

CUSTOMER TESTIMONIAL

YANMAR AND VALLELY TANKERS

How a demanding relaunch became a success story built on reliable power and genuine partnership.

When Vallely Tankers set out to relaunch its business and develop a new generation of tipping tankers for the UK waste management market, the stakes were high. Sludge: thick, semi-solid, and often containing hazardous elements, places extreme demands on every component of a machine, and most of all on its engine. A single point of failure in the field can mean costly downtime in conditions that are already punishing. Getting the powertrain right from the outset was not a preference; it was a necessity.

Vallely Tankers, headquartered in Leeds, England, specialises in the design and manufacture of bespoke tanker combination units and equipment for liquid waste handling. Its work spans hazardous waste transport, tank cleaning, sewage management, drain clearance, agricultural and industrial clearance, and flood cleanup, applications in which reliability and ruggedness are non-negotiable. The company's consultative approach to tanker design means each machine is engineered to meet precise customer requirements, from initial design through to scheduled maintenance and refurbishment services.

Meeting the Power Demands of Sludge Handling

Moving sludge is fundamentally different from moving water. The material is abrasive, adhesive, and variable in density, and the pumps and jetters required to shift it demand sus-

tained, consistent power. For Vallely Tankers, selecting an engine that could deliver that power reliably, in a compact package suited to vehicle installation, was the central engineering challenge of the relaunch programme.

The company selected the Yanmar 4TN107FTT, a 4.6 L four-cylinder diesel rated at 155 kW and featuring twin turbocharging, as the heart of its new tipping tankers. The engine is fully compliant with EU Stage V emissions legislation and was specified in part for its refined combustion process, which delivers precise fuel control, strong starting characteristics, and improved performance across a wide range of operating conditions.

“CRUCIALLY, THEY OFFER THE EXACT POWER WHICH WE REQUIRE FOR OUR BIG PUMPS AND JETTERS.”

Darrel Cooper, Production Manager, Vallely Tankers:

“We are developing new product lines following a relaunch of the company, and we started working closely with Yanmar, and its UK distributor, Barrus, to identify our engine requirements. From the very start of the project they worked hand in hand with us, very successfully.”



YANMAR 4TN107FTT

Model	YANMAR 4TN107FTT
Configuration	4-cylinder, water-cooled diesel, twin turbocharged
Displacement	4.6 L
Rated output	155 kW
Emissions compliance	EU Stage V
Application	Tipping tankers for sludge movement and drainage
Local distributor	Barrus (United Kingdom)

Operating Quietly in Sensitive Environments

Vallely Tankers' machines are deployed across a wide range of sites, including urban areas and locations with tightly regulated noise levels. For the new tipping tankers to be commercially viable across the full breadth of the company's customer base, the engine would need to run with acceptable acoustic characteristics, without compromising the power available to the machine's critical systems.

As part of the development programme, Barrus, Yanmar's authorised UK distributor, connected Vallely Tankers with Amcanu in Wales, a specialist in acoustic enclosure design. The collaboration extended further to include Vallely's hydraulics supplier, ensuring that all elements of the installation were fully integrated from the outset.

Darrel Cooper:

"The engines run relatively quietly, which is very important for some areas where our machines are operational. Crucially, they offer the exact power which we require for our big pumps and jetters."

Reliability and Maintainability in Harsh Working Conditions

Tankers operating in drain clearance, sludge removal and industrial cleanup face working conditions that test every component. Maintenance access can be difficult, and unplanned downtime in the field carries significant cost. For Vallely Tankers, an engine with a proven reputation for robustness and straightforward serviceability was a prerequisite. The Yanmar 4TN107FTT met both criteria.

Barrus also provided technical training to Vallely Tankers' staff throughout the development process, ensuring the team had the knowledge to support the engines in service.

Darrel Cooper noted that the collaborative approach extended well beyond the supply of hardware.

Darrel Cooper:

"Not only did Yanmar and Barrus help with our plans, but they also introduced us to a company to build the engine's acoustic enclosure and worked very closely with our hydraulics supplier. That ensured that all aspects of the project married up – it was very much a team effort. Furthermore, they demonstrated new techniques to our staff who learned throughout the development process."

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A Partnership Built for the Long Term

The new tipping tankers completed a rigorous testing programme before entering production, with Barrus and Yanmar involved throughout. For Vallely Tankers, that involvement has cemented a relationship that Darrel Cooper expects to continue as the company's product range expands.

Darrel Cooper:

"The impact of the teamwork has been considerable and all of the challenges faced through the programme were overcome. We will continue to work with Yanmar and Barrus as we grow our products - the tankers are a good demonstration of teamwork. The Yanmar engines certainly fit the bill."



YANMAR

About Vallely Tankers

Founded in 1981 by Gerry Vallely, Vallely Tankers designs and manufactures tanker combination units and equipment for the liquid waste, tank cleaning and drain maintenance industries, including vacuum tankers, jetting equipment and dust suppression tankers. Vallely Tankers supplies customers across the UK, Ireland and internationally, with specialist experience in bespoke tankers for the waste, oil and gas, and construction sectors.

About Barrus

Founded in 1917 by Ernest Prouty Barrus, Barrus has over 100 years of experience supplying engines and equipment across the marine, outdoor and industrial sectors. The company is recognised as a custom-engine builder, working directly with original equipment manufacturers to supply engines specified to their production requirements. As Yanmar's authorised UK distributor, Barrus provides nationwide sales and technical after-sales support.



More information

For more information about Yanmar industrial engines and authorised distributors, visit www.yanmar.com/eu/industrial/

For UK sales and support, contact Barrus at www.barrus.co.uk

