

PROVEN SUCCESS: FUEL EFFICIENCY AND LOW NOISE WITH MARINE COMMERCIAL TUGBOAT REPOWER

The Miss Anne tugboat has a lengthy history that dates back to the 1950s. The tugboat was repowered using twin Volvo Penta [D16C-MHs](#) to revitalize its [performance](#). The project began in June 2015 after Bill Magann, who was the president of [W.F. Magann Corp.](#), contacted [Western Branch Diesel](#) in Portsmouth, Virginia. Western Branch is a Volvo Penta Power Center dealer. Magann was seeking a high performance marine commercial engine to re-energize Miss Anne.

Increased performance

Increased fuel efficiency and low noise levels are primary features for tugboat owners and operators, which were important factors when considering the repower.

“The existing DDC Series 60 engines were aged, and Magann wanted to repower the boat to increase power and allow the tug to become involved in more projects,” says Tim Walters, marine sales manager, [Western Branch Diesel](#). “We repowered with the 650-horsepower, 1800-RPM, keel-cooled Volvo Penta D16C-MH. The keel-cooled engine was chosen for its fuel efficiency, weight-to-power ratio and a complementary size to the available space in the engine room.”

Miss Anne moves construction equipment as well as barges along the coast, bays and rivers. It runs a minimum of 50 to 100 hours per week. This marine diesel engine is approaching 1,000 hours, and so far, there have been no service calls. “I am told they are much [more fuel efficient](#) than the engines we removed. The crew especially likes the low noise level,” says Walters.

Excellent service by Volvo Penta

“We performed all service and installation on the boat and engine. The main challenge we had was getting enough propeller under the boat. Volvo Penta has provided great customer service to assist us,” says Walters. “Several companies were watching to see how the project went. It could open up a lot of Volvo Penta business for us.”

Advantages of the D16

This marine commercial engine ensures lower diesel fuel consumption, emission levels and noise levels when running. It injects fuel for high pressure and performance, all with easily accessible service points.

Additionally, all Volvo Penta marine engines are designed with a unique torque. This allows top speeds with lower fuel consumption, load-carrying capability and the ability to maintain a high cruise speed. All of these benefits are possible regardless of the condition at sea. Torque also has a positive impact on the longevity of the engine.

Marine professionals appreciate the lowered total cost of ownership. Propulsion systems from Volvo Penta offer simplified service points, easy maintenance and long service life. Our complete range of high quality lubricant, oil and coolant ensures uptime and top performance. When it comes to propulsion in successful marine commercial applications, reliable and high performance engines are needed to meet the demands of the job. Volvo Penta's diesel engines work high on uptime, diesel fuel efficiency and power. The engines are known for their robust cast iron cylinder block and head.

Emission Friendly

Volvo Penta has a strong focus on sustainability. The company meets the stringent EPA and IMO emission regulations for marine commercial operations. For tug boats, ferry services, pilot boats and other workboats, our propulsion solutions are equipped to meet the emission standard for the specific application. Volvo Penta currently offers a specific IMO III engine range for IPS, inboard, genset and auxiliary applications under 800 hp. The SCR exhaust aftertreatment technology with our robust engines result in a choice power solution to achieve low emissions.

Integrated Marine Propulsion System

When pairing Volvo Penta engines with our Glass Cockpit System, vessel owners can operate with more ease and accessibility. This interface can be combined with Electronic Vessel Control, so the engines, electronics and unique optional functions are all into one platform. The experience can be enhanced further thanks to additional features like [Joystick Docking](#), [Dynamic Positioning System](#) and [Glass Cockpit](#). These solutions are beneficial for workboats of all kinds.

Right for the Job

Volvo Penta has over 100 years of experience working together with marine commercial experts across the globe. The company has the knowledge, worldwide support and services to equip marine commercial professionals with the engine technology needed for a successful workboat operation. Tugboat owners and marine industry professionals can expect engines with advanced, emission-friendly technology to get the job done. Volvo Penta's reliable high performance diesel engines meet industry standards and exceed customer expectations with high performance levels.

Interested in repowering your own workboat application? Volvo Penta's authorized service dealers can help. Find a dealer near you: [Dealer Locator](#).