



and



**The only referee and standardized equipment's for octane and cetane measurement**

# We are proud to announce:



**Auvorstadtgasse 4, 2301 Groß-Enzersdorf, Austria**  
**+43 664 340 5915**  
**[www.dalytical.com](http://www.dalytical.com)**  
**[office@dalytical.com](mailto:office@dalytical.com)**



November 3, 2020

Dalytical GmbH  
Auvorstadtgasse 45  
Gross-Enzersdorf, Lower Austria 2301, Austria

Subject: General Representation Letter

Dear Damir Grabovac,

This letter confirms that Dalytical GmbH, with its principal place of business at Auvorstadtgasse 45 Gross-Enzersdorf, Lower Austria 2301, Austria, ("Channel Partner"), currently holds a Distributor Agreement (the "Agreement") for the CFR® family of fuel rating products. CFR Engines Inc., having its principal place of business at N8 W22577 Johnson Drive, Pewaukee, WI 53186, U.S.A. ("Manufacturer"), is the exclusive manufacturer of CFR® fuel rating products.

The purpose of this letter is to confirm that the company, Dalytical GmbH, Auvorstadtgasse 45, Gross-Enzersdorf, Lower Austria 2301, Austria, ("Dalytical") is an independent company with authorization to quote, participate in public and private bids, sell, service and conduct warranty work on the CFR® fuel rating engines and service parts, which would be sold by Manufacturer to Dalytical pursuant to Manufacturer's standard scope of supply and terms of sale and export.

Manufacturer currently recognizes Dalytical as its authorized Channel Partner in the territories of Albania, Austria, Bosnia & Herzegovina, Bulgaria, Croatia, Czech Republic, Greece, Holy See, Hungary, Italy, Kosovo, Liechtenstein, Malta, Montenegro, North Macedonia, Poland, Romania, San Marino, Serbia, Slovakia, Slovenia. As such they are authorized to sell new CFR® equipment, genuine CFR® repair and service parts, as well as provide factory authorized service, repair and warranty work pursuant to their Agreement with Manufacturer, within the territories noted. The above recognition is subject to Dalytical performance and Manufacturer business strategy, as defined by the Agreement.

We trust this information meets your requirements. This letter is valid for whichever of the following occurs first; November 3, 2021, expiration/termination of the Agreement, or supersession by a subsequent replacement letter.

If you have any questions, please do not hesitate to contact me directly.

Regards,

A handwritten signature in blue ink that reads "Joseph Lange".

Joseph Lange  
Business Manager  
CFR Engines Inc.

Phone: (262) 352-2107  
Email: [joseph.lange@cfrengines.com](mailto:joseph.lange@cfrengines.com)

# European fuel standards

## EN 228:2017 Automotive fuels - Unleaded petrol - Requirements and test methods

is a standard published by the European Committee for Standardization that describes the physical properties that all automotive fuels, unleaded petrol must meet if it is to be sold in the European Union and several other European countries.

Research octane number, RON	95,0	--	EN ISO 5164
Motor octane number, MON	85,0	--	EN ISO 5163

### 5.6 Octane reporting

To prevent any misinterpretation in the reported results, the following reporting is recommended:

- *RON*<sub>m</sub>, being the measured Research Octane Number according to EN ISO 5164,
- *MON*<sub>m</sub>, being the measured Motor Octane Number according to EN ISO 5163,
- *RON* and *MON* being the Research and Motor Octane properties, respectively, shall be reported after correction of *RON*<sub>m</sub> and *MON*<sub>m</sub> according to Formulae (1) and (2):

$$RON = RON_m - 0,2 \quad (1)$$

$$MON = MON_m - 0,2 \quad (2)$$

### 5.7 Precision and dispute

#### 5.7.2. Arbitration test methods

**In cases of dispute concerning motor octane number and research octane number, EN ISO 5163 and EN ISO 5164 respectively shall be used.**

For the determination of MON and RON, alternative methods to those indicated in Table 1 and Table 2 may also be used, provided that these methods originate from a recognized method series, and have a valid precision statement, derived in accordance with EN ISO 4259, which demonstrates precision at least equal to that of the referenced method. The test result, when using an alternative method, shall also have a demonstrable relationship to the result obtained when using the referenced method.

# European fuel standards (continued)

## Research octane number, RON - EN ISO 5164 : 2014

*CFR Engines Inc. Octane Rating Unit  
Combination Research & Motor Method  
Model: F1/F2*

The purpose of this International Standard is to accord ISO status to a test procedure that is already used in a standardized form all over the world. The procedure in question is published by ASTM International as Standard Test Method **D 2699-01a**.

