

**abh INGENIEUR-TECHNIK GmbH**  
**PETER BERG -GENERAL MANAGER-**

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*Don't hesitate to contact us  
 should you wish to discuss  
 any future or ongoing  
 projects...*

*Our company focuses on client-oriented  
 and innovative design throughout the seven seas.*

Our:  
**„abh-2800 TEU -BIGBOX-“**

*shown below was designed for*  
**Reederei Gebr. Winter GmbH, Hamburg, Germany**  
**Columbia Shipmanagement Ltd., Limassol, Cyprus**  
**Thien & Heyenga, Hamburg, Germany**  
**Yardimici Shipping Group, Istanbul, Turkey**  
**S & D Ship Management, Germany**



MV „CAPE MALE“

*...we look forward to  
 hearing from you.*

**abh INGENIEUR-TECHNIK GmbH**  
**WERNER HESSE -GENERAL MANAGER-**

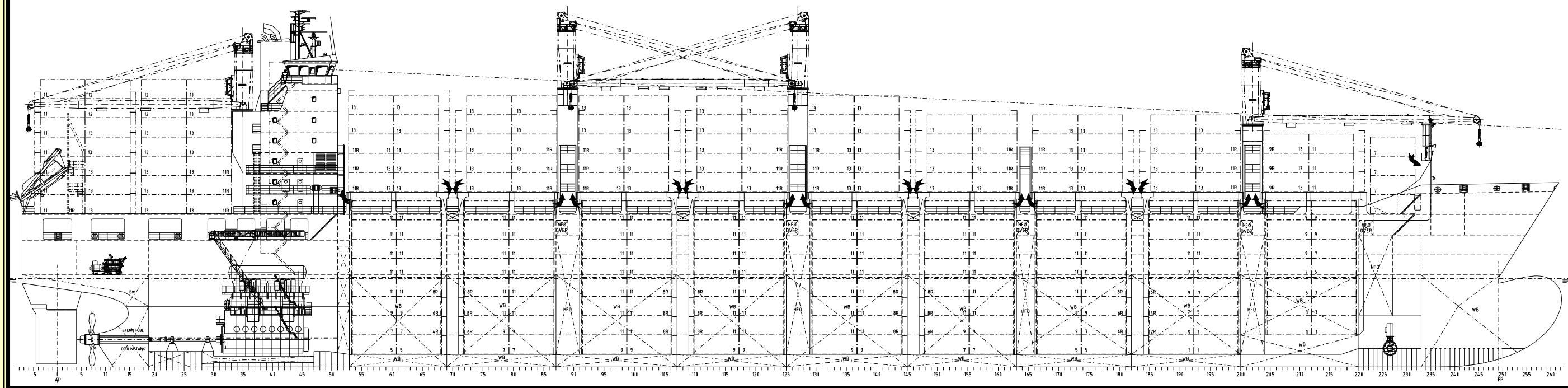
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**F**rom this design to date 16 newbuilding contracts have been placed at:  
**Guangzhou Wenchong Shipyard, China**  
 In 2009 the first vessels was delivered to one if the contractors

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Design: abh INGENIEUR-TECHNIK GmbH

<b>Type of Vessel:</b>	Container Ship																				
<b>Tonnage:</b>	London-Rules: abt. GT 37,000																				
<b>Deadweight:</b>	abt. 29,500 tdw at D = 10.50 m abt. 40,500 tdw at D = 12.50 m																				
<b>Classification:</b>	GL + 100 A5 E BWM- IW "Containership" + MC E AUT "SOLAS II-2, REG. 19"																				
<b>Operation Range:</b>	17,500 NM																				
<b>Main Dimensions:</b>	<table border="0"> <tr><td>Length over all</td><td>abt.</td><td>208.60 m</td></tr> <tr><td>Length between perp.</td><td>abt.</td><td>195.30 m</td></tr> <tr><td>Breadth moulded</td><td>abt.</td><td>32.20 m</td></tr> <tr><td>Depth to main deck</td><td>abt.</td><td>20.70 m</td></tr> <tr><td>Design Draught</td><td>abt.</td><td>10.50 m</td></tr> <tr><td>Scantling Draught</td><td>abt.</td><td>12.50 m</td></tr> </table>			Length over all	abt.	208.60 m	Length between perp.	abt.	195.30 m	Breadth moulded	abt.	32.20 m	Depth to main deck	abt.	20.70 m	Design Draught	abt.	10.50 m	Scantling Draught	abt.	12.50 m
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Scantling Draught	abt.	12.50 m																			
<b>Speed:</b>	abt. 22.15 kn at D = 10.50 m at 90% MCR																				
<b>Stack Loads:</b>	<u>on Deck</u>	<u>in Hold</u>	<u>on Hatch</u>																		
	20'/30' 80 t	180 t	80 t																		
	30'/40'/45' 120 t	210 t	100 t																		
<b>Container Capacity:</b>	<u>20'</u>	<u>40' +20'</u>	<u>Reefer</u>																		
in hold	abt. 1,386	681 + 18	168																		
on deck	abt. 1,404	676 + 52	335																		
Total	abt. 2,790	1345 + 68	503																		

for ISO and CPC types also in holds

Total number 14 t/TEU: abt. **2,269 TEU** (at 12.50 m draught)  
abt. **1,800 TEU** (at 10.50 m draught)

