



Advanced Marine Solutions
we build on your vessel's seaworthiness every day



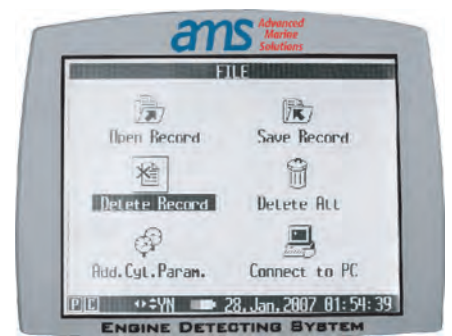
Engine Diagnostics System (EDS)

The **EDS** is a portable unit that monitors the combustion process of all types of Diesel Engines in real time. It allows you to tune the engine while measuring and detects faults or irregularities early in the developing stage.

The **EDS** consists of a handheld unit, a cylinder pressure sensor that connects to the indicator valve of the cylinder being measured.

The **EDS** is easy-to-use and very intuitive thanks to the single function buttons: Engine Measure, File, Graph, Bar, Table, Mode, Setup and Help. There are no hidden sub menus.

The large icons are self-explanatory. User can navigate by the arrows, confirm by the YES button and return back by the NO button.



The **EDS** is designed as a stand alone unit. The long battery life, the 320 x 240 pixels screen allows operation without a PC. The large non-volatile memory stores 60 measurement records, up to 20 cylinders each. The engine library can keep 30 engine data files.

The **EDS** measures in auto-stop and continuous modes:

AutoStop: ON stops measuring after a preset number of diagrams. It is suitable for routine, scheduled monitoring of the Engine Performance.

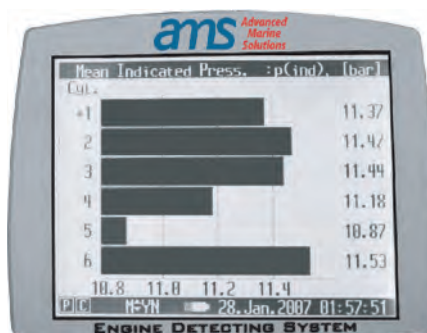
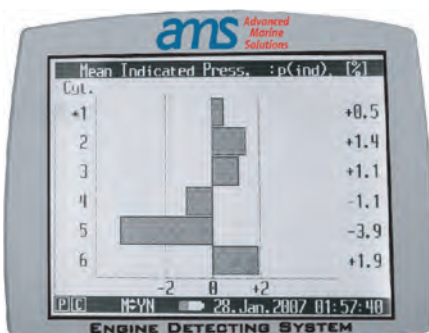
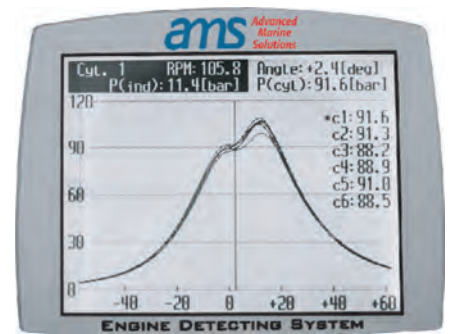
AutoStop: ON measures, in real time, continuously till you press a button to stop. It is suitable to tune the engine while measuring.

The **EDS** has **Graph, Bar and Table** visual modes.

All three can be used to measure or to analyze data records.

Graph shows the Pressure - Angle diagram(s). You can compare cylinders, zoom the diagrams, read the pressure at the cursor position from multiple diagrams.

Bar displays either absolute or relative (% deviation) plots of a selected measured or calculated parameter for cylinder-to-cylinder comparison.