## Motor octane number, MON - EN ISO 5163 : 2014

*CFR Engines Inc. Octane Rating Unit  
Combination Research & Motor Method  
Model: F1/F2*

The purpose of this International Standard is to accord ISO status to a test procedure that is already used in a standardized form all over the world. The procedure in question is published by ASTM International as Standard Test Method **D 2700-01a**.



# European fuel standards (continued)

## EN 590:2017 Diesel Fuel Requirements - Requirements and test methods

*CFR Engines Inc. Cetane Rating Unit  
Model: F5*

is a standard published by the European Committee for Standardization that describes the physical properties that all automotive diesel fuel must meet if it is to be sold in the European Union and several other European countries

Cetane number	51,0	–	EN ISO 5165 EN 15195 EN 16144 EN 16715
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### 5.7 Precision and dispute

**In cases of dispute concerning cetane number, EN ISO 5165 shall be used.** For the determination of cetane number alternative methods to those indicated in Table 1 and Table 3 may also be used, provided that these methods originate from a recognised method series, and have a valid precision statement, derived in accordance with EN ISO 4259, which demonstrates precision at least equal to that of the referenced method. The test result, when using an alternative method, shall also have a demonstrable relationship to the result obtained when using the referenced method.



# European fuel standards (continued)



## Research octane number, RON – ASTM D 2699

*CFR Engines Inc. Octane Rating Unit  
Combination Research & Motor Method  
Model: F1/F2*

The sole source of supply of the Engine equipment and instrumentation known to the committee at this time is Waukesha Engine, Dresser Inc., 1001 West St. Paul Ave., Waukesha, WI 53188. Waukesha Engine also has CFR engine authorized sales and service organizations in selected geographical areas.

## Motor octane number, MON – ASTM D 2700

*CFR Engines Inc. Octane Rating Unit  
Combination Research & Motor Method  
Model: F1/F2*

The sole source of supply of the Engine equipment and instrumentation known to the committee at this time is Waukesha Engine, Dresser Inc., 1001 West St. Paul Ave., Waukesha, WI 53188. Waukesha Engine also has CFR engine authorized sales and service organizations in selected geographical areas.

## Cetane Rating Unit – EN ISO 5165

*CFR Engines Inc. Cetane Rating Unit  
Model: F5*

Engine equipment and instrumentation are available from the single source manufacturer, Waukesha Engine Division, Dresser Industries, Inc., 1000 West St. Paul Avenue, Waukesha, WI 53188, USA, fax: +1 414-549-2960. Waukesha Engine Division also has authorized sales and service organizations in selected geographic areas.



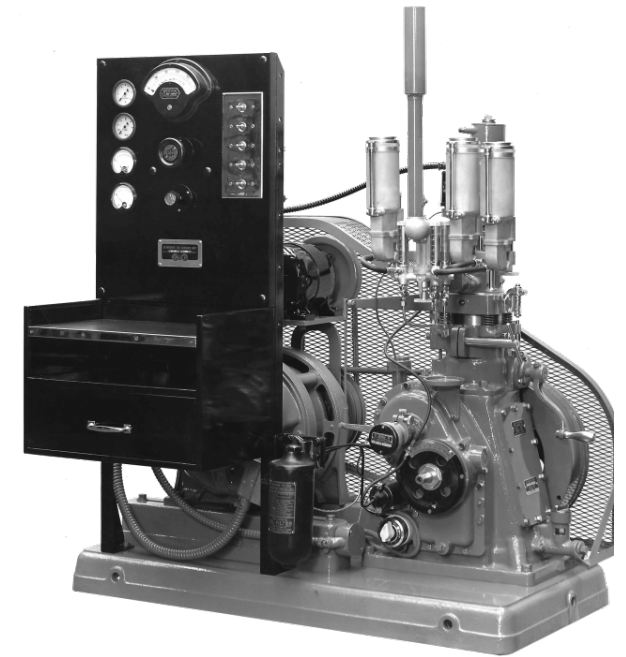
# History

**Home of the renowned CFR F1/F2 Octane & CFR F5 Cetane test engines.**

**For over 90 years, still Made in America by U.S. Craftsmen.**

In December 1928, the Cooperative Fuel Research (CFR) Committee accepted the Waukesha Motor Company design for a standardized, single-cylinder test engine to test gasoline knock. With the development of the CFR engine, the automotive and petroleum industries now had a universally accepted standard for defining fuel quality, which enabled refiners and engine builders to tailor their products to perform together more effectively. New models were quickly launched to meet additional industry needs, a cetane rating unit for diesel fuels and a supercharge version for testing aviation fuel.

