

# CRM





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The exclusive features of C180-class engines are superb light weight and reliability.

Since 1970, these engines have been the mainstay of the company that has consistently devoted all its efforts to research and the application of new technological solutions.

In commitment and long experience in the field of marine diesel engines and their applications, Fiat power C180 undoubtedly leads the way in engines of the 180-2100 hp power range.



**F180-2100**

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One of the ways for determining displacement and fuel oil (oil) weight, and 1,100 kg of maximum weight of 1,100 kg.

# Technology translated into speed.

DFM's concept of hydrocraft is functional research aimed at continuous improvement of its engine performance and reliability.



Just tried with DFM engines can replace the very high power-weight ratio to achieve high speeds at sea. Such characteristics have helped to contribute very profitable motor work with naval and other organizations that need fast, reliable and maneuverable craft with high capacity in terms of armament and equipment for specific operations purposes.

For the same reason and thanks to the company's close cooperation with specialized agencies, an increasing number of high-class fast pleasure craft are being fitted with DFM engines.



Every vessel powered by a DFM engine can count on the expertise of the company's technicians both for assistance at the design and installation stages and when faced in operation. To visit, meet, consult, service and outboard in any part of the world.

The equipment for shore oil-pumping stations.

An engine in the experimental test room.



1. R/V Albatross, sailing on the ocean.

2. R/V Albatross, sailing on the ocean.

3. R/V Albatross, sailing on the ocean.



Speedboat named 'Magnum' with the number '3710' on its side.

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# The future is our present.

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Since its foundation, CNH's prime objective has been to achieve maximum specialization in the engine sector by always seeking the most advanced technologies to implement into internal solutions.

The use of special lubrication procedures and the choice of specially treated special materials has resulted in a series of engines which fully comply with light weight and safety

requirements and which require only very moderate overhaul.

The skilful selection of engine geometry and the extensive application modularity allow CNH engines to be installed in the very minimum of space and make them extremely easy to service and overhaul.



A series of pistons.



A combustion chamber in special material for high temperatures.



Crankshaft.



Our 300-ton press  
forms precision  
components of  
all components of  
the engine.



Engine parts  
assembled



Of course, they can be used to make more accurate measurements or simply tested to reduce the measurement to practice.<sup>1</sup>

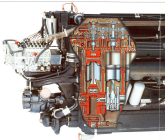


The position of a cyclone separator (separator principle) in the process of the fluid-bed particle coating (left)

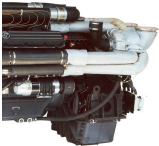


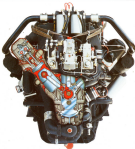
A detail of the engine the turbine

A detail of a turbine (turbine principle) separator (right) separator



Longitudinal section of a multi-cylinder engine showing the internal combustion chamber layout.





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Diagram illustrating the 1953 Buick Wildcat V8 engine, showing the main and secondary shafts and pistons.

# Precision, enthusiasm, expertise.

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At CIMA, your manufacturing stage reflects the company's policy on making perfection its prime objective.

The extensive integration of automated processes with the specialized experience of human skills leads to maximum precision in machining and assembly.

The stages are tested and their further operation is controlled in modern, computerized test rooms, where

thermodynamic phenomena and system performances are plotted and displayed.

And if all a given tool is cast against, just like approval by the Master Mary, this fine power reveals that another vital power is demonstrated at all times, even in the most adverse weather and environmental conditions, without the need for any restrictions of their operations.



Computerized test room.



The hydraulic experience and test process.



Repairing the engine



Repairing the main crankshaft

# Experience at the service of shipyards.

The close interdependence of hull, machine and power plant design allows complete selection for the achievement of optimum regular performance together with cost.

That is why CIMA has accelerated the speed of its design services by setting alongside the objectives of the overall propulsion design.

CIMA's design department carries out all the calculations and verifications needed to achieve the most rational, efficient and reliable results.

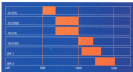


Advanced and flexible construction  
of drawings.

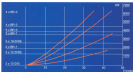
Navigation study  
P. BARONETTI  
P. GALLI  
S. JANI DEPTERIGI

Advanced design





Activity 1000H  
(500 hours of work)



Activity 1000H  
(500 hours of work)

**On the crest of the wave.**

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Hydroquest 210 2000 hp.  
20 knots, 22 knots

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20 knots, 22 knots

Hydroquest 210 2000 hp.  
20 knots, 22 knots



Italian research vessel Capricorno di Porto.  
Porto Cervo, Sardinia, Italy.

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