



# AOS RATCHABURI

## Stern Drive Steel Tug



### PRINCIPAL PARTICULARS

Year Built	2004
Place Built	Guangzhou Panyu Lingshan Shipyard, China
Design	KCM Consultants
Flag	Panama
Length Overall	45.00m
Length BP	42.75m
Breadth Moulded	11.00m
Depth Moulded	4.00m
Draft (max)	3.41m
Freeboard (SLL)	1.80 m
Class	BV
Notation	I x Hull x Mach, Tug, Unrestricted Navigation
GRT/ NRT	499.00 T / 149.00 T
Deadweight	235.00T
Bollard Pull	40.99 T

### DECK PARTICULARS

Clear Deck Area	154.50 m <sup>2</sup>
Deck Carrying Load	160.00 T
Deck Strength	5.00 T/m <sup>2</sup>

### PERFORMANCE

Maximum Speed	12 Knots @ 13 T/24hrs
Economic Speed	8.5 Knots @ 7 T/24hrs

### PROPULSION SYSTEM

Main Engines	2 x Caterpillar 3512B, 1750 BHP, 1305 kW @ 1600 RPM, Total 3500 BHP
Auxiliary Engines	2 x Caterpillar 3406, , 215 kW @ 1500 RPM
Air Compressor	1 x Hitachi 3.7P-9.5V5
Bow Thruster	Tunnel HRP 2001TT
Propellers	2 x Fixed Pitch Propellers with Kort Nozzles
Steering Gear System	Palmarine Hydraulic ISO32
Rudder	2 x Palmarine

### TANK CAPACITIES

Fuel Oil	276.54 m <sup>3</sup>
Fresh Water	152.80 m <sup>3</sup>
Bilge	Nil
Ballast Water	86.50 m <sup>3</sup>

### CARGO DISCHARGE CAPACITIES

Fuel Oil Pump	50 m <sup>3</sup> /hr
Fresh Water Pump	50 m <sup>3</sup> /hr
Drill Water Pump	50 m <sup>3</sup> /hr
Bilge Pump	50 m <sup>3</sup> /hr

### DECK EQUIPMENT

Anchors & Chain	2, Jiangsu Asia Star Anchor Chain
Tugger Winch	2 x 5 T, 1st Wire 26 mm x 100 m
Anchor Windlass c/w Bow	Electrical Windlass, DMA28-2-45
Crane	Nil

### ANCHOR HANDLING & TOWING EQUIPMENT

Anchor Handling/ Towing Winch	40 T, Waterfall Double Drum
AH/Towing Drum Capacity	1000 m (L) x 32 mm (Dia)
Spare Reel Drum Cap	Nil
Line Pull @ First Layer	Nil
Brake Holding	60 T
Towing Pin	100 T, Hydraulic Type
Shark Jaw	100 T, Hydraulic Type
Stern Roller	SWL 80 T, 3.5 m (L) x 1.5 m (Dia)
Fairlead	Nil
Bow Winch	Electrical Windlass, DMA28-2-45, W.W.L. 33.3 kW, W.L. 20 kW
Aft Tow Winch	Pull 50 T x 4 m/min (1st Layer Low Speed), Pull 12 T x 12 m/min (1st Layer High Speed), Brake Holding 120 T

### ACCOMMODATION

Berths	3 x 4, 4 x 2, 2 x 1 Berths
Total Pax	22

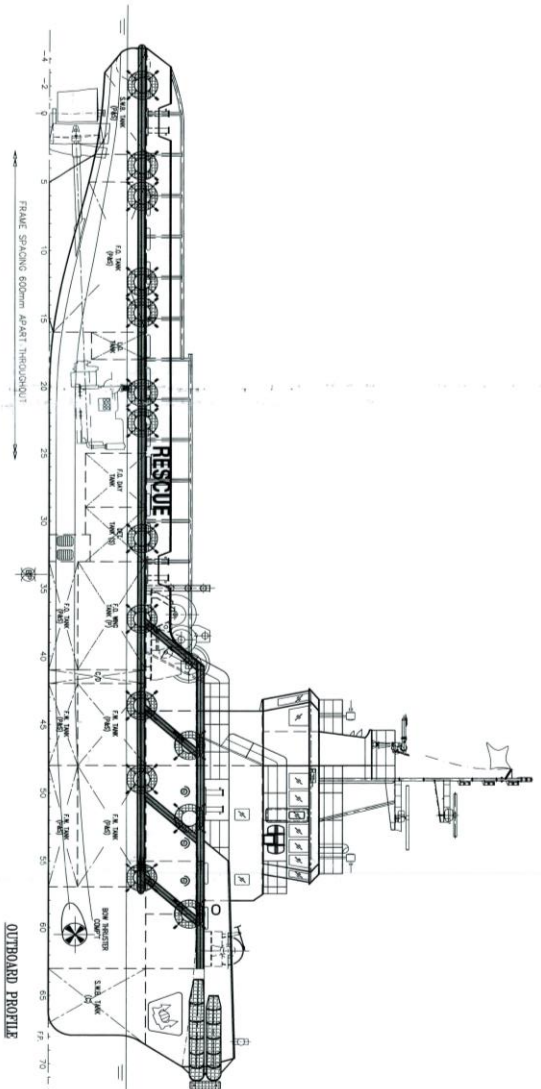
### EXTERNAL FIRE-FIGHTING EQUIPMENT

Fi-Fi Notation	Fi-Fi 1/2, Fire Fighting System (FFS)
Fi-Fi Monitors	2 x 600 m <sup>3</sup> /h
Fi-Fi Pump	1 x 1200 m <sup>3</sup> /hr

