



READY FOR A GREENER FUTURE

Together with safety and quality, the environment is one of Volvo's core values. "The Volvo Penta Green Commitment" is the comprehensive theme for all our efforts in this field, such as:

- Revolutionary drive systems that drastically reduce fuel consumption and CO2 emissions – e.g. the IPS system.
- Marine gensets running on low sulphur diesel oil – drastically reducing harmful emissions.
- Ultramodern engines that combine higher performance with emission compliance – well in advance of new regulations.
- Diesel-electric propulsion leadership.
- Development of diesel engines that can operate on future renewable fuels.
- Massive investments in research and development of catalytic technology for effective exhaust after treatment.

With a worldwide trend towards moving cargo and passengers from road to sea, the Volvo Penta Green commitment can be a major improvement for the environment.



UNCOMPROMISING STANDARDS OF INNOVATION AND QUALITY

Complete and classified generating sets

All Volvo Penta gensets are delivered complete and tested, ready for installation on board. All equipment and sets are type approved by the major classification societies and can be delivered with certification.

Compact yet easy to service

Engines and gensets that occupy less space in the engine room but still provide good service accessibility have always been a hallmark of Volvo Penta. Our range is designed for fast and trouble-free service operations and most engines support the use of computerised diagnostics tools which facilitate fault-tracing.

Fully compatible monitoring systems

Based on the Modbus protocol and equipped with a large number of hardwire contacts, the Volvo Penta control and monitoring system enables fast and safe integration with most switchboards and power management systems available on the market. The monitoring system and its range of functions – e.g. auto-start, shut-down and alarms – comply with all international standards.

Wide range of options

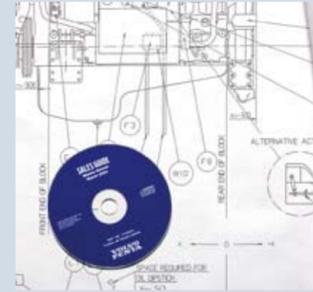
The range of accessories and extra equipment – including shaft generators, box coolers and sound boxes – ensures that virtually any requirement can be met.

FULL SUPPORT FROM SPECIFICATION TO SERVICING

With a solid financial base provided by the Volvo Group, Volvo Penta continues to invest in product renewal programs as well as in expanding our range of services with the aim of ensuring long-term security, reliability and low operating costs.

INSTALLATION AND APPLICATION SUPPORT

We provide professional application support throughout the installation process. A representative of our service organisation is present at start-up and commissioning in order to ensure that installation complies fully with Volvo Penta's requirements.



Drawings, installation instructions and rich technical documentation are delivered with every generating set.

GLOBAL PARTS AND SERVICE NETWORK

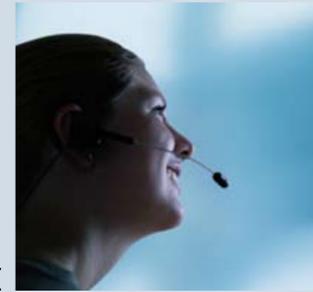
The world-wide Volvo Penta network of dedicated marine commercial specialists provides skilled service and support. Genuine Volvo Penta Parts are readily available thanks to an advanced distribution network. Orders can be placed around the clock.



Genuine Volvo Penta Parts are available even for engines that went out of production 15 years ago.

EMERGENCY ASSISTANCE: VOLVO PENTA ACTION SERVICE

Volvo Penta Action Service provides emergency assistance 24 hours a day, all the year round, in Europe and the USA.



With Volvo Penta on board, help is just a phone call away. Volvo Penta Action Service is available round the clock.

This document is not contractual – Volvo Penta reserves the right to modify any of the characteristics stated in this form without further notice in a constant effort to improve the quality of its products. For specific information on a certain generating set or auxiliary, please ask your dealer or visit our website www.volvopenta.com. The engines and generating sets in the pictures may be fitted with extra optional equipment.

