Tubi USA produces pipe with mobile extrusion plants

CATHERINE KAVANAUGH

Plastics News Staff

TWEET

SHARE

SHARE

EMAIL



Tubi Group Inc.

Tubi pipe can be produced in long-length sticks or on coils. The company developed coiling technologies for large-bore reeling and stringing that can handle a mile of 4-inch pipe on one reel.

Tubi USA Inc. is on a roll with mobile extrusion factories that can be packed onto flatbed trucks, hauled to project sites and set up within 72 hours to manufacture polyethylene pipes for drinking water, sewers, natural gas distribution, and oil and gas gathering.

The subsidiary of Tubi Ltd. in Australia has two mobile plants in Bartow, Fla., one in Odessa, Texas, and a fourth is being built by extruder manufacturer Battenfeld Cincinnati for mining work in Arizona.

Tubi's patented portable plants can extrude 4- to 26-inch pipe in lengths of 500 feet or more right where it needs to be installed. This eliminates the need for dozens or even hundreds of trucks to deliver heavy, bulky materials to a job site. And the longer pipe lengths reduce the need for 90 percent of the conventional weld joints, which cut down on installation time, labor and future maintenance.

Tubi pipe can be produced in long-length sticks or on coils. The company developed coiling technologies for large-bore reeling and stringing that can handle a mile of 4-inch pipe on one reel.

Founded in 2009 in New South Wales by Tubi CEO Marcello Russo, a second-generation pipe maker, the company invests about \$6.5 million into each mobile, modular extrusion factory, which has 20 million pounds of annual capacity each.

"While most pipe companies are cutting production because of the down market we are in, we're quadrupling to 80 million pounds of capacity," Tubi Chief Operating Officer Wes Long said in a phone interview. "The country needs innovation and new technology, and we feel like we can fill that void by saving money for the owners and construction companies, eliminating the risks of handling big pipes and being good for the environment by reducing truck traffic."

Publicly traded in Australia, Tubi generated sales of \$31.2 million in 2019, which is up from \$17.3 million in 2018 with the increase attributed to additional work in the United States, according to the 2019 annual report for the fiscal year that ended June 30, 2019.

Tubi entered the U.S. market in early 2018 with one mobile extrusion unit in Odessa to produce pipe in the Permian basin.

"At the time, demand far outweighed the supply of pipe. We did well in 2108 and for the most part 2019, but at the end of last year, you saw the oil and gas gathering market slow," Long said. "Companies wanted a return on their investments and capital spending slowed quite a bit. Then, oil prices plummeted and then we got hit with COVID-19."

The pandemic resulted in travel bans and lockdowns that closed schools and nonessential businesses around the world, reducing demand for oil and gas.

In Texas, since the start of 2020, total oil production has dropped 30 percent and total natural gas production has fallen 20 percent, according to *The Texan* news outlet, which points to statistics kept by the Texas Railroad Commission, a regulatory agency for a variety of state industries.

Most of Tubi's work in the Permian Basin dried up and company officials looked for a new place to set up shop.

"Competitors with conventional manufacturing plants can't go anywhere. They're stuck in that bad market, and they have had to furlough people. We didn't," Long said. "We're fortunate. We can pick up our plant and move."



Tubi Group Inc.

Founded in 2009 in New South Wales by Tubi CEO Marcello Russo, a second-generation pipe maker, the company invests about \$6.5 million into each mobile, modular extrusion factory, which has 20 million pounds of annual capacity each.

Going mobile

Tubi's Russo worked with Battenfeld Cincinnati experts to develop modules or containers to keep his patented mobile extrusion technology in climate-controlled spaces that can be easily moved, according to Long.

The modular factory fits into containers that are lifted by crane onto 20 flatbed trucks for transport, while the silos of feedstock, which are equipped with wheels, are towed along.

"We can move to anywhere. It may be to a strategic location where we have a freight advantage or to a hot market," Long said. "This gives us a lot of flexibility compared to conventional legacy brick-and-mortar factories."

Tubi crews follow a template to set up the facilities. The process goes quickly, Long said.

"We can be making good pipe in 72 hours plus whatever the travel time was," he said.

For one project in New Zealand, the other country where Tubi operates, the company's mobile manufacturing unit produced 105 miles of HDPE pipe to irrigate 20,000 hectares of farmland. The logistics of getting that much pipe to the rural area would have been "spectacularly difficult," according to a testimonial from a Downer Group project manager, who said minimizing truck traffic was a big consideration.

The irrigation pipe was produced on site in 100-meter lengths (328 feet). The portable plant was moved three times along the installation route.

To ensure all pipe meets industry standards, a mobile test lab is part of Tubi's operation as well as in-line monitoring. The portable plant is equipped with Sikora AG technology to measure the dimension of every lineal foot of pipe produced, including the inside diameter, outside diameter, wall thickness, eccentricity and ovality.

"This helps from a quality assurance standpoint," Long said. "We can give customers a report for every length of pipe on their order. It shows every dimension of the pipe so they can see there's never any potential for thin-walled pipe or anything that can go wrong in a process."

Leasing site in Florida

Tubi officials kept a mobile extrusion plant in Odessa for future projects in the western U.S. They picked Florida as their next place to do business for their two other portable plants. The company had a job in Bartow and then leased space from the customer, Mosaic Co., which is the largest fertilizer producer in the world.

Mosaic is using Tubi pipe for processing wastewater from phosphate mining. Tubi is producing the pipe in 500-foot lengths.

"No one has done that on land before. Maybe on the ocean, but we're the only ones who can do it on land," Long said.

Tubi also has successfully produced 1,000-foot lengths of 16-inch pipe, he added.

For the Mosaic project, Tubi's mobile extrusion facility eliminated the need for more than 450 trucks to transport pipe from a traditional factory, Long said. Fewer trucks means fewer diesel emissions, less traffic congestion and no safety hazards related to unloading the big, heavy infrastructure products.

Tubi's other mobile extrusion plant is servicing pipe distributors throughout Florida. The distributors send trucks to pick up pipe at Tubi's site, which Long said is within two hours of major customers in the Southeast.

"We're right in the center of the biggest market in the Southeast for PE pipe," Long said. "Florida is a good market on the industrial side and the municipal side because HDPE pipe is widely used for trenchless technology, directional drilling and pipe bursting for drinking water, wastewater, reclaimed water for irrigation, sewers and natural gas distribution."

Tubi has a long-term lease in Florida, giving it a strategic and flexible home base.

"We can move one of those plants anywhere to do a temporary project and then return to Florida," Long said.

He previously worked for Plano, Texas-based Performance Pipe. Long retired after 30 years and then was lured back to work by the prospects for Tubi.

"To me, nothing had really changed in the world of pipeline innovation in terms of what is the next step to do things better, smarter and save money for customers," Long said. "Then, I saw this new technology for mobile extrusion. The larger the pipe, the bigger the freight advantage is. And, it can eliminate thousands of welds and hundreds of days of installation time. The cost savings are tremendous. I think it's a game-changer."