



# D&K ABDUL RAZZAK KHALID ZAID

## AL-KHALID: Product oil/chemical tanker

Shipbuilder: ..... **STX Offshore & Shipbuilding Co.Ltd.**  
Vessel's name: ..... **D&K Abdul Razzak Khalid Zaid Al-Khalid**  
Hull No: ..... **S1636**  
Owner/Operator: ..... **D&K Holdings LLC.**  
Designer: ..... **STX Offshore & Shipbuilding Co.Ltd.**  
Country: ..... **Republic of Korea**  
Model test establishment used: ..... **KRISO (Korea)**  
Flag: ..... **Marshall Islands**  
IMO number: ..... **9700213**  
Total number of sister ships already completed (excludingship presented): ..... **Nil**  
Total number of sister ships still on order: ..... **1**

The **D&K ABDUL RAZZAK KHALID ZAID AL-KHALID** has an overall length of 182.90m, a moulded breadth of 32.20m and a moulded depth of 19.10m. Its service speed at design draught is 14.5knots at NCR power for the main engine with a 15% sea margin, and maximum deadweight is about 50,153.8dwt on a scantling draught of 13.3m.

This vessel is a new MR tanker which has been built in accordance with newly developed procedures and a formal certificate of EEDI will be issued. According to the pre-EEDI technical file, attained EEDI is 4.02g CO<sub>2</sub>/tonnes-nm at the design stage and it has attained 18.92% for required EEDI Phase 2.

A mewis duct is installed on the vessel and it is expected to achieve power savings when compared with vessels of similar size without a mewis duct. To allow the shipping of high-density cargo (s.g. = 1.53 t/m<sup>3</sup>) partial loading, additional structural reinforcement was carried out and verification of stability was also completed.

### TECHNICAL PARTICULARS

Length oa: ..... Appx. 182.9m  
Length bp: ..... 173.9m  
Breadth moulded: ..... 32.2m  
Depth moulded  
To main deck: ..... 19.1m  
To upper deck: ..... 19.1m  
Width of double skin  
Side: ..... 2m  
Bottom: ..... 2.15m  
Draught  
Scantling: ..... 13.3m  
Design: ..... 11m  
Gross: ..... 29,554gt  
Deadweight  
Scantling: ..... 50,104MT  
Speed, service (79 %MCR output): ..... 14.5knots  
Cargo capacity (m<sup>3</sup>)  
Liquid volume: ..... 54,011.9m<sup>3</sup>

Bunkers (m<sup>3</sup>)  
Heavy oil: ..... 1,564m<sup>3</sup>  
Gas oil: ..... 310m<sup>3</sup>  
Water ballast (m<sup>3</sup>): ..... 20,806.1m<sup>3</sup>  
(including A.P.TK)  
Daily fuel consumption (tonnes/day)  
Main engine only: ... appx. 21.19 tonnes/day  
Classification society and notations: ..... LR + 100A1 Double Hull Oil and Chemical TankerShip Type 2, CSR, ESP, ShipRight(CM,ACS(B)), \*IWS, LI, SPM4, ECO(BWT,CRM,SEEMP,EEDI\_2,IHM, P,TC)+LMC, IGS, UMS With the Descriptive Notes ETA,Part Higher Tensile Steel, ShipRight(BWMP(T,S), SERS, VESC, SCM)

% high-tensile steel used in construction: ..... 45%  
Main engine(s) x 1  
Model: ..... STX-MAN B&W 6G50ME-B9.3  
Manufacturer: ..... STX HI Co. Ltd.  
Type of fuel: ..... HFO, MGO  
Output of each engine: ..... 7,020kW 85rpm (MCR), 5,545kW 78.6rpm (NCR)  
Propeller(s) x 1 EA  
Material: ..... Ni-Al-Br  
Designer/Manufacturer: ..... Silla Metal  
Fixed/Controllable pitch: ..... Fixed pitch  
Diameter: ..... 6,800mm  
Diesel-driven alternators x 3  
Engine make/type: ..... STX Engine / 6L23/30H Mk2  
Type of fuel: ..... HFO, MGO  
Output/speed of each set: ..... 1050kW at 900rpm

Alternator make/type: ..... Hyundai/ HFC7 508-08P  
Output/speed of each set: ..... 990kW/900rpm  
Boilers x 2  
Type: ..... Auxiliary boiler, composite boiler  
Make: ..... Kangrim  
Output, each boiler: ..... 16,000KG/HR, 1,200 X 700 KG/HR  
Cargo cranes/cargo gear x 1  
Make: ..... Oriental  
Type: ..... Electro-hydraulic  
Performance: ..... 10t SWL  
Other cranes x1  
Make: ..... Oriental  
Type: ..... Electro-hydraulic  
Tasks: ..... Provision handling  
Performance: ..... 3.2t SWL  
Mooring equipment x 6  
Make: ..... Rolls-Royce  
Type  
(electric/hydraulic/steam): ..... Low-pressure hydraulic system

Cargo tanks  
Number: ..... 12 cargo tanks & two slop tanks

Coated tanks: ..... International Paint Korea.  
Type : ..... Pure-epoxy  
Cargo pumps  
Number: ..... 13 sets + 1 set (portable cargo pump)  
Type: ..... Submerged type  
Make: ..... Framo  
Stainless steel: ..... Yes  
Capacity (each): ..... -  
- 12 of cargo pumps (SD200) : ..... 600 m<sup>3</sup>/h x 125 mlc  
- 2 of slop tank pumps (SD150) : ..... 300 m<sup>3</sup>/h x 125mlc  
- 1 residual pump (SD100) : ..... 100 m<sup>3</sup>/h x 125mlc  
- 1 portable pump (TK100) : ..... 150 m<sup>3</sup>/h x 70mlc  
Cargo control system  
Make: ..... Framo  
Type: ..... 1 of electric control panel + 2 of diesel engine control panel  
Ballast control system  
Make: ..... Emerson  
Type: ..... Plano type ballast control panel  
Water ballast treatment system  
Make: ..... Ocean Saver  
Capacity: ..... 830m<sup>3</sup>/h horizontal ex proof type for upper deck 330 m<sup>3</sup>/h vertical type for E/R  
Complement  
Officers: ..... 11  
Crew: ..... 13  
Suez/Repair Crew: ..... 6 Suez crew / 2 Shore workers

Bridge control system  
Make: ..... Kongsberg  
Type: ..... A-CHIEF 600  
Fire detection system ..... Consilium  
Type: ..... CARGO/2IL  
Fire extinguishing systems  
Cargo holds: sea water & deck foam system.  
Make/Type: ..... NK / alcohol resistant foam  
Engine room: ..... CO<sub>2</sub> fire extinguishing sys.  
Make/Type: ..... NK/high pressure CO<sub>2</sub>  
Galley: ..... Galley hood firefighting system  
Make/Type: ..... Sam-joo / ANSUL  
Galley CO<sub>2</sub> system.  
Make/Type: ..... NK/Fixed CO<sub>2</sub> system  
Radars x sets: ..... Furuno  
Model(s) FAR-2837S / FAR-2827  
Integrated bridge system: ..... No  
Waste disposal plant  
Incinerator ..... Hyundai-Atlas Incinerator  
Model: ..... MAXI T60SL WS  
Sewage plant: ..... EVAC  
Model: ..... MBR 16C  
Delivery date: ..... 22 September 2015

