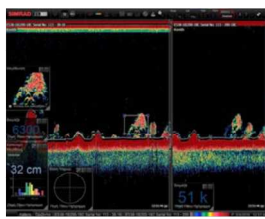
- ✓ Variabel speed PTO, dynamic combinator curve to optimize the load and rpm on the engine
- ✓ Propeller boost from auxiliary generators
- ✓ Regeneration of power from trawl winches
- ✓ Blackout prevention
- ✓ Peak shaving
- ✓ Shore connection



FISHMASTER®



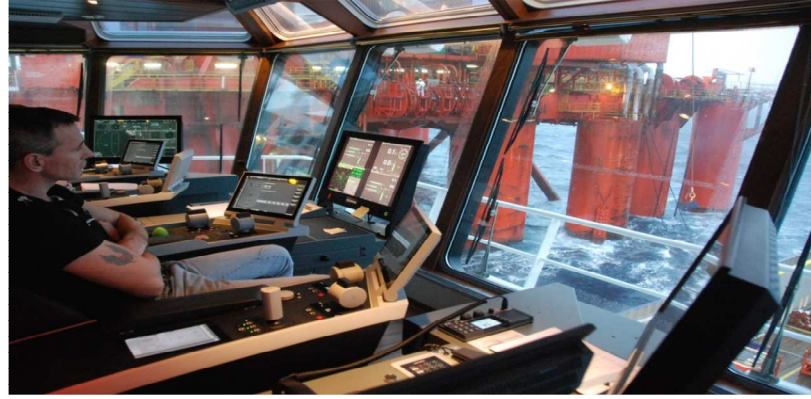
By combining vessel manoeuvring with fish finding equipment, winch systems, catch monitoring systems and energy handling into one concept the FISHMASTER® is a reality.



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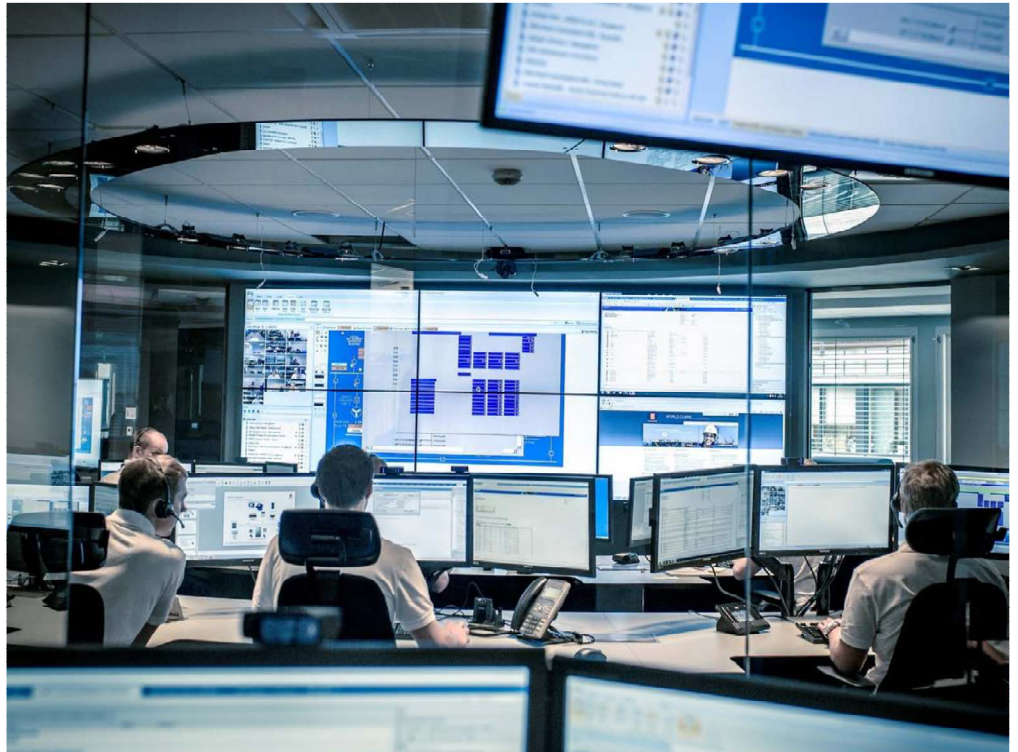
Fishmaster is a unique fusion of functions and operator comfort for efficient fishery. The excellent capability of the sensor systems to find and identify fish is combined with the capability to manoeuvre and sail the vessel, all made simple by the advanced Human Machine Interface (HMI) based on large presentation displays.



KONGSBERG Maritime - Global customer support

“Follow the sun”

24/7/365



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