

POWER

FOR MARINE PROFESSIONALS | NO 4

Welcome to
the world of
Volvo Penta Marine
Commercial!

**VOLVO
PENTA**



TRIED AND
TESTED

Volvo Penta's marine test center at Krossholmen is the largest and best equipped of its kind in Europe, and one of the major reasons behind Volvo Penta's groundbreaking innovations.

Here, Volvo Penta carries out tests not possible in the lab. >> [Continued on page 4](#)

Complete Marine gensets



Marine genset sales are booming for Volvo Penta. And for good reason. The company supplies extremely competitive low emission sets, fully classified and individually tested in-house. We pay a visit to the assembly plant.

>> [Continued on page 4](#)



THE VOLVO PENTA
GREEN COMMITMENT

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.

>> [Page 2](#)



Take a green cruise in **Germany**.

>> [Page 2](#)



Volvo Penta on patrol in **China**.

>> [Page 3](#)

GREEN ECONOMY

Ultramodern engines, well in advance of new regulations, and revolutionary drive systems, that drastically reduce CO₂ emissions, can also prove to be very good for your business.



Environmental care is one of our core values, and has been for decades. So it comes as no surprise that we supply low emission propulsion systems and gensets for marine commercial applications.

Apart from being generally good for the environment, these low emission products can be very good for your business. More and more purchasers put environmental demands on their contractors.

Environmental leadership is a competitive advantage that is becoming more and more important.

So whether you are looking for high performance propulsion that has 30% lower emissions, super efficient gensets running on low sulphur diesel or complete solutions for diesel electric propulsion, contact us at Volvo Penta!



Ingemar Karlsson
Senior Vice President, responsible for the Marine Commercial segment.

Launch in Turkey

The first diesel electric powered ferry boats for the Bosphorus and the Sea of Marmara were launched recently. Powered by Volvo Penta D16MG marine gensets, they offer a more environmentally friendly alternative in the world's busiest strait.



>> A GREEN CRUISE continued.

The Neptun Yard at Rostock is building two new river cruise vessels to the highest environmental standards, thanks to Volvo Penta powered diesel propulsion.

A-rosa river cruises offer elegant cruising on the Danube and Rhône/Saône and next year also the river Rhine. Their two new cruise vessels will be powered by Volvo Penta for minimal emissions and will not only meet all regulations but also fulfill the EU rules for sponsoring of clean engines on inland waterways.

The propulsion is four 450 hp D12 marine diesels powering two Schottel

pods. This configuration means the boat only uses two engines downstream for exceptional fuel economy – with full maneuverability.

Gensets are powered by two low-emission D16 diesels for continuous operation and one D9 for harbor and emergency operation. The bow thruster is powered by a single 550 hp D16.

The yard has sourced all the onboard power needs from the Volvo Penta Center "Warnow Werkstatt", fulfilling the most stringent environmental demands.

