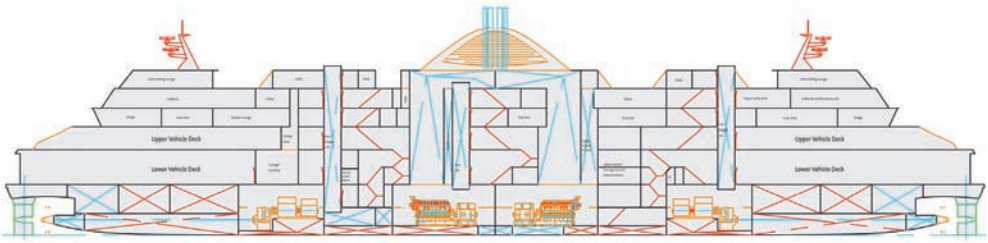
Diesel-electric double-enders booked by BC Ferries

Three double-ended ferries ordered by British Columbia Ferries from Germany's Flensburger yard for 45-minute crossings between Horseshoe Bay and Departure Bay and between Swartz Bay and Tsawwassen in western Canada are specified with MaK medium speed diesel-electric propulsion.

Due for delivery from end-2007, each 160m-long/28.20m-wide/5.75m-draft ferry is designed to carry 1,650 passengers and up to 370 cars. The propulsion plant layout and specification reflects a requirement for reliability, redundancy and environmental friendliness.

Each of the four 8-cylinder MaK M32C engines is rated for 4,000kW at 600 rpm and

Artist's impression of the BC Ferries pair



Main genset and propulsion motor compartments of BC Ferries' double-ender design

will be coupled to an alternator ordered by the yard. The gensets will provide power for the two 10.15MW propulsion motors driving the fore and aft propellers at constant speed as well as for auxiliary systems and ship's services. A speed of 18 knots is anticipated from just two gensets running and also supplying power for the public areas.

(Flensburger has complete liability for all design risks. Substantial penalties in the form of price reductions will arise, for example, if the speed of the ferries does not meet the contracted figure; and if the speed should be one knot slower than that figure, BC Ferries can withdraw completely from the contract with full return of all payments made. The same sanction will apply if the high standards for noise and vibration are not attained.)

In line with BC Ferries' policy, the engines will be arranged to operate on marine gas oil or marine diesel oil, fostering reliability and lower overall operating costs. The operator has a longstanding relationship with the Kiel-based enginebuilder, which has supplied the company with propulsion machinery for retrofit and newbuilding projects since 1970.

MaK M32C engines satisfy current NOx emission regulations (IMO I) at all loads. More demanding requirements can be met by retrofitting Caterpillar's ACERT/Flex-Cam Technology (FCT), which is said to be particularly effective in reducing soot emissions in the part-load range. Engine-internal measures reportedly yield NOx emission figures up to 30 per cent lower than those demanded by IMO I.