

4BT3.9DM-driven genset installed for harbour service.

Diesel-electric propulsion is increasingly favoured for offshore tonnage, a trend sustained by the 3,755 dwt diesel-electric platform supply vessel *Stril Mariner*, handed over last October to Stavanger-based Simon Mokster Rederi by the Norwegian yard Simek A/S. The 78.6m-long x17.6m-wide Havyard-designed PSV is classed by DNV.

Four Cummins KTA50-(D)M diesel-driven gensets form the 5,164kW power



*Engine room of the Cummins-powered Korean tug Haeyang No 7*

station, electrical power driving a pair of Ulstein Aquamaster US 205 CRP thrusters from Rolls-Royce and two bow thrusters.

Environmental friendliness is fostered by running only those number of gensets required to meet the given load, thus curbing emissions and enhancing fuel economy. In addition, the main engine exhaust lines incorporate selective catalytic reduction (SCR) systems to cut NOx emissions by around 90 per cent. A similarly-equipped sistership is due for delivery this spring.

## Volvo Penta package powers *Paradise*

An environmentally friendly design and equipment specification characterises a coastal tanker built by the Lindenau Shipyard in Germany for Seychelles Petroleum. With a tank capacity of 1,700m<sup>3</sup>, the 1,785 dwt/67.8m-long *Seychelles Paradise* is designed to distribute oil products and LPG within the inner islands of the Indian Ocean country.

Propulsive redundancy is secured by a twin-screw plant based on a pair of Volvo Penta D16 MH high speed diesel engines, each developing 473kW at 1,500 rpm. The 2m-diameter, four-bladed CP propellers are driven at 253 rpm via gearboxes with a reduction ratio of 5.93:1, a speed of 11 knots being attained with an output 2 x 278kW at 3.9m draught. Manoeuvrability is enhanced by twin high-efficiency spade rudders and a 150kW bow thruster.



*Keeping the Seychelles green*

## EMD develops 'green' engine kits

Kits from Electro-Motive Diesel will allow operators of the US designer's EMD Model 645 and 710 medium speed two-stroke trunk piston engines - both Roots blown and turbocharged - to comply with EPA requirements calling for a 25 per cent reduction in particulate matter emissions. The new Part 1042 kits are also said to lower lube oil consumption by more than 25 per cent and fuel consumption by 3 per cent over EPA-defined marine duty cycles.

Such reductions have been achieved by enhancing standard engine components and without introducing new systems, EMD reports. No unproven retrofit technology is involved, and no new training is necessary to overhaul or maintain the engines.

Since EMD holds the EPA certificate for its engines and kits, emissions compliance and performance is covered by the OEM factory warranty. The Part 1042 marine emissions kits are offered through the company's authorised distributor network. **MP**

## Wärtsilä drives Carnival's new dream



Carnival Corp's latest cruise ship project - codenamed Carnival Dream 3 - will be powered by a diesel-electric plant based on six Wärtsilä 46 medium speed engines. The 130,000gt vessel is building at Fincantieri's Monfalcone yard in Italy for launching in August 2011 and entry into service in spring 2012.

The engines will be arranged for operation on light fuel oil to reduce emissions in sensitive sea areas. In

addition to supplying the engines and other equipment, Wärtsilä will commission the machinery and provide annual training for crew at its premises.

Diesel-electric plant based on six W46 engines are in service powering Royal Caribbean Cruises' 155,000gt Freedom-class trio and was also specified for its 220,000gt Genesis-class pair, recently headed by Oasis of the Seas.