

ON-LINE OCTANE CFR ENGINE AUTOMATION

- Conforms to ASTM D2885 Test Method
- No Modification to the CFR Engine
- Quick Switching Possible Between Automation and Manual operation
- Improved Data Precision
- Give Away Reduced by up to 70%
- Investment Payback in a Few Months
- ISO Traceability is Simplified with Full Documentation
- Automated Knock Meter Drift Compensation
- Automated Cylinder Height Adjustment
- Automated Adjustment of Detonation Meter Parameters

For Method:

ASTM D2885

Upgrading of Waukesha CFR octane test engines for fully automated on-line operation is now available that fully and in all details conform to ASTM D2885 test method. Unlike other systems, there is NO modification to the CFR engine, and on-the-fly switching from automated to manual operation is done by a simple turn of the fuel selector valve and a single electrical switch.

Depending on degree of automation selected, data is captured from the knock meter, cylinder height position, and detonation meter. The cylinder height position, and detonation meter parameters are automatically adjusted. The software does all data management, calculations, and data storage. This data capture offers full, simplified ISO traceability with full documentation. Detailed reports are printed out at end of each test or on command. Historic data is easily retrievable. This data is available for transfer to a LIMS for storage or to a spread sheet for further analysis.

For stable, crash proof operation a PLC (process logic controller) is used for the controlling system. Proprietary Windows XP based software is used for calibration, and data capture. The level of the falling level bowl is managed by a laser detector for precise control.

All ASTM method tables are automatically corrected for barometric pressure and humidity (optional) with internal sensors.

▶ AVAILABLE MODELS

ROFA Model 2885-S consists of a cabinet with a PC, and assorted electronics. Windows based proprietary software manages and captures knock meter data. The knock meter drift is automatically compensated.

ROFA Model 2885-SC is the same as ROFA Model 2885-S above but with the additional capability of automated adjustment of cylinder height and the capture of the cylinder height position.

ROFA Model 2885-SCD is the same as ROFA Model 2885-SC above but with the additional capability of automated parameter control of the detonation meter and the capture of the detonation meter data. The improved precision of the octane number allows the refinery to operate with a significantly lower give away, up to 70%.



▲ ROFA Model 2885-SCD