CFR octane and cetane testing units have since provided reliable and proven performance to thousands of global users. This reliability has been consistently maintained for over 90 years through a series of well-designed system upgrades and product enhancements. CFR systems and components are built to deliver unsurpassed operating life, from the robust engine crankcase and cylinder to the industrial grade control panels and accessories. Through all progress, the core design principles and combustion chamber characteristics have not changed, a strong testament to the uniqueness and innovation of the CFR engine that has made CFR Engines Inc. what it is today. With basic maintenance and upkeep, a user can expect CFR Engines Inc. products to consistently withstand the demands of today's fuel testing environment with a true engine-based octane or cetane test.



# History (continued)

In 2008, CFR launched its innovative Expandable Control Platform (XCP™) to bring computer-based accuracy and process accountability to fuel testing. Introduced first on the CFR F1/F2, XCP Technology was quickly expanded to the CFR F5 and has been a major step forward in allowing users to capitalize on the benefits of improved octane and cetane fuel rating equipment. XCP Technology provides the measurement accuracy of digital instrumentation, the flexibility and ease-of use of computer guided operation, and the traceable accountability of data recording and reporting.

XCP Technology is standard equipment on all new CFR units and is also available as an upgrade for currently installed CFR units. Depending on the unit age and mechanical condition, many units can be upgraded from an existing Legacy control panel to XCP Technology.

Upgrading existing units can be done with minimized downtime and at a reduced cost. CFR Engines Inc. and its Authorized CFR Distributors are uniquely trained to help users determine the XCP solution that is best for their installation.





# CFR Engines Inc. Octane Rating Unit *Combination Research & Motor Method* Model: F1/F2

The CFR® F1/F2 Octane Rating Unit is the globally accepted standard for determining and certifying the anti-knock characteristics of motor fuels – whether gasoline, fuel constituents, or alternative fuels. Since the release of the first CFR octane rating engines in 1929, CFR has been at the forefront of establishing test methods for rating fuels. Working hand-in-hand with the automotive and petroleum industries, we continue to enhance the CFR product line to help fuel producers and engine manufacturers develop products that perform together more effectively.



**The CFR F1/F2 octane rating engines are specified equipment for testing fuels according to:**

**ASTM D2699:** Standard Test Method for Research Octane Number of Spark-Ignition Engine Fuel

**ASTM D2700:** Standard Test Method for Motor Octane Number of Spark-Ignition Engine Fuel

**IP 236:** Determination of Knock Characteristics of Motor and Aviation Fuels – Motor Method

**IP 237:** Determination of Knock Characteristics of Motor Fuel – Research Method

# CFR Engines Inc. Cetane Rating Unit Model: F5

The CFR® F5 Cetane Rating Unit is the globally accepted standard for determining and certifying the ignition quality of diesel fuels. First introduced in 1938, the CFR F5 today continues to provide a stable, accurate testing platform for defining the ignition quality of diesel fuels. The CFR F5 enables the automotive and petroleum industries to develop new engines and fuels that perform together more effectively. As the most accurate method to measure the cetane number of diesel fuels, the CFR F5 also helps to ensure the integrity of the fuel supply chain from refinery to the pump.



**The CFR F5 Cetane Rating Unit is the specified equipment for testing fuels according to:**

**ASTM D613:** Standard Test Method for Cetane Number of Diesel Fuel Oil

**IP 41:** Petroleum Products – Determination of the ignition quality of diesel fuels – Cetane engine method

**EN ISO 5165:** Petroleum Products – Determination of the ignition quality of diesel fuels – Cetane engine method

# XCP™ Technology Standard for Octane and Cetane Rating Units

XCP™ Technology remains the modern instrumentation of choice for octane and cetane testing. CFR continues to apply advances in design, measurement, and control to its XCP Technology platform. The XCP Digital Control Panel brings advanced functionality, increased automation, enhanced documentation capabilities and future expansion opportunities to the CFR fuel rating units. Designed with the operator in mind, the XCP panel is intuitive, easy-to-use, CE Mark compliant, and accommodates users of all skill levels. XCP Technology is standard on all octane and cetane testing units, and can be retrofitted to most existing CFR units.



# CFR Genuine Accessories

**Users can rely on the factory design and performance of a complete octane or cetane test package with CFR Genuine Accessories.**

Important for any method compliant octane test is the proper treatment of intake air temperature and humidity. CFR offers multiple accessories that properly treat ambient room air and help deliver ideal intake air to the CFR engine. Whether the classic Ice Tower or a modern Engine Air Control System, CFR accessories for intake air are built for the long operating life that CFR products are known for.

