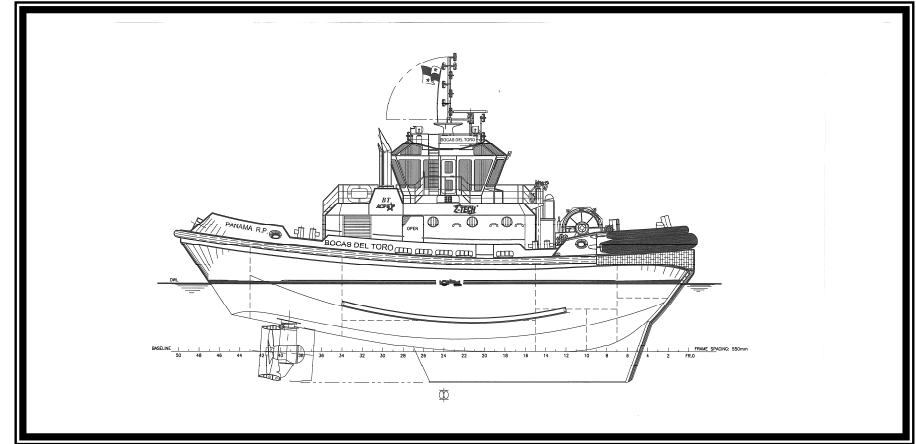


Panama Canal Authority – Tugboat Fleet – Principal Particulars



BOCAS DEL TORO

GENERAL

Registered Owner	: Panama Canal Authority
Owner/Operator	: Panama Canal Authority
Category	: Harbour Tug
Type	: Z-Tech
Built	: 2007
Yard	: Cheoy Lee Shipyards Ltd. Hin Lee (Zhuhai) Shipyards Ltd.
Hull No.	: 4892
Built to Class	: LR 100 A1 Tug, +LMC UMS
Flag	: Panama
Port	: Balboa, Panama
Call Sign	: HO-4368
Bollard Pull	: About 61 tons
Speed	: 12 Knots

TONNAGE/DIMENSIONS

GRT	: 327
LOA	: 89 ft 10 in
Beam	: 38 ft 3 in
Draught	: 17.49 ft
Moulded Depth	: 16.4 ft

TANK CAPACITIES

Fuel Oil	: 29,243 Gal
Fresh Water	: 3,242 Gal
Foam	: 1,838 Gal

MACHINERY

Main Engines	: 2
Make	: Wartsila
Model	: Wartsila 9L20
BHP	: 4,826
Propulsion	: LIPS LCT FS 250-S/BN-K
Propulsion description	: Twin Screw, fixed pitch 360° steerable Kort Nozzles

EMERGENCY INTERVENTION

One (1) Centrifugal Pump	: 5,000 GPM @ 170 PSI
One (1) Firefighting Monitor	: FFS 600

TOWING EQUIPMENT

Two (2) Hydraulic Towing Winches on the bow	
Manufacturer	: Plimsoll Corporation Pte. Ltd.
Model	: PC-HTW/SD-06/180-L
Drum capacity	: 600 ft x 7" circumference line
Rope Reeling Rating	: 6.0 tons pull @ 82 ft/min
Drum Brake Capacity	: 180 tons
One (1) Hydraulic Vertical Capstan on the stern	
Manufacturer	: Plimsoll Corporation Pte. Ltd.
Model	: PC-HVC-10/450
Warping Head Diameter	: 17 inch
Bollard Rating	: 10 tons @ 40 ft/min