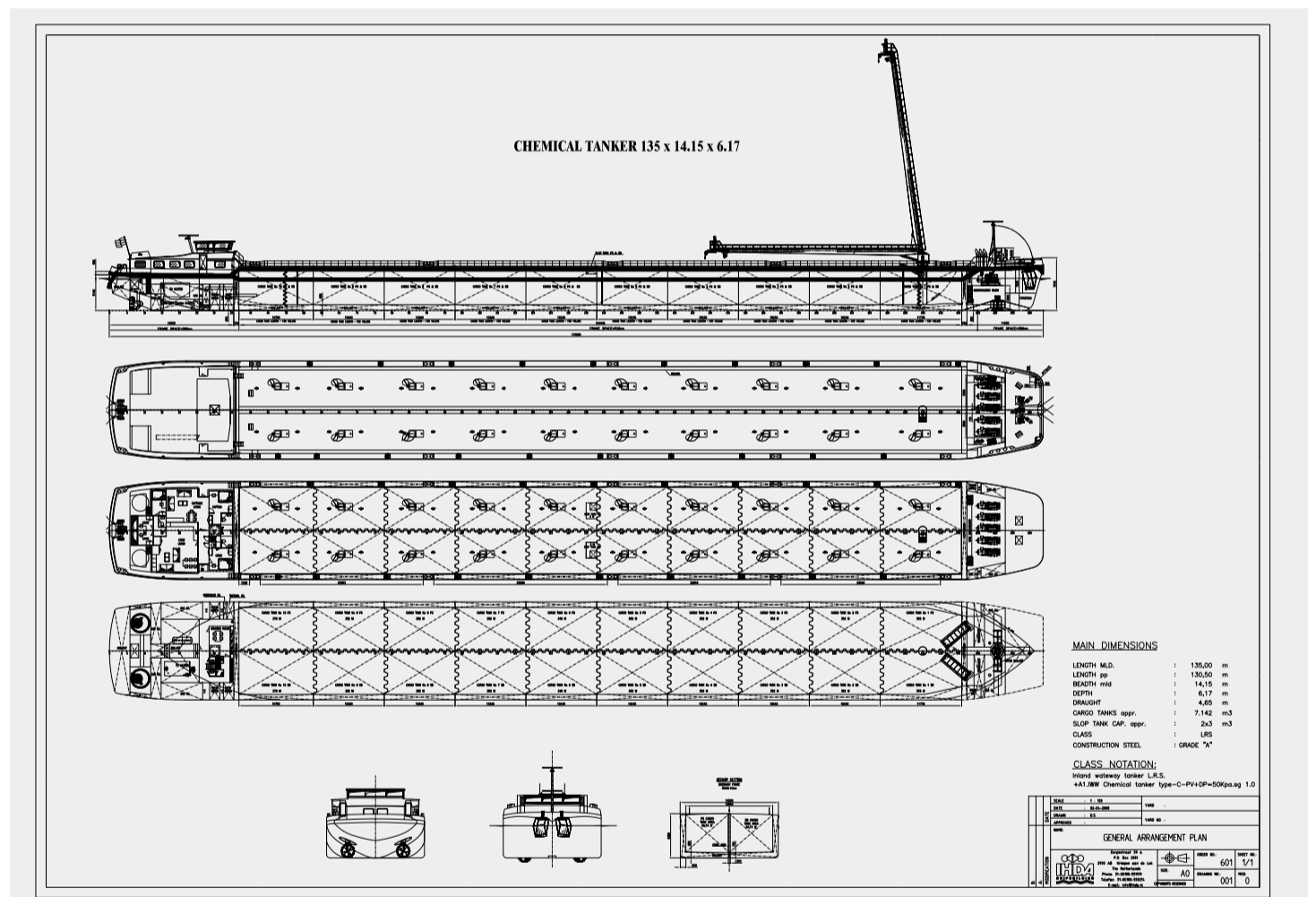


Technical Data

A-rosa cruise vessel

Main propulsion	4 x D12-450 with two Schottel STP 200
Genset	2 x D16-HCM 534F
Harbour/emergency	D9-HCM 434F
Bowthruster	D16-550 with Schottel pump-jet SPJ 82 RD

New inland ECO tanker



Technical Data

IHDA inland Eco tanker

Length	135 m
Wide	14.15 m
Draft	6.17 m
Capacity	7.145 m ³
Main engines	5 x D16MG HCM534E
Propulsion	2 x 850 kW
Pumps	20 x 52 kW
Thruster	1x 550 kW
Classification	Lloyds Register of Shipping
Harbour/emergency	D5A TA

Stringent emission regulations and high demand for fuel efficiency are behind the two new Dutch inland Eco tankers.

The power source chosen is a diesel electric system with five Volvo Penta D16s providing power for propulsion, onboard electrical supply and a bow thruster.

The new and exciting design has been developed by IHDA Shipbuilding. Interesting features include all the engines placed in the bow, giving very low noise on the bridge and 5% extra load capacity. The D16 gensets are used for all onboard power needs including: two propulsion Veth thrusters giving excellent manoeuvrability, a Veth bow thruster and electrical power for pumps, etc.

An advanced power system means that engines are operated at peak efficiency. While sailing unloaded, or downstream, one or more engines are automatically shut down to save fuel.

The first tanker will be delivered in the summer of 2009 and will operate as a re-fuelling vessel in the Port of Rotterdam.

>> VOLVO PENTA IN CHINA continued.

VOLVO PENTA POWERS CHINESE PATROL



China powers up its border control. The new flag boat of the China border police patrol fleet is a real performer, powered by four Volvo Penta D12s at 715 hp each.

The China border police have a large number of HP 1500s, 15-metre patrol boats, in operation. Propulsion aboard these high-speed vessels is provided by twin D12-715s, and the border police are extremely satisfied with overall performance.

So it was only natural that the same power source was chosen for the new patrol flagship to enter service this summer. The new SD2188, a 22-metre multi-

purpose patrol boat, was designed and manufactured by Shenzhen Highspeed Boats Tech. Propulsion is provided by four D12-715s powering four surface drives. This gives this large patrol boat a top speed close to 50 knots.

Fuel economy is excellent with a maximum range of 500 nm. Emissions are minimal with the D12 engines complying with the most stringent international exhaust regulations.

