

NEW FIA-100 Fuel Combustion Analyzer

Developed in compliance with new IP Test Method for Heavy Fuel

The new FIA-100 FCA from Fueltech AS has been designed and manufactured for easy testing of Ignition and Combustion Properties of Heavy Fuel Oil. The technology is based on many years of experience from development and manufacturing of testing equipment based on Constant Volume Combustion. The instrument is compliant with new IP Test Method being developed by Energy Institute, UK (ST-B 14)

Unique system

FIA-100 FCA is a unique instrument used to perform efficient and accurate measurement of ignition- and combustion properties of heavy fuel.

The product has been developed in close cooperation with the industry, in order to operate according to a new IP test method developed by Energy Institute, UK.



Testing procedure

Fill the sample reservoir and initiate the test cycles from the computer screen. The test sequence operates fully automatic. Technical diagnostics and quality control of test parameters is performed continuously. Test results available on computer screen and as printed standard test report.

Calibration

Adjust settings based on testing Methylcyclohexane.

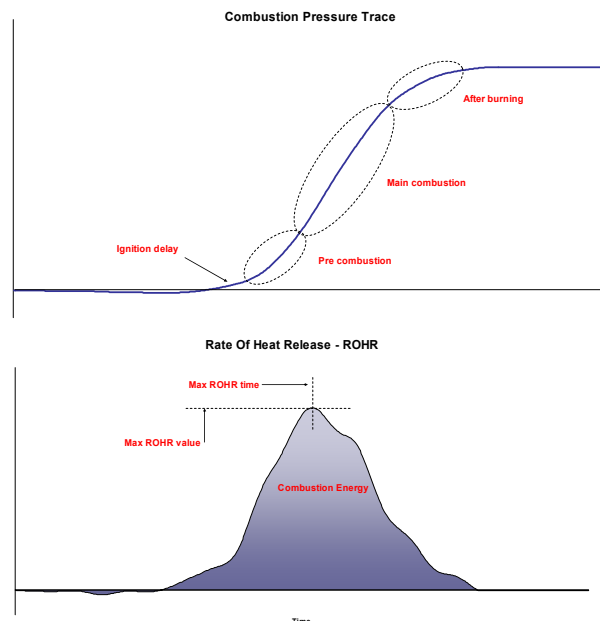
Process parameters

Combustion process parameters compatible with medium-speed engines at low-load:

- Temperature: 500 °C
- Chamber pressure: 45 bar
- Injection pressure: 350 bar
- Injected volume: approx 0,1 ml/injection
- 25 injections pr test

Test results

- Ignition properties
- Combustion properties
- Energy content - Net Heat of Combustion



Technical design

FIA-100 FCA is based on well-proven technology and many years of experience from research and development in *Constant Volume Combustion Chamber technology (CVCC)*.

Compact desk-top unit, easy to transport, fitting easily in existing laboratory environment. Connection to pressurized air, cooling water and exhaust outlet using industry standard fittings.

Specifications overview:

| | |
|------------------------|--|
| Size (BxHxD): | 70x70x40 cm Painted steel cabinet |
| Weight: | Approx 60 kg |
| Air supply: | Compressed air – dry and clean |
| Electrical connection: | 220-240 V, 50Hz, 1800 W max effect |
| Circulation bath: | External heater/cooler |
| Computer conn: | Windows PC, Serial port & USB connection |
| Fuel consumption: | 100 ml pr test |

fueltech

Product development and manufacturing
Trondheim, Norway
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