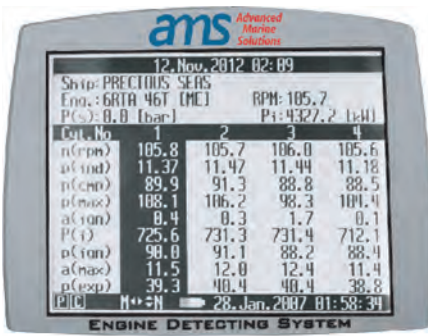
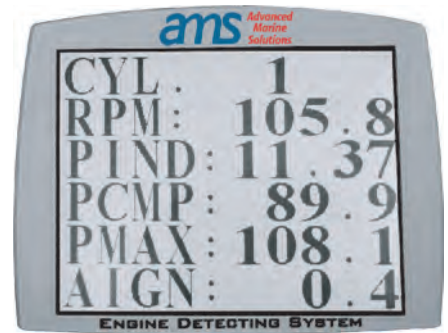


Table mode shows the values of RPM, P(ind), P(cmp), P(max) and A(ign) of a selected cylinder.

The values of all other parameters of all cylinders are shown when scrolling through the table of results.



The **Acoustic Emissions Sensor** allows optimization of fuel pump overall performance, assists achievement of proper injection timing and helps identify worn fuel injectors.

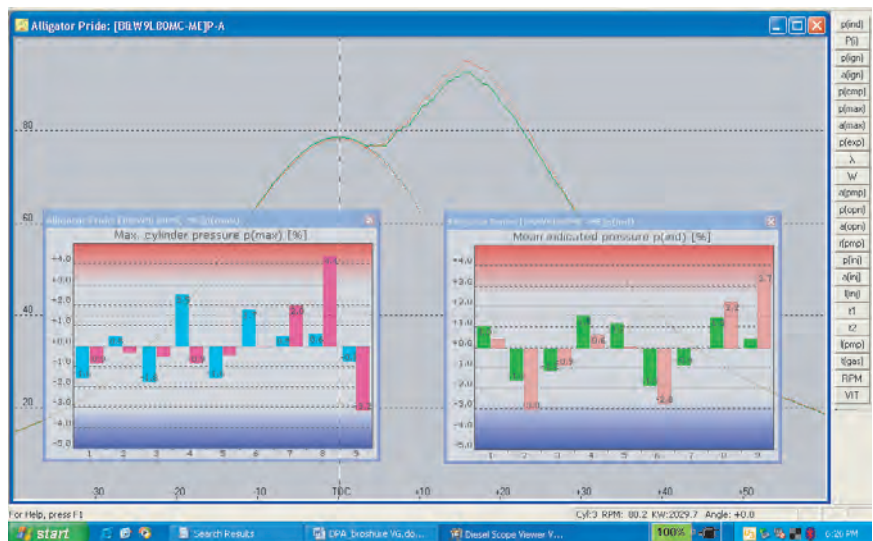


The **Engine Diagnostics System** is supplied with a PC software package the **EDS Viewer**. The transfer of measurement records and engine data files to PC folders is done by the USB cable provided.

The **EDS Viewer** helps analyze the combustion process, perform ISO corrections, perform TDC correction, export data to CSV compatible files, store the measurements in data files, print diagrams or complete reports, send data files by email to home office.

The **EDS Viewer** facilitates user to compare current to previously taken reference data and thus enabling detection of worn parts or incorrect adjustment,

The **EDS Viewer** allows easier comparison of current with previously taken reference data and thus allowing detection of worn parts or incorrect adjustment.



The **EDS** helps to reduce the engines' operating cost. Cylinder - to Cylinder load balancing and correct fuel injection settings will optimize engine performance, minimize specific fuel oil consumption and reduce Emissions.

EDS standard Configuration:

1. EDS Handheld unit (230x105x40mm), 500gr, 20 hours battery life
2. Pressure sensor, Kistler 7613, 250 bar 350 C
3. Thompson Adaptor
4. PC to EDS USB Cable
5. Battery Charger
6. "EDS Viewer" Software Package
7. Instructions Manual

Optional Parts:

1. Pair of inductive Pick-ups
2. TDC Magnetic Pick-up
3. Pick-up(s) Junction Box
4. Acoustic Emission Injection Sensor
5. Extension Cable for the TDC Pick-up 8m
6. Extension Cable 25m for Pair of Pick-ups
7. Fleet Management Software Program