Technical Data

Shenzhen Highspeed Boats Techs patrol boat	
Overall length	22.20 m
Draft	0.99 m
Crew	10
Main engines	4 x Volvo Penta D12-715 hp at 2300 rpm
Transmission system	4 x ZF 325-1A
Displacement	36.0 tons
Top speed	Over 45 knots
Cruising speed	24-28 knots
Range	500 nm
Harbour/emergency	D5A TA

D4-260s for Argentinean coast guard

Prefectura Naval Argentina (PNA) is the coast guard in Argentina. They are increasing their patrol, salvage and rescue resources with the addition of no less than 30 fast and versatile RIBs. Their choice of power is twin D4-260s – thanks to excellent previous experience.

With a coastline of no less than 4,000 kilometers, several mountain lakes and fishing as a base industry with exports amounting to over USD 1000 million, the Prefectura Naval plays an important role. Large, fast and reliable RIBs provide the perfect platform for control of fishing, patrolling, salvage, rescue and more. Each boat also carries two Zodiac rescue platforms with a total capacity of 90 persons, making it possible to provide immediate primary assistance.

International bidding

The Ministry of Justice, Security and Human Rights opened international bidding for 30 vessels, 18 with cabins and 12 open. Volvo Penta and Zodiac dealer Naval Motor in Buenos Aires landed the deal. Their combination of technical performance, support and price was unmatched by other bidders. Plus the fact that Naval Motor had already delivered no less than 36 D4 units previously to the Prefectura Naval, all of which have worked flawlessly.

SOLAS approved performance

The SOLAS approved D4-260s are equipped with Volvo Penta DPH stern-drives giving excellent performance combined with high efficiency for minimal fuel consumption and exhaust emissions. The twin D4-260s also deliver outstanding performance. With maximum operative load, the RIBs will reach a top speed of 42 – 44 knots.

The boats will be delivered in March 2009

HIGH PERFORMANCE

The Volvo Penta high performance diesel range range is second to none.

An unmatched range of diesel inboards, our unrivalled range of Duoprop drives plus the revolutionary Volvo Penta IPS – now with more power!

Diesel sterndrive Duoprop.

From 130 to 370 hp.

Diesel Inboard.

From 110 to 750 hp.

Volvo Penta IPS

From 260 to the new 600 hp.

MORE VOLVO PENTA IPS COMMERCIAL POWER!

Volvo Penta IPS moves up to 600 hp with the new IPS800. Available in twin, triple or quad installations, IPS800 is the new, ultra-efficient, low emission alternative for planing commercial craft.

Better than WJ and shafts

Follow ups on installations have shown that Volvo Penta IPS gives at least 30% better fuel economy than shafts and in comparison with water jet, the difference is even greater – with the same manoeuvrability and easy handling.

Twin, triple or quad

Thanks to total electronic control, Volvo Penta IPS works perfectly in twin, triple or quad installations. The engine space required is limited, leaving more room for crew, cargo or passengers. Driving is easy with joystick docking available.

Technical Data

Volvo Penta IPS800 Complete propulsion package including engine, pods, propellers, controls and electronic management.	
Configuration	In-line 6-cylinder diesel with turbo, compressor and charge air cooling.
Displacement	10.8 l
Crankshaft power	600 hp

Argentinean coast guard Prefectura Naval RIBs with twin Volvo Penta D4-260s.



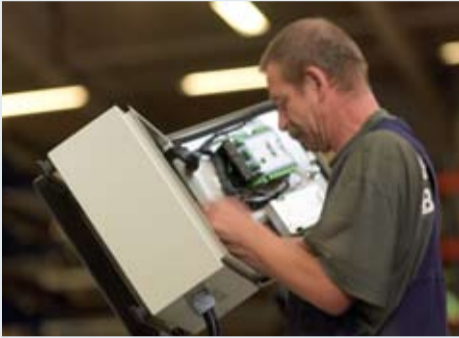


>> COMPLETE GENSETS continued.

Developed, Manufactured and Serviced by Volvo Penta



All gensets are fully classified. Volvo Penta cooperates with 12 classification societies.



The electrical systems are installed by electronic specialists.



Computerized sales support means that every order is quality assured.



The base engines come straight from Volvo Powertrain – the world's largest diesel engine manufacturer.



The Marine gensets are available for heat exchanger, keel cooling or come complete with radiator.

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 up-to-date information, there is no better place than the Volvo Penta website. Here you can also easily find your nearest dealer and download operator's manuals for most Volvo Penta engines.

