

**PROJECT:**

BP Oil Spill Response, OSV Pumping Operations

SOLUTION:

3-HYDRO Shredder

CUSTOMER:

T&T Marine Salvage Inc.

In the first weeks of the BP oil spill, T&T Marine Salvage quickly arrived on scene to skim and recover oil near the site of the Deepwater Horizon sinking. Then a setback: Their massive offshore vessels ran into an issue when seaweed and trash started clogging pipelines and valves onboard the ship.

“We recognized there was a problem quickly,” said Mike Popa, a response manager for T&T Marine of Galveston, Texas, one of the nation’s leading marine response companies. “We had high-capacity hydraulic pumps attached to the arm of an excavator, but on board the vessel, the 4-inch (100 mm) pipeline valves would become clogged with seaweed, sticks and trash.”

Once a valve or pipeline clogged on the 224-foot (70 m) offshore vessel (OSV), the entire pumping operation shut down — a frustrating setback during the intense pressure of the cleanup operation.

“The OSVs pick the oil up from the skimming boats so delays were frustrating,” said Mike. “To clear a clog we would shut everything down, dismantle everything, blow the lines. We were down 2 to 3 hours each time. It was no good.”

T&T Marine Salvage President Rudy Teichman realized they had a solution waiting for them back in their warehouse — a portable Monster in-line grinder model 3-HYDRO. The Monster grinder has two rows of sharp steel cutter teeth and uses very low-speed, high-torque grinding to shred solids such as seaweed, wood and trash into small particles which easily pass through pumps, pipelines and even those 4-inch valves.

“We asked for authorization (from the command center) to install the Monster and were given the go-ahead,” said Mike. “When the boat went back to shore for a retrofit we quickly hooked up the Monster and sent the OSV back out.”

Mike’s team realized that same day they had solved the problem with the Monster shredder — there were no more clogs. The skimmer boats would tow the portable skimmers over to the OSV. Then excavator arm would position the pump inside the skimmer, siphon it up and pump it through the Monster for size reduction and then into the OSV’s internal storage tanks. The success meant all of T&T’s OSVs needed to return to shore and get a Monster — and fast.

“We got calls from our product representative, Hartwell Environmental, and T&T Marine and realized right away the urgency of their request,” said Gary Smith, industrial sales manager for JWC Environmental. “We normally take a week or two to design and build a grinder but they needed it a lot sooner. Our team knew we had to get the job done. Those ships were dead in the water if they can’t pump that oil.”

Luckily, JWC has a large, well-stocked factory and was able to build the grinder in one day. JWC built, painted and quality tested the grinder in only one night. The

MONSTERS HELP BP OIL SPILL VESSELS KEEP WORKING

Monster shipped out the next day so it could be installed on the next T&T Marine vessel when it returned to shore for a retrofit. JWC built even more Monsters to be installed on T&T's other vessels.

Sadly, tons of trash and debris washes down the Mississippi River from upstream cities and right into the Gulf of Mexico where it was getting tangled up in the oil spill, making pumping operations difficult. Over the summer, JWC rapidly shipped several Monsters to protect pumps on vessels working to clean up the oil spill.

T&T Marine's response was massive since they already several of the vessels, pumps, equipment and personnel trained to deal with the situation. In addition to the large OSVs, the company outfitted a number of OSVs with ocean-buster and harbor-buster skimmers to clean up the oil.

"Our crews worked 24 hours a day, seven days a week to assist in the Gulf of Mexico cleanup effort," said Kevin Teichman, a vice president for T&T Marine.

In order to respond quickly to marine emergencies, T&T maintains emergency warehouses across the continental U.S. and in Alaska, Hawaii, Guam and Puerto Rico. During our interview, Mike was in the midst of responding to yet another large pipeline oil spill in Michigan. For more information visit www.tantmarine.com.



T&T mounts the Monster grinder on a portable skid so it's easy to store and quick to deploy when vessels are handling liquids with lots of debris.



Two shafts of sharp steel cutters cut trash and debris into particles to keep pumps, valves and pipes from clogging. The grinder bolts right into almost any pipeline – from 4 inches (100 mm) and up.

"We're real happy," said Mike about T&T's experience with Monster grinders. "I'd recommend them to anyone pumping debris. They're low maintenance and our SOP now is to have a Monster in-line grinder. Another tool in our toolbox."

About JWC Environmental

JWC Environmental (JWC), a Sulzer Brand, is a world leader in solids reduction, removal systems and product destruction for municipal and industrial applications. JWC Muffin Monster® sewage grinders are the first choice to protect vital sewage pumping stations and sludge system equipment, and JWC headworks screens are proven performers to protect essential treatment plant equipment from debris and wastewater. Plants globally turn to JWC systems like Auger Monsters® and Screening Washer Monsters® for unique all-in-one packaged solutions for solids separation and dewatering. JWC provides industrial wastewater treatment equipment through its IPEC screens and separation equipment. JWC industrial screening equipment is used in a variety of food and beverage, oil and gas, general manufacturing and industrial wastewater applications. JWC Monster Industrial shredders and grinders are uniquely designed to cut through the toughest solids and bring them down to size. Monster Industrial products are working every day, protecting pumps and destroying debris. They are found in applications like recycling, waste-to-energy, commercial facility sewage, food processing, agriculture, and oil and gas. Founded in 1973, the company has built and shipped more than 40,000 Monster grinders, shredders and screens to customers worldwide.

