

WHEREVER YOU NEED A DIESEL, THERE'S ALWAYS A DAF



DAF Diesel

DAF DIESEL: MADE TO MEASURE THIRTY THOUSAND TIMES A YEAR

DAF is not just the largest truck maker in the Netherlands. DAF Diesel, responsible for the development, marketing and sale of engines and pumps, merits, however, a place of its own within the truckmaker concern. DAF Diesel is an engine specialist in the widest sense. Such specialists do know how and experience to tackle any job, however complex it may be.

DAF Diesel's activities are aimed at manufacturers of industrial equipment (pumping sets, compressors), marine equipment, vehicle builders of buses and special vehicles and users (farming tractors, workboats and yachts).

The total production capacity of the engine factory which manufactures 2000 (around 25,000 units) a year.

This structure lends speciality with marine applications,

for which DAF Diesel engines are extremely economical and reliable power plants. Whether they are used to drive generators or as driving force for pumps or thrusters, DAF Diesel is built for the job down to the last bolt.

Full speed ahead right from the start

Three months after the opening of DAF Diesel was set in 1973 when DAF decided to take up the production of diesel engines itself. Four years later DAF was made with a following of other engines. The continuing work in the early days, the modern methods adopted, huge investments in engine and machine technologies and confidence in the future resulted in a high rate of technical development.

DAF was one of the first

manufacturers who applied the technology to high speed diesel engines. Such steps led the way followed by introducing a European "first" for DAF Diesel's low performance solution and improved performance operation of turbocharged, four-cylinder engines under the name of All Advanced Turbo introducing for even greater efficiency.

So thrifty as a DAF

Thanks to improved well-known characteristics of the DAF, DAF Diesel does much to add to this reputation. The economy and efficiency of the DAF Diesel are well known.

This is due to the perfect control of diesel injection technique and fuel delivery, the favourable power-weight ratio and the wide low-speed tor-
que



from liquid rings. In this way an optimum balance is reached between performance and lubricating costs, even in the most difficult and often extreme conditions.

Block design

All DDP Diesel are

6-cylinder in-line engines. This configuration combines excellent fuel economy, a high degree of efficiency and a long life. The Superdiesel in-line engine is compact and relatively light, making it easy to maintain and good component accessibility.

In sound construction materials, robust engine components (steel, cast-iron) result in quiet, smooth operation.

Seamless crankshaft

The cast operation and reliability of a DDP Diesel engine

are not due solely to its block design. Research and practical experience have led to a well thought-out choice of materials.

The crankshaft, a single piece forging, is stronger in its lower than upper bearings.

Furthermore, DDP Diesel has developed six-cylinder liners and piston cooling, which make a very strong cylinder block possible and provide a very reasonable thermal efficiency.

All these features go to show that reliability is very important to DDP Diesel.



DEPENDABLE CONTINUOUS-OUTPUTS FROM 45 TO 250 kW



GM's Cummins engine range consists of 4.5 liter, 6.0 liter and 7.6 liter engines. By better matching the continuous outputs of these engines to the applications they're used in, GM's engines deliver better efficiency, an engine range that's easier to control with sophisticated 45 to 250 kW. These are continuous outputs, not 1000-24 hours a day.

The basic design requirements that drive GM's design, include low operation, together with optimum efficiency and performance at low cost.

The power characteristics of the engine family extend to the rest of the application. The design and construction, systems, changes in fuel injection and control are applications. Changing engine output, GM's engine.

Inspection after inspection.

GM's Cummins engine has the most advanced production techniques used in engine. The complete computer-controlled machining series are integrated with inspection systems.

Active control engine components, such as cylinder head, cylinder block, crankshaft, connecting rods, pistons, gears, are machined in-house.

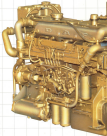
GM's Cummins engine is a

high-quality, low-quality, low-cost, low-cost, and it doesn't make attention to the product. Quality standards are therefore high. A good reputation can only be maintained by giving constant attention to a very high quality level.

The same standards apply to components, such as fuel

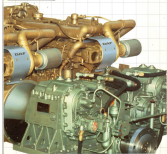
injection pumps, turbochargers, alternators and timing gear, which GM obtains from specialized outside suppliers.