Exhaust management is often overlooked as a source of testing challenges. The CFR Exhaust Surge Tank provides the correct back-pressure and temperature management for successful CFR engine operation. The Surge Tank accessory is supplied as standard equipment on any new CFR octane and cetane units, and can be retrofitted to any existing units.

Some accessories help a user get the longest life-cycle and use of a CFR product. Proper use of the redesigned Cylinder Carbon Blaster from CFR, allows users to maintain their unit, keep the cylinder in peak operating condition, and extend service intervals.



# Technician Service



## Local support when you need it

With the support of dozens of global locations and personnel, Genuine CFR Service is close and accessible. Users can operate a CFR unit in comfort, knowing that local help and service support is nearby. CFR units are built to operate for long duty cycles without disruption. Whether scheduled routine maintenance or an unscheduled service event, CFR users consistently depend on the responsiveness and availability of their local CFR technician to minimize down-time. With the purchase of a CFR Engines Inc. product, a user is also purchasing the vast network of service technicians and support resources

## Experience that matters

CFR service technicians have been providing Genuine CFR Service to thousands of operating units for over 90 years. With decades of selling and servicing experience, CFR Engines Inc. and its Authorized Distributor technicians know how to keep CFR octane and cetane test units operating their best. Extensive factory training and close network collaboration further enhance the knowledge and capabilities of an Authorized CFR Technician. If a CFR unit needs maintenance or service, the support and experience of a CFR technician is the best value and most dependable solution available.

## Comprehensive training and skill

CFR Engines Inc. and its Authorized Distributor technicians undergo extensive factory training programs as part of their technical development. Additionally, CFR technicians complete elaborate hands-on training to refine their skills in a supervised environment. Users can trust that a CFR technician has the knowledge and skills to properly take care of CFR Engines Inc. products. CFR technicians are also trained in maximizing unit up-time and protecting the user's investment in CFR. When on-site, CFR technicians use their experience to review all systems of a CFR unit and advise the user on issues of concern.



# Tools and Documents



Having the right tools for the job makes a big difference. Using the correct tool helps prevent mistakes and injury. Using a well designed tool is also more efficient and saves time and money. CFR Engines Inc. offers a variety of Special Tools that are unique to CFR products and are specially designed to make servicing a CFR unit easier.

Often the best tool is knowledge. CFR offers a full array of technical publications and service bulletins for its products. These documents provide a user the necessary procedures for successful operation of CFR units and the necessary information for proper maintenance and service. Following CFR Factory instruction and guidance is a valuable way for users to ensure the longest product life-cycle and most reliable performance.

Trusted and reliable CFR engine performance starts with a proper unit start-up. CFR Authorized Distributors are trained to follow specific procedures for unit installation and commissioning. The Unit Start-Up Registration Form is used to document the beginning of an expected long operating life for CFR Engine Rating Units.

## Special Tools



The Special Tools catalog from CFR Engines Inc. contains a variety of hand tools and service aides to assist users in maintenance and repair of CFR products. Each special tool is selected or designed to work specifically with CFR units. Some items perform a general task, but use a unique shape or tool orientation to make the task easier. Some items perform a specific service function and are custom designed to make that function possible. Using the proper CFR Special Tool helps users do the job correctly while also preventing damage, improving safety, and working efficiently.

# Technical Publications



CFR technical publications are instrumental in a user understanding proper installation, operation, and maintenance of CFR products. All manuals are spiral bound for convenience and include detailed instructions with appropriate safety, illustration, and specification information. A full set of manuals is supplied with each new CFR unit. Contact your local CFR Authorized Distributor to order any additional manuals.

# Service Bulletins



Occasionally, CFR Service communicates important information regarding the availability, service, and care of CFR products. This information could be the announcement and introduction of a new Special Tool or a new Genuine CFR Service Part. Other times this information could be detailed instruction and guidance on proper maintenance and service of CFR products.

