

Stream Measurement Digitalising gas calibration

“Made Smarter gave us the confidence to modernise one of the most critical parts of our business. The new technology safeguards existing contracts, strengthens our capability, and creates a platform for future growth.”

Robert Allan
Operations Director at Stream Measurement



A flow measurement company is modernising its operations and doubling capacity after embracing strategy, technology, and skills through Made Smarter.

Stream Measurement Ltd, based in Oldham, Greater Manchester, has supplied flow meters and related services for gas, steam, water, energy, and batching applications since 1999. The company serves a wide range of industries, including utilities, chemicals, oil and gas, food and beverage, and manufacturing. Its services cover repair, refurbishment, calibration, verification, and flow surveys.

Employing 17 staff, the business has long been recognised for its technical expertise and trusted relationships across the energy sector. Under new ownership since 2019, Stream Measurement is now pursuing an ambitious growth strategy to triple turnover through growth in instrumentation sales, measurement services and software and data solutions. This has been underpinned by investment in premises, people, processes, and equipment.

Over the past three years, Stream has engaged with multiple areas of Made Smarter support: developing a digital roadmap, securing a grant to implement new technology, and developing leadership capability through the Leading Change for Digital Champions (LCDC) programme.

Robert Allan, Operations Director, said: “Made Smarter gave us the confidence to modernise one of the most critical parts of our business. The new technology safeguards existing contracts, strengthens our capability, and creates a platform for future growth.”

The Challenge

Stream Measurement operates a 40-year-old ‘certified’ gas calibration rig that underpins contracts with major customers such as National Gas Metering. The rig supports vital refurbishment services that extend the life of gas meters by more than 25 years.

However, the ageing system had become a growing risk. It still ran on MS-DOS software, and despite extensive research, no supplier was willing to attempt an upgrade due to the uncertainties. With only one experienced engineer, Bob Ashton, able to operate the system and approaching retirement, succession planning had become a serious concern.

The rig created a production bottleneck, limiting testing capacity and constraining the company’s growth ambitions.

Robert explained: “We needed a new rig that could meet our current customers’ needs within the gas market, allow us to target new sectors, and create a sustainable future for this service.”

The Solution

Stream Measurement turned to Made Smarter for strategic and technical support. After completing a Digital Transformation Workshop, the company developed a clear roadmap and began working closely with Made Smarter technology specialist Will Kinghorn to scope options for replacement.

Following 18 months of research and discussions with suppliers, Stream partnered with Precision Gas Measurement (PGM), a Netherlands-based specialist in bespoke calibration systems.

Backed by a Made Smarter technology grant, the business invested £300,000 in the design and installation of a new, fully digital gas calibration rig. The system integrates advanced control and data acquisition, automates certification, and significantly reduces manual input. It is capable of testing meters from 0.25 m³/hour to 4,000 m³/hour providing greater flexibility and capacity for turbine, rotary, diaphragm meters as well as newer vortex, swirl, coriolis and inline-ultrasonic meters.

A modern software interface enables automation and data capture, reducing reliance on legacy expertise and improving accuracy. The system also links with customer systems to generate and distribute automated test certificates, eliminating manual processes.

Alongside the investment, Lydia Meredith Rowe, Business Development Coordinator, participated in the Made Smarter LCDC programme to strengthen leadership and change management skills, helping to embed digital transformation throughout the company.

Other members of the Stream Measurement team have also engaged with Made Smarter, including Dominic Kelly, Senior Supply Chain Coordinator, and Nick Price, External Sales, who have attended Made Smarter Digital Champions Network events, a peer-to-peer community that brings together manufacturing SMEs to share knowledge and experience of adopting digital technology.

The Benefits

The new gas calibration rig has transformed Stream Measurement’s operations. A process that once took an entire day can now be completed in just a few hours, effectively doubling testing capacity.

The system enables the business to handle larger gas meters, increasing throughput from 3,000 to 4,000 cubic metres per hour. This higher capacity supports faster, higher-volume testing and opens up new customer markets.

The investment has also helped modernise the workforce. A wider team of engineers, including digitally skilled apprentices, can now operate the new system, reducing reliance on legacy knowledge and improving resilience.

For the first time, Stream can host customer demonstrations within its calibration facility, strengthening



client relationships and showcasing its technical capability.

The project is also driving growth and sustainability. Five new roles are being created, including engineers and apprentices, while the original rig will be retained as a contingency system to ensure business continuity.

By upgrading its equipment, Stream Measurement can continue to offer refurbishment services that extend the lifespan of older meters, reduce waste, and contribute to the UK’s net zero ambitions. The upgrade also supports Stream’s continuous improvement and ISO 14001, 9001 and 45001 accreditations as part of its commitment to sustainable manufacturing.

Apprentice engineer Joe Hewson said: “Being trained on the new rig has been a huge opportunity. It’s state-of-the-art technology that gives me and the other engineers skills that will be vital for the future of the business.”

The Future

The new calibration rig is central to Stream Measurement’s ambition

to grow turnover to £6 million by expanding its product and service portfolio. The company has already designed and built new water based mobile calibration rigs and plans to further develop its calibration and refurbishment services to meet rising demand, target new process industry customers, and further grow sales in its pressure, temperature, level, and analytical applications.

Robert added: “Working with the knowledgeable Made Smarter team has been invaluable. Their support has enabled us to make a significant investment in our test facility, helping us secure and grow our gas meter calibration services.”

Our new rig will be one of the most accurate high-capacity systems in the country, with full automation to improve efficiency, bridge skills gaps, and futureproof the business.”