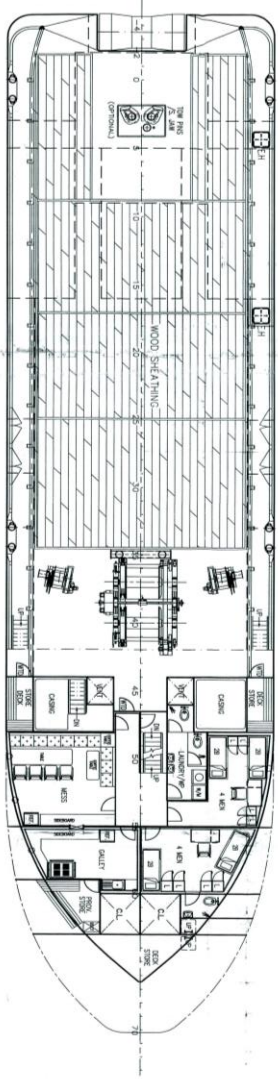
### LIFE-SAVING EQUIPMENT

Life Rafts	2 x 20 Men, SOLAS Compliant
Rescue Boat c/w Davit	Nil

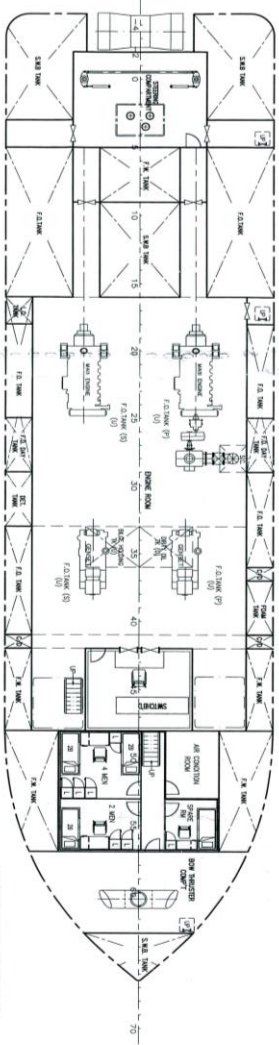
Particulars are believed to be correct but not guaranteed. Owners reserve the rights to amend the specifications without notifications. Particulars are entirely without warranty as to correctness and interested parties must inspect vessel's certificates, drawings or physical inspection of vessel.



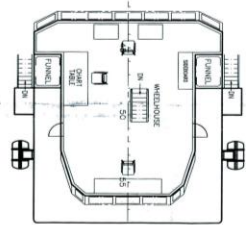
OUTBOARD PROFILE



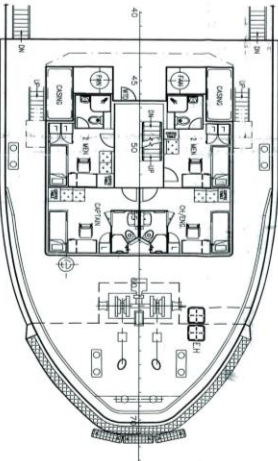
MAIN DECK PLAN



BELOW MAIN DECK PLAN



WHELFHOUSE DECK PLAN



FORECASTLE DECK

**PRINCIPAL DIMENSIONS**

LENGTH OVERALL	45.00 M
LENGTH WATERLINE	42.75 M
LENGTH B.P.	40.00 M
BREADTH MOULDED	11.00 M
DEPTH MOULDED	4.00 M
DESIGN DRAFT MOULDED	3.20 M
FUEL OIL	250.0 M <sup>3</sup> (app)
FRESH WATER	175.0 M <sup>3</sup> (app)
CLEAR DECK AREA	210.0 M <sup>2</sup>
MAIN ENGINE	2 x 1750 BHP
SPEED (TRIALS)	12.0 KNOTS
ROLLARD TULL	40 TONS
COMPLEMENT	20 MEN

BUREAU VERITAS Coupes 0.1.8.0.9.R  
 VU 02 NOV 2004  
 J. Zhou  
 Checked and approved by J. Zhou

**FOR APPROVAL**

1.	APPROVED BY THE MARITIME COMMAND	DATE: 28-10-2004
2.	APPROVED BY THE MARITIME COMMAND	DATE: 14-11-2004
3.	APPROVED BY THE MARITIME COMMAND	DATE: 14-11-2004
4.	APPROVED BY THE MARITIME COMMAND	DATE: 14-11-2004
5.	APPROVED BY THE MARITIME COMMAND	DATE: 14-11-2004

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**GENERAL ARRANGEMENT**

COMPLETION	DATE	SCALE	DRAWING NUMBER	REV.
13-10-03	1:100		KCM/0315(A)-01	3

APPROVED BY REV. ON 13-10-04

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