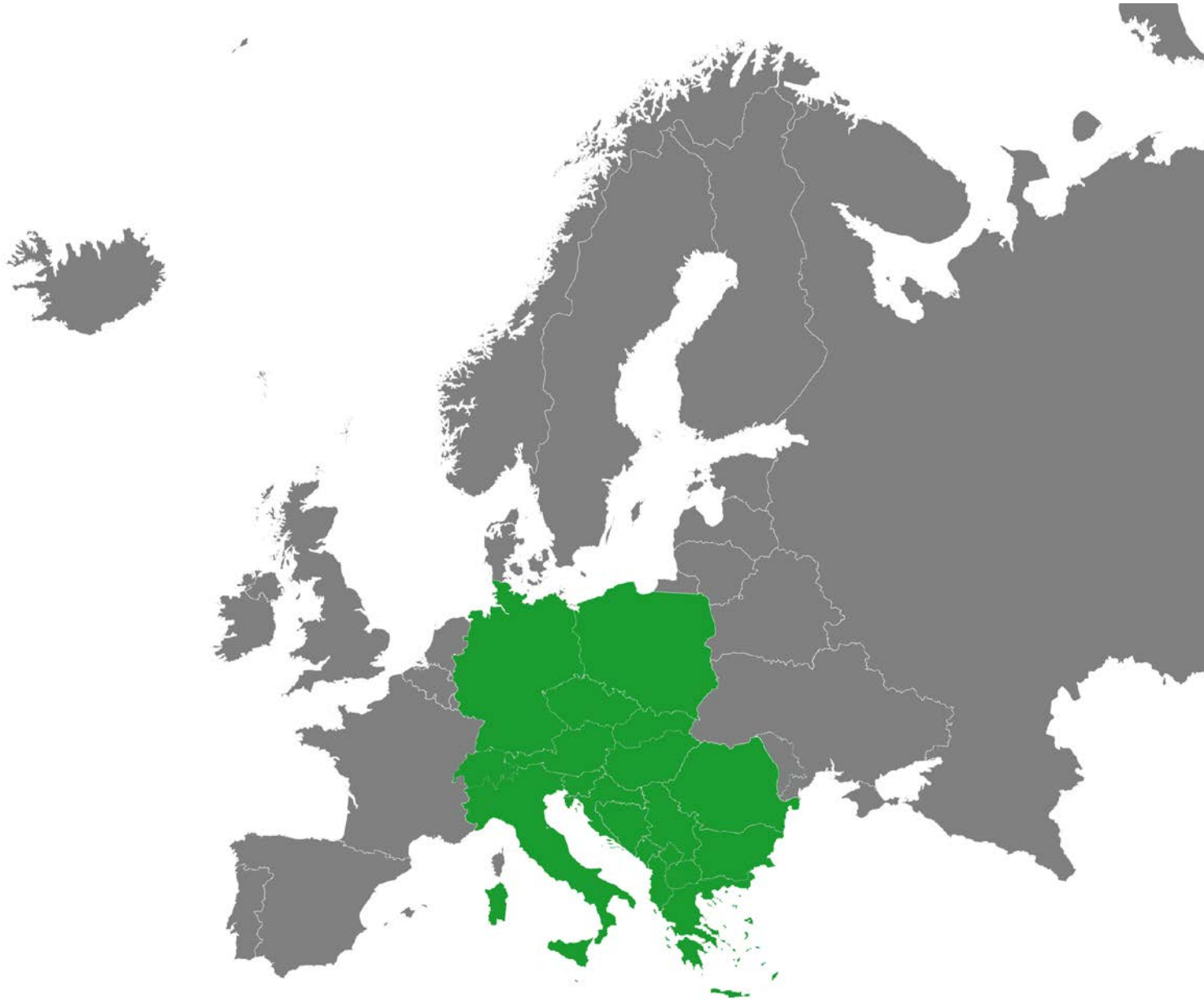
# Genuine Parts

CFR Engines Inc. provides a full offering of Genuine Parts for each of its current production products, such as the the F1/F2 octane units and the F5 cetane units. CFR also recognizes the long operating history of its products and provides critical spare parts for its retired legacy products, such as the F4 supercharge units and the legacy control panels.

CFR products rely on the performance of all parts in the system. Often times the smallest single part plays an critical role in the performance of the overall product. It is important that individual parts are properly inspected and replaced according to factory recommendations. Proper inspection and maintenance of a CFR product will ensure ideal unit operation and user experience. More importantly, a well maintained CFR product will better perform method compliant tests and produce the most accurate results.



# Dalytical GmbH (Authorized CFR Distributor) territory



- Albania
- Austria
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Czech
- Greece
- Germany
- Holy See
- Hungary
- Italy
- Kosovo
- Liechtenstein
- Malta
- Montenegro
- North Macedonia
- Poland
- Romania
- San Marino
- Serbia
- Slovakia
- Slovenia
- Switzerland

# Dalytical GmbH - main customer

- Refineries
- Inspection houses
- State inspections
- Customs offices



**PETROM**



**VÚRUP**



**NIS**  
GAZPROM NEFT



**OMV**

**MOLGROUP**

**INA**

 **Slovnaft**



**Unipetrol**

**ORLEN** GROUP

**SGS**





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