VOLVO PENTA

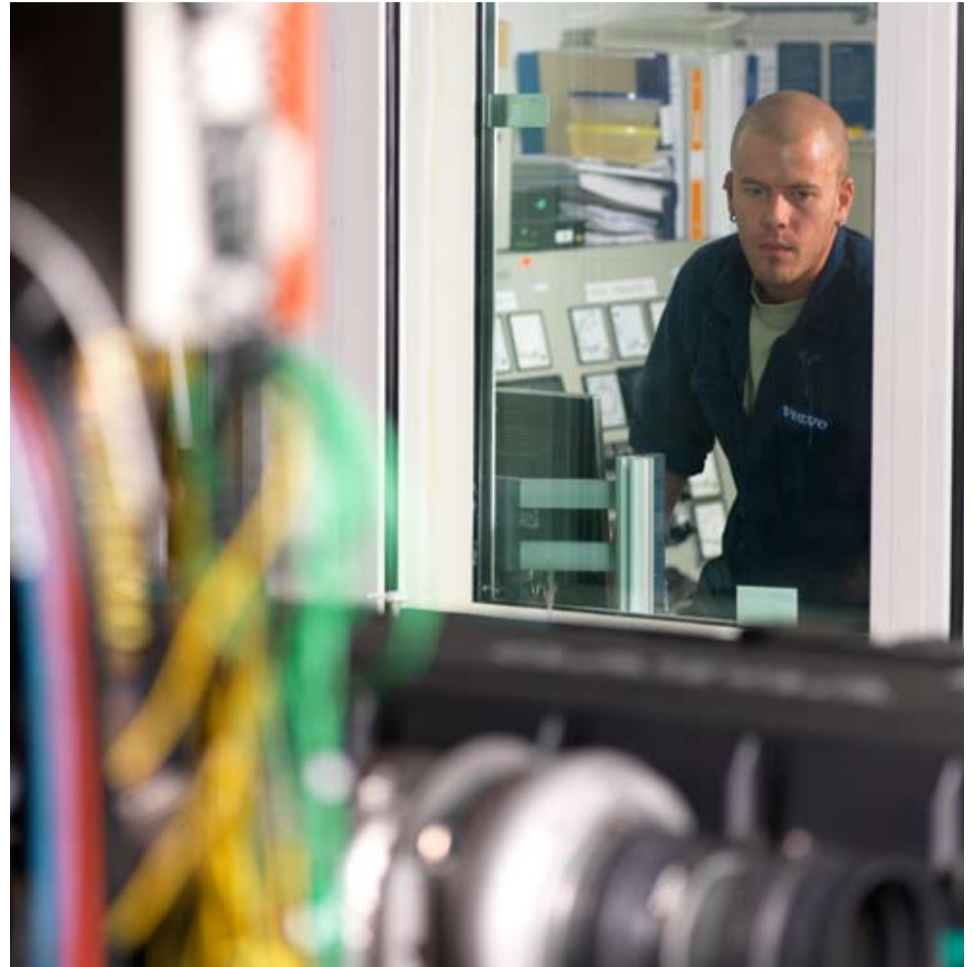
www.volvopenta.com

Kjell Lundin is manager of production. He tells us that genset production is up well over 40 per cent this year and that Volvo Penta has invested to increase production capacity even further.

“Today's high-volume line assembly does not leave room for individual adaptations. Here, we employ experienced and skilled personnel for manual assembly that is superior when it comes to cost and, not least, quality”, says Kjell Lundin. and continues:

“The fact that we do everything in-house is a great advantage for the customer. We cooperate with 12 classification societies and deliver each genset fully classified and individually tested. Many customers also visit us for in-factory engine tests.

Each Marine genset is tested individually in the computerized test room. They are delivered complete and are easy to install. Fuel in – electrical power out!



>> TRIED AND TESTED continued.

Volvo Penta's marine test center at Krossholmen outside Göteborg has been in constant operation since 1968. Here, Volvo Penta can carry out tests not possible in the lab. A typical year at Krossholmen represents some 5,000 hours of testing and around of 12,000 nautical miles at sea.

Together with Volvo Penta's US-based test center in Virginia, Krossholmen plays an important role in product development. Engines, transmissions, propellers, controls, instruments and everything related are tested. This thorough testing leads to higher reliability, better performance and improved environmental characteristics. Krossholmen is in many ways a unique asset for Volvo Penta – and the company's customers.

Frequent visitors

As an independent supplier, Volvo Penta cooperates with designers, boat builders and yards all over the world. Many of them come to Krossholmen to see new products and test them first hand.

Well equipped

Krossholmen is fully equipped with large lifting capacity and complete workshops for engines and drive systems, work with plastics, welding and everything else needed to adapt hulls and perform installations.

Around 35 vessels are used at Krossholmen, everything from standard production boats of all sizes to special floating test rigs with advanced monitoring equipment installed.



The test boats do heavy-duty work with different propulsion alternatives installed.



The whole drivetrain is evaluated.



Extensive use of computerized monitoring.