Each part is thoroughly inspected and tested in a final quality control. GM's engine can be supplied with standard or low-emission of power. GM's engine is a complete system, including parts and service.



Marine engine range

CF 305 M	20,000 CV hp
CF 305 M	30,000 CV hp
CF 305 M	37,000 CV hp
CF 305 M	50,000 CV hp
CF 305 M	60,000 CV hp
CF 305 M	70,000 CV hp
CF 305 M	80,000 CV hp
CF 305 M	100,000 CV hp
CF 305 M	120,000 CV hp
CF 305 M	150,000 CV hp



POWER PLANTS FOR WORKBOATS AND PLEASURE CRAFT

Cat Diesel engines have been used for fifty years to power tug and patrol vessels, pilot boats, motor ferries and luxury yachts. But they are also in their element in tougher applications, as power plants for tugger tugs, log skidders, logging vessels. Cat Diesel engines demonstrate their quality and reliability day after day. Engines with over 25,000 operating hours are not exceptional.

Often enough, the production engines are not the only kind working on board. Cat Diesels are also used as auxiliary engines to drive winches, hoisting cranes, compressors, etc., and generators which are of crucial importance for the electricity needs on board.

The great versatility of Cat Diesel engines makes also one more Cat Diesel engine in this way. They are also often used as a custom purchase to drive steel propellers in low-thrust applications.



DAF DIESEL: VERSATILE SPECIALIST



Every engine that leaves the DAF factory is carefully selected for intended application. Basically, all DAF engines are the same within their 100-hp range. Standardization will find components and built for a long, trouble-free life.

But the two-stroke may offer advantages from the four-stroke because each application has its own specific requirements for dimensions, specifications, rated output, maximum speed. Any desired specification, however complex it may be, can be supplied.

This has been made possible by the great store of experience DAF Diesel has accumulated in the past decades.

Full power at the flywheel

The power supplied by the engine at the flywheel has to be transmitted further. Besides moving parts, DAF Diesel can also supply flywheels and axles, enabling the user on the bridge to keep a watchful eye on the performance before such the performance is lost.

Highly responsive delivery

All engines are tested for their performance and operation under circumstances or circumstances in separate tests in a modern engine testing building. A computer running-in programme (based on a standard evaluation) is carried out. Everything is done to guarantee that the DAF Diesel engine will deliver its full power and go on doing so. Continuously.

Take only the most exact: meet any flywheel 100 kW DAF Diesel's response to the demand for higher output

up to 500 kW is further set in the new DAF Diesel offer: output in a specific configuration which has specific advantages for the user. The compact design of the belt and power shaft and weight on the main shaft space is available from with a complete shaft engine delivering the same output.

However, strengthening will offer the possibility to use any one engine in the full output level required, e.g. when spring dampening. This enables a substantial fuel saving to be made.



THE FORCE BEHIND A DAF DIESEL



DAF Diesel is a service chosen within Mercedes, but this does not mean that it operates on its own. All the innovations and experience DAF has accumulated in the course of the years contribute to DAF Diesel's results and also some knowledge obtained by millions of lay men and technicians on the road and just as many instructors at the driving school and focus in the laboratory and on the test bench.



DAF Diesel is an organization on the move: effort continuously progresses to allow its specialists, men and women, time to improve quality and product technology over time. This development, which benefits users, is based to a large extent upon feed-back

from the market.

Service training

The quality of an engine is determined to a considerable extent by the organization behind it. Active co-operation with customers, constant technical guidance and in-company training for mechanics provide an additional reason for a good treatment. Good service stands of fact with proper training personnel. This is why DAF Diesel looks after the training of technicians in a very well equipped training centre.

Course taking several days are given throughout the year in several languages in a very well equipped training centre.

DAF Diesel's 600-hour working week.

Quality equipment for testing. This is why, in addition to test cells, engine, good service is crucial. Working with a network of 500 DAF dealers and service centres linked by modern communication sys-





Since ICB, ensures that any parts needed in an emergency are supplied in the shortest



possible time. It is EAF Olin's job to keep South running for years.

