



# XCP® Continuous Testing System

## XCP Automation for Online/Blending

CFR Engines Inc. has further expanded the application range of its advanced XCP Digital Octane Panel. XCP Technology is now designed to also serve online and blending applications with CFR's XCP Continuous Testing System.

Like all CFR Engines Inc. products, the XCP Continuous Testing System is designed, manufactured, and tested to work as part of an integrated and reliable solution for your operation. The engine, parts, accessories, instrumentation, and control system are all provided by CFR to operate together with seamless efficiency.

- User friendly Windows® based operating system for easy integration, security, and upgrades.
- Customizable site-specific setups and fully automated fuel system (no manual valves).
- Visual interface with process flow graphics and engine/system status indicators, including real-time feedback on blend quality/octane results.
- Fully compatible and customizable with the on-site SCADA/HISTORIAN systems to allow maximum integration and operational oversight.
- Historical operating data for every engine is saved to allow full traceability and comprehensive reports.

### COMPLIANCE

Built by CFR to fully integrate with existing CFR systems and comply with the industry standard ASTM Method for On-Line Direct Comparison Tests.

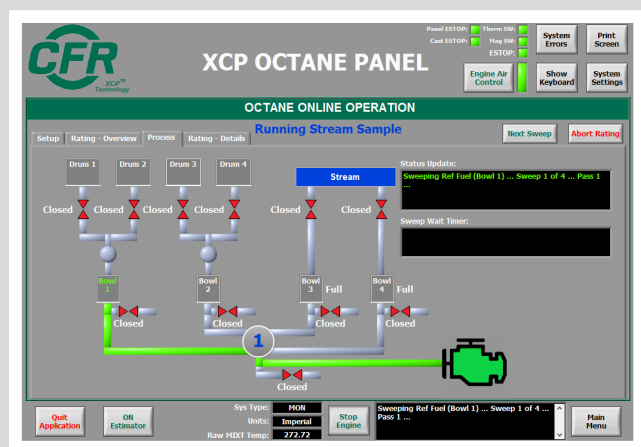
**D2885** - Octane Number by On-Line Direct Comparison

### SPEED

With XCP Technology, the ability to conduct faster tests and increase productivity is achieved through its integrated computer, smart valve timing, and fuel management.

### ACCOUNTABILITY

XCP Technology is known for its intuitive interface, real time data recording, and system monitoring. XCP now delivers the same improved test compliance and data accountability for online/blending applications.



Animated diagrams display present state of system valves, pumps, and fuel flow - on unit or remote.

# Control at Engines or From a Distance

Inherent to all XCP platforms, an on-board full function industrial PC for operation, measurement, data storage, and control are key features of the XCP Continuous Testing System. This design lends itself to easier integration of multiple units via Modbus onto a User's master SCADA system. Each machine maintains its own on-board data storage with external network connectivity.

The CFR system also comes with customizable remote monitoring and control capabilities through the XCP application. This allows for standard output screens, unit/system status and control, real time performance curves, and data table summaries.

## CONFIGURATIONS

As an upgrade kit for existing units:

**p/n: G-802-65:** F1/F2 XCP Online upgrade kit

As a specified inclusion on new CFR F1/F2 units.

## INTEGRATIONS

Carburetor cooling, fuel bowl cooling, and intake air humidity can be controlled and documented by XCP when integrated with CFR's Engine Air Control System.

