

CCM Marine portable

multi cylinder combustion monitoring system for Marine Diesel Engines

The CCM Marine portable is a comprehensive system which can be rapidly installed on-site to enable acquisition of cylinder pressure data on 4-stroke Marine Diesel Engines.

Characteristics

- Optimise performance
- Advanced engine balancing
- Save fuel
- Reduce emissions
- HTT-04[®] cylinder pressure sensors

Application:

- 4 stroke Diesel engines 350...1800 RPM



Technical data

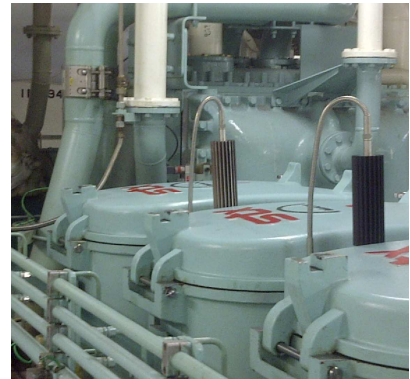
Central unit	
CCM Combustion control unit	Max. 12 analog inputs (option: extension to 20 analog inputs) Resolution: 0.1°C Interface: Fast Ethernet LAN 100 Mbits/s Wide range power supply 90...264VAC
Cylinder pressure sensor HTT-04[®]	
Measuring range pressure	0...300 bar
Over pressure static	400 bar
Thermal shock 1500 RPM pmi=9bar	< +/- 0,5 bar
Accuracy	≤1% Full scale
Max. temperature at measuring cell	300 °C (short time 350 °C)
Temperature range of SCU	-40 °C ... + 75 °C
Output signal range	4...20 mA

Mounting:

The HTT-04® cylinder pressure sensors are installed at special designed Thompson adaptors on indicator valve for combustion pressure monitoring during engine optimisation. A permanent installation at the indicator valve is not recommended because the operating temperature may exceed the admissible temperature range. Permanent installation is only allowed on special designed adaptors.



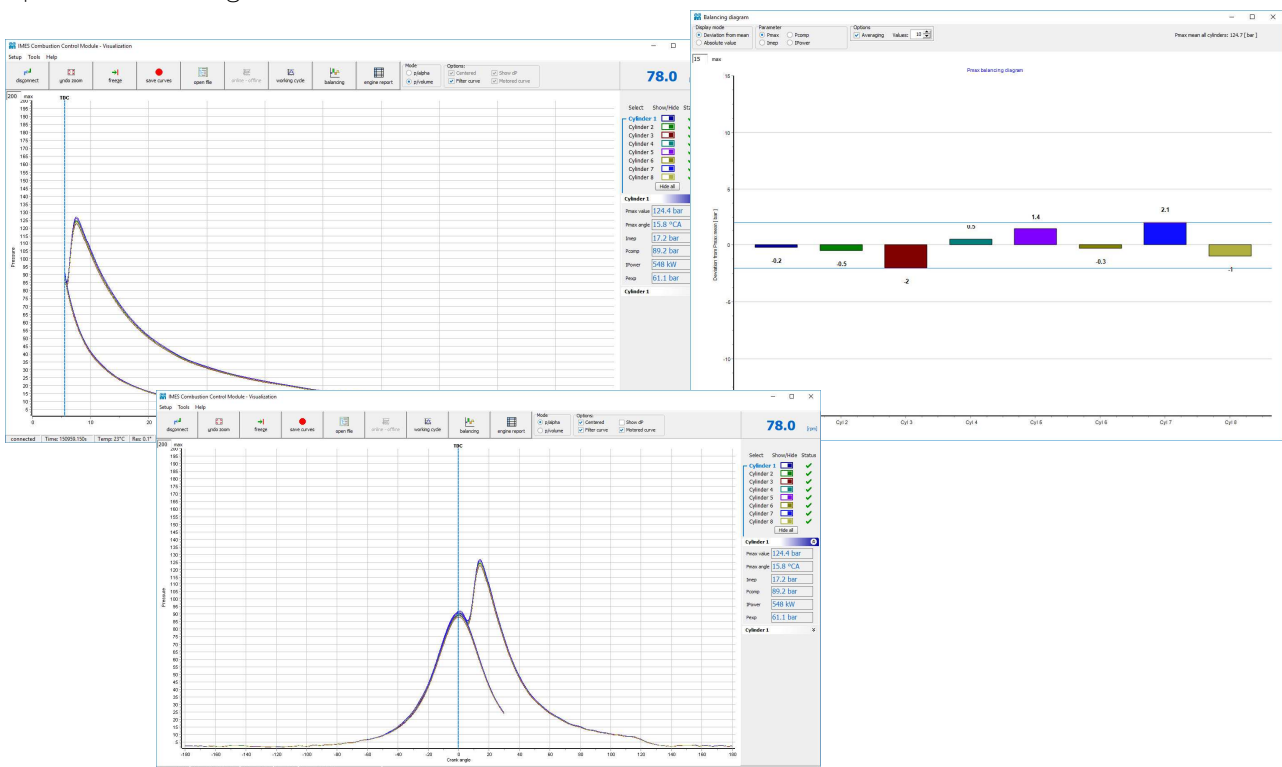
HTT-04® sensor mounted on a special designed adaptor for permanent installation on Wärtsilä 46 engine



HTT-04® sensors mounted on Thompson adaptors on a 4-stroke diesel engine.

CCM Marine 4-stroke portable PC software

The CCM Marine PC software is a modernised version for online combustion monitoring on medium speed diesel engines.



Scope of supply

	Product No.
Central unit incl. the following:	
- Central unit incl. multi channel data acquisition unit 1...12 cylinder	
- Wide range power supply 90...264VAC	
- Ethernet/Lan cable 10 m	
- Sensor terminal box 1..12 cylinder incl. 5 m cable to CCM unit	
- Visualisation software 4-stroke (1 ...20 cylinder) incl. diagrams: Pressure/CA incl. data storage, working cycle diagram on- and offline For Pmax, Ipower and IMEP, event storing	
- Optical pick up sensor incl. connecting cable 10 m	
 Sensors and cable	
- HTT-04 sensor range 0...300 bar	IW-6237
- Sensor connecting cable 5 m	IW-4110
- Thompson adaptor 4 stroke application	IW-1219
 Option:	
- Multichannel data acquisition unit for 11...20 cylinder	IW-8002
- Sensor terminal box 11...20 cylinder incl. 10 m cable to CCM unit	IW-8003
- Portable box for sensors and cables	IW-7990
- Industrial notebook PC WINDOWS 10 en	IW-6310