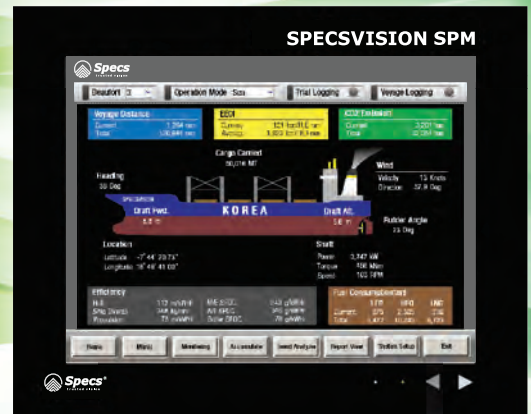


SPECSVISION-SPM

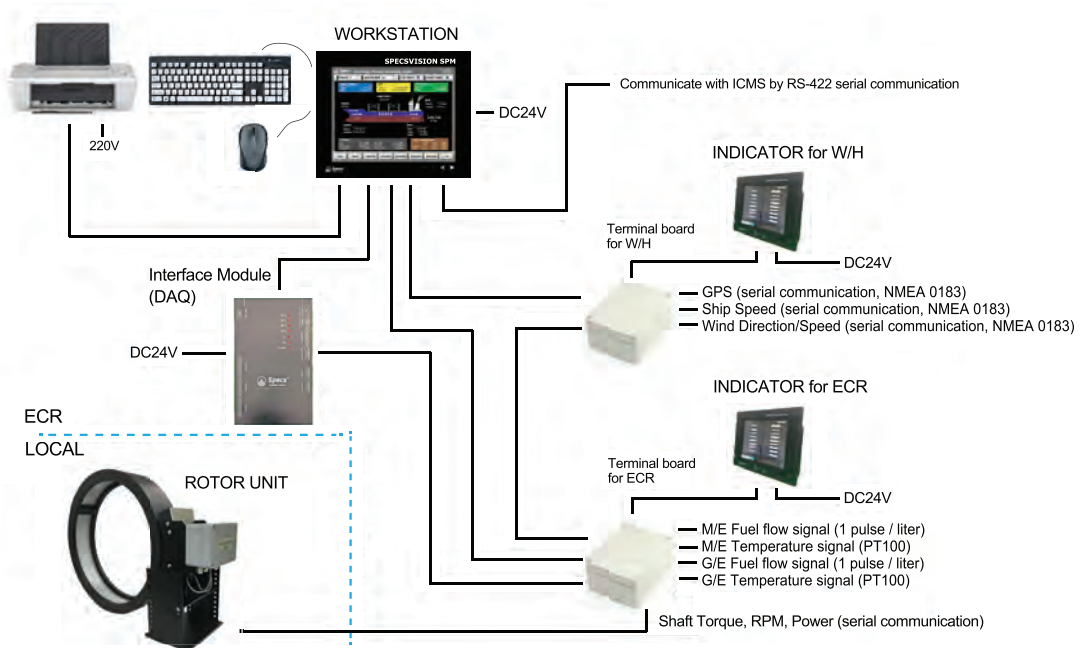
Ship Performance Monitoring system



SPECSVISION-SPM

SPECSVISION-SPM is most useful and practical tool for monitoring, reporting and verification of CO₂ emissions and energy efficiency of all ships. It has following functions which can be adjusted based on the different ship types, sizes and operational profiles.

CONFIGURATION

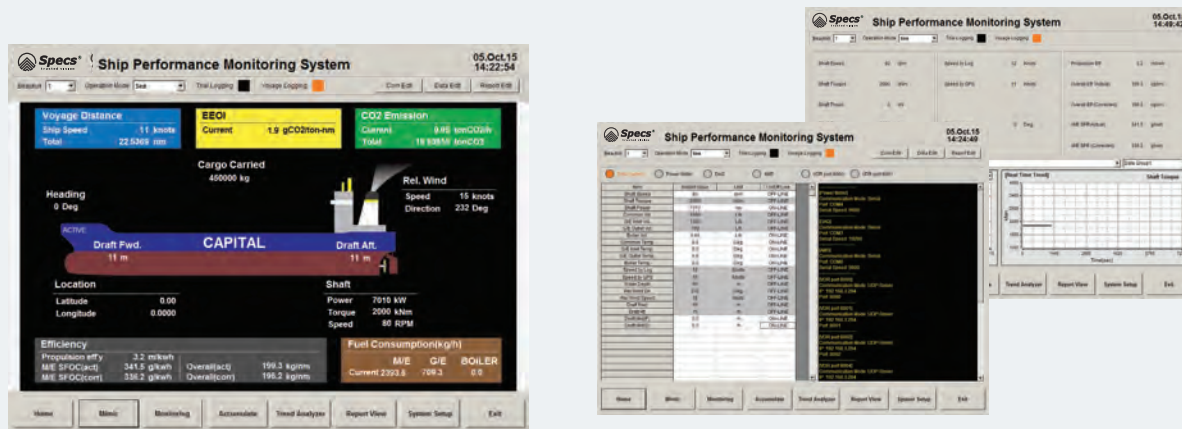


SYSTEM FEATURES

- Calculates and displays EEOI & CO₂ emission values as a valuable SEEMP mechanism based on IMO regulations.
- Displays, prints and stores real-time measurements and performance data
- Presents trend graphs of the data for a variable period of time
- Displays actual operational values compared with reference values of ideal case
- Easy maintenance by applying slot type card to DAQ
- Enables users to store more than 150 different data
- Enables engineers to make the optimum plan for ship maintenance and/or renovation based on the stored performance data
- Presents daily, voyage and sea trial reports
- Transfers various data to the owner via ship's network for fleet management
- Access remote HMI from anywhere around the world securely

SPECSVISION-SPM

Ship Performance Monitoring system



TECHNICAL SPECIFICATIONS

Input data	Interface for all possible data
Calculated values	Accumulated fuel consumption & main engine energy output, total revolutions, total distance travelled, main engine fuel efficiency, propulsion efficiency, vessel overall efficiency, EEOI and CO ₂ emission
Reference curves	Shaft power vs. rpm, shaft power vs. ship speed, fuel consumption vs. ship speed, specific fuel rate vs. shaft power
Trend curves	Short & long term trend of all instant data and calculated values for max. 30 years
Displays	Numeric and graphic display in colors
Reports	Daily, voyage and trial reports
Main controller/Monitor	15-inch color TFT-LCD display, capacitive touch screen, 1024 X 768 XGA Windows 7, 500GB HDD, 6USB, 2RS232, RS485/422, 2Ethernet W385 X H307 X D100 mm Flush panel mounting
Data aquisition modules	Binary input : 4ch Analog input : 4ch (4~20 mA, 1~5 VDC, 2~10 VDC) Pt100 input : 4ch Serial Input : 2ch (RS-485, RS-422) Analog output : 4ch Dry contact output : 1ch Module extension : max. 4 modules