## SPECIFICATIONS

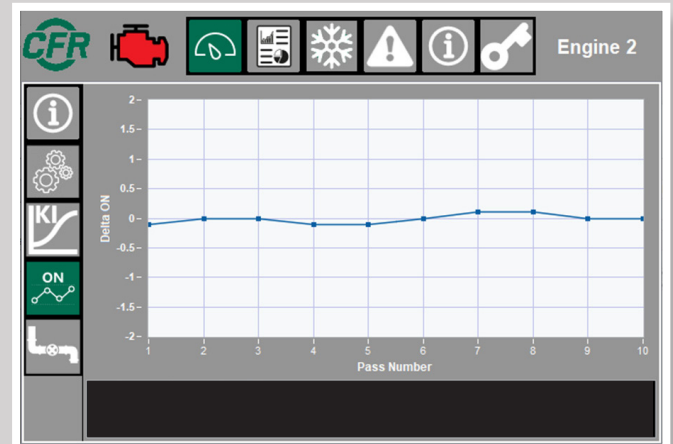
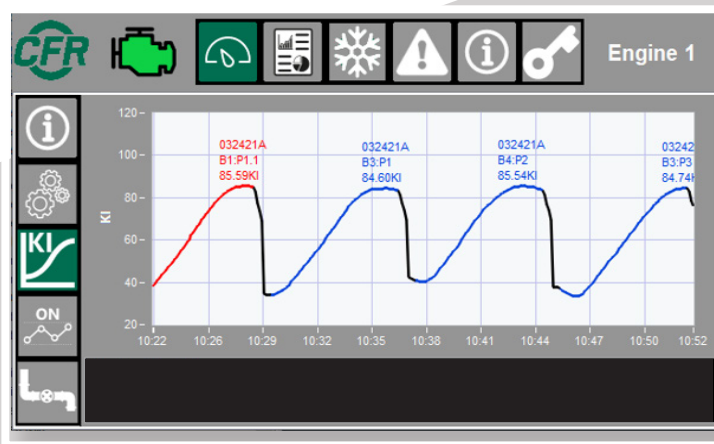
- Touch screen HMI with industrial PC
- Windows operating system
- Modbus register for SCADA connectivity
- LIMS connectivity
- Bolt-on configuration to existing units
- Power supply: 120V, 1 Ph, 50/60Hz
- Standard common size fuel connections

Status	Name	Fuel ID	Octane Number
	Engine 1	83056517	90.94
	Engine 2	30096176	89.78
	Engine 3	34211272	88.98
	Engine 4	46993846	88.92
	Engine 5	73410559	89.56
	Engine 6	87763027	91.18

Remote monitoring system tracks real time unit status and performance via TCP/IP communications.

Time Stamp	BatchID	OperatorName	EngineID	SystemType	DeltaKvON	RefFuelON	RefFuelID	RefFuelID	StreamFuelID
2021-03-08 14:11:36.558	Test_A	Rawi	SS_0302021133940_Test_A_E01	MON	0.22	88.0	032421A	85.59KI	032421A
2021-03-08 14:19:34.211	Test_A	Rawi	SS_0302021133940_Test_A_E01	MON	0.22	88.0	032421A	85.59KI	032421A
2021-03-08 14:27:31.727	Test_A	Rawi	SS_0302021133940_Test_A_E01	MON	0.22	88.0	032421A	85.59KI	032421A
2021-03-08 14:35:04.560	Test_A	Rawi	SS_0302021133940_Test_A_E01	MON	0.22	88.0	032421A	85.59KI	032421A
2021-03-08 15:06:36.764	Test_A	Rawi	SS_0302021133940_Test_A_E01	MON	0.22	88.0	032421A	85.59KI	032421A
2021-03-08 15:14:34.217	Test_A	Rawi	SS_0302021133940_Test_A_E01	MON	0.22	88.0	032421A	85.59KI	032421A
2021-03-08 15:22:31.671	Test_A	Rawi	SS_0302021133940_Test_A_E01	MON	0.22	88.0	032421A	85.59KI	032421A
2021-03-08 15:29:50.453	Test_A	Rawi	SS_0302021133940_Test_A_E01	MON	0.22	88.0	032421A	85.59KI	032421A
2021-03-08 16:01:22.736	Test_A	Rawi	SS_0302021133940_Test_A_E01	MON	0.22	88.0	032421A	85.59KI	032421A
2021-03-08 16:08:12.530	Test_A	Rawi	SS_0302021133940_Test_A_E01	MON	0.22	88.0	032421A	85.59KI	032421A

Data tables and full reports of all engine and test parameters are stored on machine and accessible for system integration.



System provides intuitive menus for easy access to critical data, such as KI charting and Octane ratings across passes.