VOLVO PENTA

www.volvopenta.com

POWER FOR MARINE PROFESSIONALS

AUXILIARIES AND GENERATING SETS

A wide range of reliable marine gensets, expertise in power engineering and a global service network make Volvo Penta the perfect provider of power for marine professionals.

VOLVO PENTA

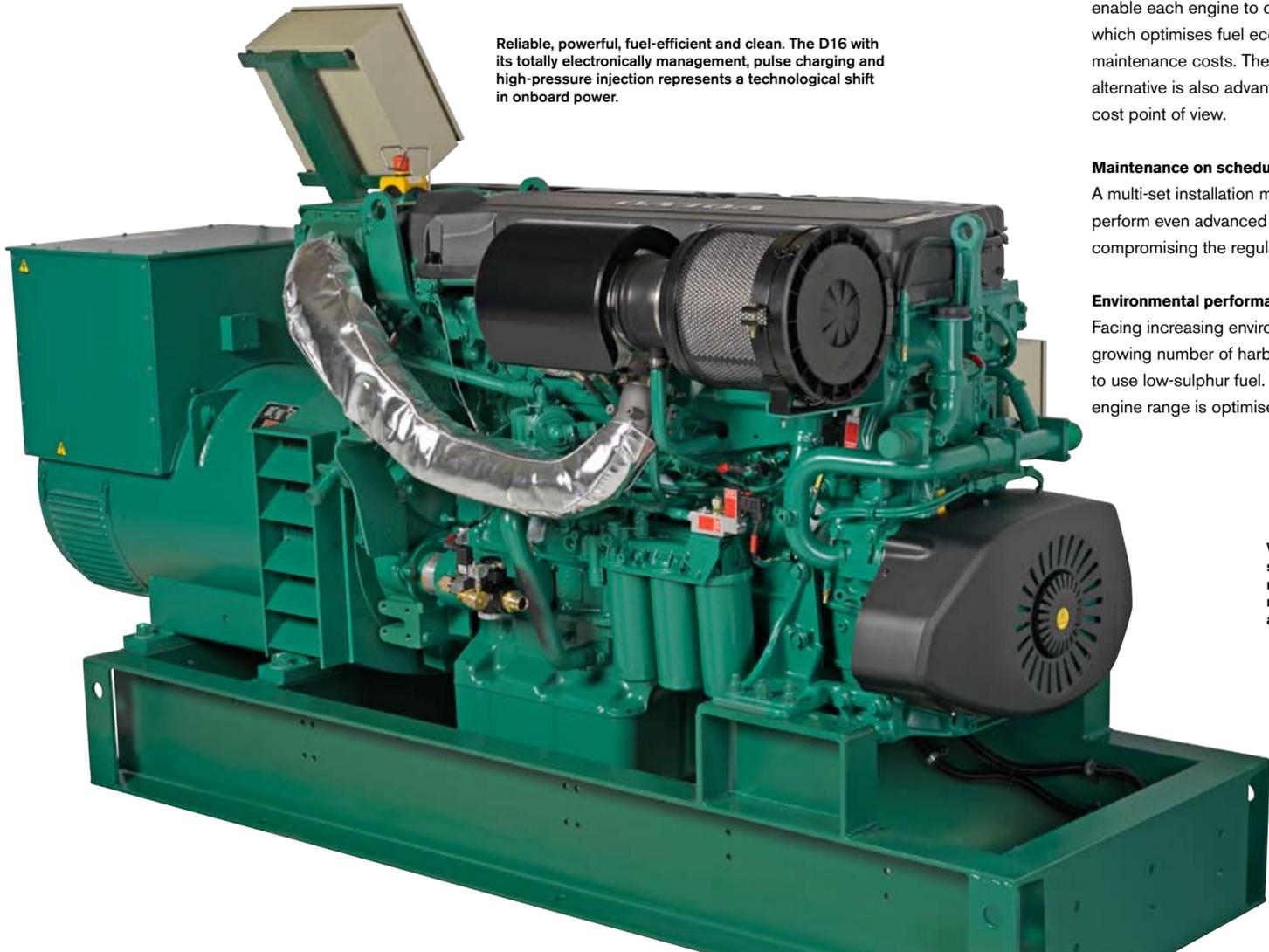
THE COMPLETE SOLUTION FOR YOUR SHIP'S ONBOARD POWER REQUIREMENTS

With expertise in marine power engineering, a broad range of reliable marine diesel engines and collaboration with leading component manufacturers, Volvo Penta offers complete and cost-efficient onboard power solutions.

Our auxiliary engines and complete generating sets are famous for their technical qualities and superior reliability standards. Moreover, we supply a wide range of services that optimise your investment. And we provide worldwide support.

As a part of the Volvo Group, we have access to the powerful resources of the leading manufacturer of heavy-duty diesel engines. So with Volvo Penta, you can rest assured that the latest technological breakthroughs are at your service – today and tomorrow.

Reliable, powerful, fuel-efficient and clean. The D16 with its totally electronically management, pulse charging and high-pressure injection represents a technological shift in onboard power.



MULTI-SET INSTALLATIONS FOR OPTIMISED OPERATIONAL COSTS

Using high-speed engines as prime movers is the most cost-efficient answer to a broad range of marine power needs. A multi-set installation has several benefits compared with an installation based on a few large sets – redundancy being one.

Economical operations

Multi-engine synchronising and load sharing enable each engine to operate at peak efficiency, which optimises fuel economy and reduces maintenance costs. The high-speed engine alternative is also advantageous from a capital cost point of view.

Maintenance on schedule

A multi-set installation makes it possible to perform even advanced service operations without compromising the regular power supply.