Container heights in holds: 8 x 8'6" or 7 x 9'6"

**Hatches:**

Weather deck hatches:  
hatch 1 abt. 12.80 x 23.412 m, 3 panels  
hatch 2 - 9 abt. 12.80 x 28.500 m, 3 panels  
hatch covers: pontoon type hatch covers, non-sequential

**Deck's Machinery:**

2 comb. anchor/mooring winches with 1 mooring drum and 2 warping heads and 1 mooring winch on forecastle deck  
3 high pressure hydr. autom. mooring winches with warp. head, pull 20 t on poop deck  
1 electro hydr. steering gear

**Deck's Equipment:**

1 free-fall motor lifesaving boat for 32 persons  
4 life rafts for each 16 persons, 1 for 6 persons  
1 rescue boat  
1 combined rescue boat/liferaft/provision crane

**Special Plants:**

Bow thruster, controllable pitch propeller, el. driven, abt. 1,200 kW, container cellguides for 40'-Container  
remote controlled ballast water valves  
4 el. hydr. cranes, outreach abt. 29.5/31 m, 45/40 t SWL  
anti heeling plant, pump system ≈800 m³/h  
fully-balanced high active rudder  
el. hold air vent for 6-fold air change, 4,500 cbm/h for reefer  
1 signal mast on forecastle deck  
1 combined signal / radar mast on top of wheelhouse

**Propulsion Plant:**

1 2-stroke engine for HFO, power abt. 25,040 kW, 95 rpm  
1 fixed propeller

**Aux. Engine Plant:**

2 aggr. for HFO abt. 1,860 kW, 720 rpm, 220/440 V, 60 Hz  
2 aggr. for HFO abt. 1,620 kW, 720 rpm, 220/440 V, 60 Hz  
1 aggr. for Emergency Gen. set abt. 200 kW, 1800 rpm, 220/440 V, 60 Hz  
3 start air compressors  
2 fuel oil separators for HFO  
1 fuel oil separator for MDO  
2 fuel oil transfer pumps for HFO  
1 HFO-Booster unit for ME  
1 HFO-Booster Unit AUX Engines  
2 fuel oil transfer pumps for MDO  
1 lub.-oil separator for ME  
4 lub.-oil separator for AE  
2 lub.-oil main pumps (one in stand-by)  
1 lub.-oil automatic filter  
1 tank heating system with thermal oil  
1 oil-fired steam boiler  
1 steam exhaust gas boiler  
1 cylinder lub. oil pump for ME  
1 cylinder lub.-oil pump  
1 bilge water separator acc. MARPOL 01.10.1973  
3 central cooling sea water pumps (one as stand by for ballast pump)  
5 cooling water pump (HT/LT)  
5 plate-cooler for ME and AE  
2 ballastwater pumps, abt. 500 m³/h, 2.2 bar  
1 ejector ballast stripping  
2 bilge-/fire-fighting pumps  
1 working air compressor 200 m³/h 8 bar  
1 freshwater pressure tank  
1 freshwater generator 20 t/day  
1 sewage treatment plant  
1 sludge pump  
1 fire-fighting plant for engine room acc. rules  
1 emergency firefighting pump  
1 CO₂-fire-fighting plant for cargo hold/engine room  
1 heating, incl. warm water and air-heating in accommodation  
1 AC-plant  
1 incinerator 730,000 kcal/h

**E-Plant:**

Power 440 V, 60 Hz  
Lighting 230/440 V, 60 Hz  
Emergency light 230/440 V, 60 Hz  
Automation 24 V, DC

**Special Plant incl. Nautical Equipment:**

1 signal flash light, 1 search light  
1 GYRO-compass with autopilot  
1 bearing compass on wheelhouse top  
1 rudder indicator  
2 sea radar units  
1 ECDIS  
1 Fleet 77  
2 GPS  
1 echo sounder, 1 log  
2 VHF marine radio stations  
1 APN-navigator  
1 wireless telegraph (DSC)  
1 sound powered telephone  
1 radio direction finder  
1 EPIRP-sea buoy  
1 VDR  
1 AIS  
complete GMDSS-equipment, incl. SSAS

**Accommodation:**

32 persons Emden, November 2007