



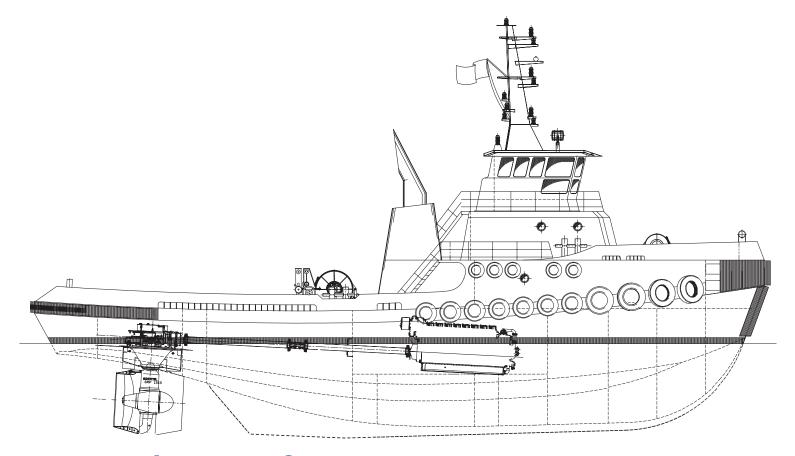
MONTANA & WASHINGTON

TITAN CLASS TUGBOATS

Crowley is pleased to introduce the Titan Class tugboats, Montana, built in 2015, and Washington, delivered in March 2014, as part of its continued commitment to meeting the ocean towing needs of its project management customers. Designed by Crowley's Seattle-based naval architecture and marine engineering firm, the two 120' x 35' x 20' ABS machinery class oceangoing tugboats, are powered by twin GE 8L250 EPA Tier II & III engines, each rated at 2679 HP/1999 KW at 900 RPM. The ABS Maltese Cross A1, towing service, machinery-classed Montana and Washington consume significantly less fuel and enjoy much lower maintenance costs than other equivalently powered oceangoing tugboats.

Measuring 497 international tons and 91 regulatory tons, the tugs meet all requirements for unrestricted world navigation and are equipped to allow for a scalable crew. They are fitted with a pair of Schottel FP1515 Z-drive units for superior maneuverability of tows in port and in close quarters. Living spaces are acoustically-dampened and fire proofed using the NORAC and Danacoustic systems, ensuring crew comfort and safety.





Vessel Specifications

Flag Registry United States (U.S.)

Overall Dimensions

Beam 35' • 10.668m Loaded Draft . 20' • 6.096m Light Draft 17'6" • 5.334m

Tonnage

U.S. Regulatory .91 International 497

Capacities

Fuel............158,000 gal. Potable Water . .11,000 gal.

Main Propulsion

Montana Main...(2) GE 8L250 Tier 3 Aux....(2) 185KW John Deere/ Kohler Gensets

Washington

Main . . . (2) GE 8L250 Tier 2 Aux....(2) 180KW John Deere 6081A/Kohler

Horsepower

Montana 5400 HP Washington 5400 HP

Z-Drives Thrusters

(2) - Schottell FP1515; 2600mm diameter stainless steel propeller, outboard rotation

Continuous Bollard Pull

ABS Certified Montana 82.5 tons Washington 82.5 tons

Double Drum Tow Winch

Montana Markey Series TESD-34 Double Drum Winch Starboard side: 2,600' of 2 1/4" wire Port Side: 2,200' of 2 1/4" wire Drum Brake Capacity: 283,000 lb

Washington JonRie Series 500; 2,600' x 2-1/4";

1,800' x 2" wire; Independent Capstan

Headline Winch

JonRie Series 200; 450'x7" Synthetic Line Reel Plus Independent Capstan

Emergency Tow Line

600' 7" Dyneema Towing Package

Accommodations/Bunks

Navigation Equipment

Dual Radars, VHF Radios, Satellite Communications, GMDSS

Builder

JT Marine Inc.

Designers

Crowley Crescere Maritime

Certification

ABS + A1, AMS Machinery Class, Towing Service, All Oceans

All information contained herein (including but not limited to any specifications, particulars, capacities, or capabilities) is believed to be correct, but is not guaranteed and is subject to change without notice.

