

# CASE STUDY: LOUISIANA CAT® ENSURES BISSO TRACTOR TUG MANAGES THE MISSISSIPPI WITH EASE

CUSTOMER	LOCATION	CAT DEALER	PRODUCT	INDUSTRY	SOLUTION
Bisso Towboat Co., Inc.	Louisiana, USA	Louisiana Cat	Cat® 3516E	Inland Waterway	High speed performance engine

## BISSO TOWBOAT: HOW TO KEEP UP WITH THE MIGHTY MISSISSIPPI

Every year, millions of tons of freight move up and down the Mississippi River via ships guided by tugboats. Fuel costs, changing river flows and aging infrastructure require that these vessels be more efficient than their predecessors.

The Port of New Orleans (Port NOLA) connects 14,500 miles of waterways through the Mississippi River and its tributaries. Additionally, the Gulf Intracoastal Waterway provides direct access along the gulf coast. A growing number of ocean carriers and barge lines serve Port NOLA.

Bisso Towboat has been part of the Louisiana waterways since 1890. Today, the company has the largest fleet of Azimuth Stern Drive (ASD) tractor tugs serving the Mississippi River ship-assist trade. Tractor tugs are the bread and butter of Bisso's business. Their fleet currently consists of 12 boats—nine are tractor tugs and the remaining three are conventional tugs.

Bisso's tractor tugs escort ships and perform various tasks between Baton Rouge and the mouth of the Mississippi River. They turn ships around and put them into berths. During high river, it can take four tugs to hold a ship while it unloads and loads again. They are more maneuverable in tight spots and narrow slips on the river. According to Dino Novic, Bisso's vice president of engineering, they "turn on a dime." In addition to providing robust power, tractor tugs also keep pace with changing Coast Guard regulations. This enables Bisso to easily maintain vessel compliance requirements.

## A MODERN FLEET ENSURES THE RIGHT TOOL FOR THE JOB

About every 18 months, Bisso has been working with Main Iron Works to update their fleet and replace a conventional tug with a tractor tug. Main Iron Works, a leading provider of shipbuilding and refurbishing services in the Houma, Louisiana area since 1947, has worked with Bisso for years. Understanding Bisso's previous purchases and preferences, Main Iron Works recommends specific upgrades that align with Bisso's goals.

Novic values the time and effort Main Iron Works invests into their relationship: "They definitely have a certain standard in the industry and are top shelf as far as I'm concerned."



In late 2022, Main Iron Works began building a tractor tug named the *m.v. Mr. Brian*, after Brian Cyprowski, Bisso's vice president of operations. Brian Cyprowski is the third non blood relative ever to be given this honor. The new vessel is the sixth ASD tractor tug built by Main Iron Works for Bisso in the past eight years. The *m.v. Mr. Brian* will further enhance Bisso's operation of the largest fleet of ASD tractor tugs to serve the Mississippi River ship-assist trade.

## BISSO, MAIN IRON WORKS AND LOUISIANA CAT: A SOLID TEAM

Louisiana Cat also plays a valuable role in supporting Bisso's fleet. Novic worked at the Cat dealer as a customer service representative for seven years and gained extensive experience working with engine technicians on overhauls. He saw first-hand the quality and workmanship that go into Cat engines.

The Bisso team looked at many different factors when selecting the engine for the *m.v. Mr. Brian*. With 16 Cat engines currently in use across Bisso's fleet- 18 with the completion of *Mr. Brian*, including 3512 and C4.4 engines, the company knew a Cat engine would provide the reliability, durability and power the *m.v. Mr. Brian* would require. "We looked at horsepower, river currents, managing loads, maneuverability and fuel burns," said Novic. "The Cat 3516E made the most sense for us."

Bisso's Cat 3516E diesel engines can maintain a continuous rating of 1865 kW (2500 hp) at 1600rpm. It is designed for applications that require continuous heavy-duty service and can be operated at maximum power and speed up to 100% of the time without interruption or load cycling—perfect for Bisso's needs. "With recommended preventative maintenance we have experienced far less issues with our Cat engines over time, compared to some other engines," Novic notes.



### THE *M.V. MR. BRIAN* TRACTOR TUG

This is Bisso's third Cat Tier 4-powered boat. Novic recalls the excellent service from Louisiana Cat when they purchased their very first Tier 4. They had many questions about the installation and how it would fit into Bisso's design. The process of upgrading a boat while keeping the efficiency and flow of the boat intact is important.

"There have been situations where it's taken my team additional time just to clear obstructions out of the way to get to a certain part and that adds up to more downtime," Novic explained. "That is why right hull design is so important to me, I want to be able to get to any part quickly and do the repair in minimum time. We really like our hull design and the whole interior. The living quarters, galley, wheelhouse, engine room—it's all beautifully laid out so that everyone can comfortably work and live. Louisiana Cat collaborated with us to find the right fit for our existing hull."

Novic points out that every boat they produce gets better thanks to his team and excellent vendors. Performance, comfort and practicality improve continuously. He not only wants the boat to look good but also needs it to be as practical as possible. The crew gives him valuable information from their time spent on the boats, and Novic shares that information with his design team, Main Iron Works and Louisiana Cat.

The quality of relationships—combined with the quality of the work product—means that safety is never compromised. As Novic says, "At the end of the day, you can replace parts, but you can't replace people."

The *m.v. Mr. Brian* is slated to hit the water in Spring of 2024.