

Marine Fuel Monitoring — Efficiency Study



CUSTOMER

Fuel Additives Manufacturer
Stamford, CT
Project Manager: Company President

APPLICATION

Manufacturer sells oil and/or fuel additives to marine diesel users to improve fuel economy. Company needed to measure improvement in engine fuel efficiency to provide their customer with accurate cost savings and investment vs. return information. Installation was on large ocean or Mississippi River tugboats.

CHALLENGE

The supply and return flow rates of the fuel in the system are much higher than the actual fuel consumption rate. The flow meters used had to be rated for the maximum supply and return flow rates, but have a great enough resolution to accurately measure the much smaller consumption rates.

SOLUTION

Company installed AW flow meters in the supply and return fuel lines on two of the vessels engines along with speed pickups. EMO-500 flow monitors are used to locally monitor the flow meters and engine tachometer signals. The required data is accumulated and stored with time-stamp for analysis by AW EMON 503 remote monitoring software running in on-board PC via serial communication to remote monitor enclosures.



AW products supplied—

- *Two EMO-500 custom enclosures for flow meter and tachometer monitoring with RS-485 link between enclosures and RS232 interface to remote PC.*
- *EMON-503 remote monitoring software.*
- *Four JVA-60KG flow meters with DH-BB sensors.*
- *Serial and signal cables in made-to-order lengths*

