



## ELITE: dedicated fireboat for Hong Kong

Builder ..... Wang Tak Engineering & Shipbuilding Co Ltd  
 Vessel name ..... Elite  
 Owner ..... Government of the HKSAR  
 Operator ..... Fire Services Department, HKSAR  
 Designer ..... Wang Tak Engineering & Shipbuilding Co Ltd  
 Flag ..... HKSAR  
 Total number of sister ships already completed ..... Nil  
 Total number of sister ships on order ..... Nil  
 Contract date ..... 2000  
 Delivery date ..... April 2002

The fireboat *Elite* was delivered in April and now acts as a replacement for the aged *Alexander Grantham*, for the Fire Services Department, HKSAR. She has been in service since May.

This vessel was designed and built to enhance the functional roles of fire fighting for vessels including ocean going merchantmen; fire fighting of coastal regions; search and rescue in case of marine disasters; diving support; and command centre for directing major operations.

*Elite*, a monohull designed to LRS 100A1 Tug designation, is propelled with two sets of CAT3516B diesel engines, which also serve as fire pumps, and deliver a 15knot cruising speed. A highly automated Unitor external fire fighting system with firewater pumping capacity totalling 7200tonnes/hr, make *Elite*, it is claimed, the world's most dedicated fireboat. Onboard firefighting equipment meets Fi-Fi 11 requirements, with 2 x 40,000litres/min water monitors at maximum throwing distance of 90m, a deluge water screen, and foam making facilities.

A Southern Oceanics diving cage, with a three-diver capacity and a maximum working depth of 60m, was fitted to carry out diving operations. This diving cage is said to be unique, and the first of its kind within HKMD's marine fleet. A Boston Whaler rescue boat is carried on deck, launched, and recovered by a Palfinger deck crane. A helicopter winching area is provided for rapid transport of survivors back to shore.

A specially designed wheelhouse has 360deg windows for all round vision. In addition, a skylight is fitted on the top of the wheelhouse, so that firefighting can be easily monitored from this area. Consoles and control stands are purposely profiled to meet operational requirements,

separated into coxswain station, navigator station, and commander station. A dedicated fire fighting and engineering station is provided as the central commander centre. Internal spaces and roomy and functional for attending crew members.

Fully air-conditioned accommodation is provided for 15 crew, with two single cabins, and one six-man crew cabin. Additionally, *Elite* is outfitted with a 16-seater conference room, a 20-seater mess room, a 25-seater briefing room, and a survivor cabin, with space for 100 people.

### TECHNICAL PARTICULARS

Length, oa ..... 42.50m  
 Length, bp ..... 39.60m  
 Breadth, moulded ..... 9.60m  
 Depth, moulded ..... 4.20m  
 Gross tonnage ..... 653gt  
 Displacement ..... 650tonnes  
 Max speed (100% MCR engine output) ..... over 15knots  
 @ 100% MCR  
 Service speed ..... 15knots @ ~85% MCR  
 Range ..... 50nm  
 Fuel consumption ..... 750litres/hr  
 Classification Society & Notation ..... Designed to LRS 100A1 Tug (not classed)  
 Other regulations ..... HKMD Survey, IMO, IEE, Fi-Fi 11  
 Main Engine  
 Model ..... CAT3516B  
 Manufacturer ..... Caterpillar  
 Number ..... 2  
 Output ..... 1772kW @ 1600rev/min  
 Alternators  
 Number ..... CAT3406  
 Make ..... Caterpillar  
 Number ..... 2  
 Output ..... 245kW  
 Gearboxes  
 Make ..... NICO  
 Model ..... MGN1424V  
 Number ..... 2  
 Reduction ratio ..... 3.06:1  
 Propellers  
 Material ..... Bronze  
 Manufacturer ..... Stone  
 Number ..... 2

Pitch ..... 5-bladed FP  
 Diameter ..... 1700mm  
 Open/nozzle ..... Open  
 Bow Thrusters  
 Make ..... Schottel  
 Number ..... STT330T-LK  
 Output of each kW and rev/min ..... 500kW @ 1470rev/min

Deck machinery  
 Deck crane  
 Make ..... Palfinger  
 Model ..... PK4800MA  
 Number ..... 1  
 Capacity ..... SWL 3tonnes @ maximum outreach 5m

Anchor Windlass  
 Make ..... Plimsoll  
 Model ..... PR-HAW/GG-24  
 Number ..... 2  
 Gypsy size ..... 24mm diameter U2 chain

Speedboat  
 Make ..... Boston Whaler  
 Model ..... 21' Impact  
 Number ..... 1

Bridge Electronics  
 Radar ..... Furuno FR1525 Mk3  
 GPS ..... Furuno GP3300  
 GPS Receive ..... Furuno GR80  
 Echo sounder ..... Furuno FE-700  
 VHF ..... Vingtor  
 PA and Intercom ..... Vingtor  
 Speedlog ..... Walker 7070

Complement  
 Crew ..... 15  
 Passengers ..... 100  
 Number of cabins ..... 3

Other Equipment  
 Diving Cage System  
 Make ..... Southern Oceanics  
 Model ..... LG-360  
 Capacity ..... 3 divers  
 Max working depth ..... 60m

External Fire Fighting System  
 Make ..... Unitor Fi-Fi Systems  
 Firepump ..... 3 x 2400m<sup>3</sup>/hr  
 Monitor ..... 2 x 40,000litres/min (water monitors); 6 x 10,000litres/min (water/foam monitors)