

Microbulk gas supply offering, a customer's view

This article summarises a customer experience of Air Liquide's Microbulk gas supply offering. Mwali Kawawa and Thuso Oliphant of Air Liquide visit Scheffer Mechanical Technology and share some insights on how the Microbulk offering has been received.

Customer experience is one of Air Liquide's key pillars and a core focus of its service delivery initiatives. "Throughout 2019, we have been profiling customers to find out how our services are being perceived, with a view to differentiating our offering," says Air Liquide's business developer, Mwali Kawawa, adding that his most recent call was to Morne Scheffer of Scheffer Mechanical Technology to get insight into the company's use of Air Liquide's Microbulk offering.

"Managing gas welding and cutting cylinders in our production environment is somewhat challenging because of having to coordinate the availability of cylinders at the workstations while dealing with cylinder handling and safety issues. This led us to looking for a solution to mitigate these risks and is how we discovered the Air Liquide Microbulk offering, which was game changing for us," says Scheffer.

"Since migrating from predominantly using cylinders to the use of Microbulk, we have realised a significant increase in productivity. This is largely due to permanently available gas supply points strategically placed throughout our factories, which enables welders to access the welding gas they need easily and instantly.

"In addition, by switching to ArcaTM Speed (ISO 14175-M20), we are seeing cost savings, because the gas is produced and mixed onsite by mixing liquid Argon gas in the bulk tank with a cylinder manifold of carbon dioxide (CO₂)," he adds.

Air Liquide Microbulk incorporates a two or three thousand litre cryogenic argon storage vessel, a CO₂ manifold and Air Liquide's Dynamic Onsite Mixer. The facility occupies less than 5.0 m² in terms of footprint and is fully enclosed in a stainless steel cage for optimal safety. It is inexpensive to operate and install, it consumes minimal power and is mounted on a skid base, which means it requires no civil works for deployment.

"Microbulk also allows for telemetry. Our service teams continuously monitor the levels of the storage tanks and schedule deliveries when levels are low," adds Kawawa.

For welding purposes, Air Liquide can supply up to three different shielding gases simultaneously, with a capability of supporting up to twenty seven welders. Replenishment of the high purity argon takes place onsite via a dedicated road tanker allowing the end user to continue with production without the need for downtime.

Established in 1991, Scheffer Mechanical Technology is a heavy engineering firm that carries out specialised fabrication including mechanical, welding and machining for mining and related industries. Its operation in Emalahleni, South Africa, has over 4 500 m² under roof and employs around one hundred employees with approximately 40% of the workforce being welders.

The applied welding practices, workmanship and quality requirements are in accordance with the AWS D14.3 specification and original equipment manufacturer (OEM) requirements. Scheffer



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Mechanical Technology services over nine mining houses in four groups, which include some of the most globally renowned OEMs. Products and services on offer include fabrication, repair and maintenance of materials handling and earthmoving equipment.

"We look to continually improve on efficiencies and to reduce costs wherever possible and Air Liquide's Microbulk solution has certainly added to our competitive edge," Scheffer concludes. ■