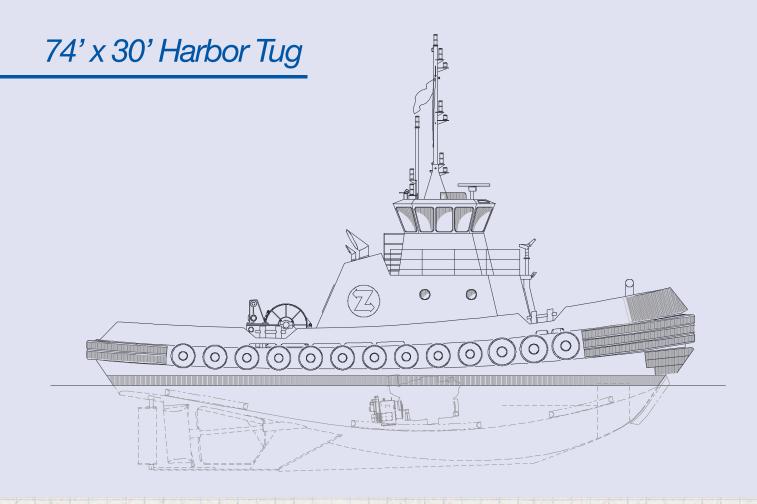


This design was developed to provide a maneuverable, powerful, yet smaller ship-assist tug to minimize some of the costs of building and operating a larger harbor tug. The design incorporates features that allow it to be built as either a conventionally powered tug or as an ASD. The first and second hulls (Hull 102 shown above) were designed for conventional twinscrew propulsion with kort nozzles and twin rudders to avoid the expense of Z-Drive units. This arrangement purportedly is as maneuverable as some ASD tugs. Engine options can provide up to 3200 horsepower through either propulsion system. The developed bollard pull can be as high as 80,000 lbs, depending on the propulsion plant installed. Free running speed is in excess of 12 knots. This tug is designed for operations with a crew as small as two persons.

This vessel was designed to ABS ice class rules with extra frames and thicker plating in the bow area to allow operation in ice. Other options include forward and aft hawser winches, fire-fighting monitor and a hydraulic crane. Full 360 degree visibility from the helm is assured with windows all around, and controls are located on consoles port and starboard of the centerline helm position.





74' x 30' Harbor Tug Specifications

Builder	
Great Lakes Shipyare	d

Overall Dimensions
Length...... 74'-0" (22.5 m)
Breadth 30'-0" (9.1 m)
Depth 13'-3" (4 m)

Light Draft 10'-3" amidships

Loaded Draft 11'-6" amidships

Bollard Pull 36 tons

Fuel Oil 26,170 gal

Lube Oil 250 gal

Potable Water 1,855 gal

Main Engines 2 Cummins QSK-38 or 2 Cummins QSK-50

Auxiliary Engines
1 Cummins/Onan 65 MODCC, 65 kW
1 Cummins 6CTA8.3, 65 kW

Horsepower

2,400 continuous BHP (QSK-38) 3,200 continuous BHP (QSK-50)

Reduction Gear

Twin Disc MG540 (2800 HP) Twin Disc MG5600 (3200 HP)

Hawser Winch Fwd—Jon-Rie Series 230 Aft—Jon Rie Series 500

Deck Machinery
ESI Marine Deck Crane (optional)
Fire-Fighting monitor (optional)