Environmental performance

Facing increasing environmental demands, a growing number of harbours require visiting ships to use low-sulphur fuel. The Volvo Penta auxiliary engine range is optimised for running on low-

sulphur fuel, a fuel that also contributes to longer service intervals and increased engine uptime.

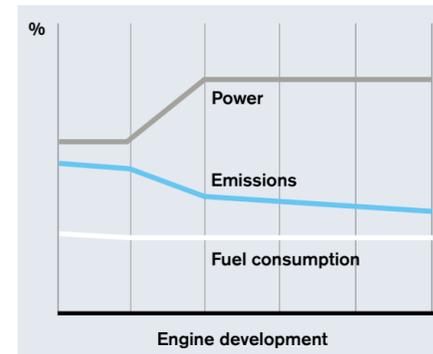
Diesel electric propulsion

With a strong installation track record, Volvo Penta's diesel electric propulsion systems are proven concepts. Our generating sets are well-suited for diesel electric installations due to their fuel-efficiency, very low exhaust emissions and compatibility with power management systems.



A multi-set installation with Volvo Penta D12 units providing electrical power on board a seagoing tanker.

Volvo Penta leads the way by sustaining power output while meeting the demands for reduced fuel consumption and emissions.



DESIGNED, ASSEMBLED AND TESTED IN-HOUSE

In the test facility, the gensets are thoroughly tested under the same conditions they will face on board your vessel.

In-house assembly means that fewer intermediaries are involved in manufacturing and delivery. Add to this our wide standard scope of supply, and it's plain to see why we are able to supply superior quality gensets – which meet almost any specific requirements.

Modern test procedures

In our well-equipped test facility, every single power unit goes through a comprehensive testing program which includes load acceptance, load sharing and auto start as well as test running and class approval. Verification of alarm and shut-down levels is also included.



COMPETITIVE RANGE OF EMERGENCY GENSETS

The D5 and D7 are highly reliable and fuel efficient marine gensets. They can be delivered with complete classification certificates.

The range of marine emergency generating sets meets most of the power requirements of the shipping industry and classification societies. Optional equipment includes e.g. factory-installed twin starting systems, battery and battery charger.

