

voestalpine Bohler Welding Africa

The best for the best

Martin Laren, CEO of voestalpine Bohler Welding Africa, with company COO, Christo Wiid, and quality, R&D and technical service manager, Annah Magopa, talk about the joint venture (JV) between voestalpine Böhler Welding and the local Linde Group company, Afrox, for the manufacturing and development of welding consumables in South Africa.

Voestalpine Bohler Welding Africa was established in 2020 as a joint venture (JV) between voestalpine Böhler Welding and Afrox, for the local development and manufacture of welding consumables for sub-Saharan Africa. The plant, which is located in Brits in the Northwest Province of South Africa, was first established 1972 and has gone through several changes and improvements over the years. It currently employs 115 people and has an annual capacity of 7 000 t of stick electrodes.

In response to a question about the initial focus of the JV and its current status, the JV CEO, Martin Laren says that the first phase of integration is now completed and the facility is an active member of the voestalpine Böhler Welding Group network.

“There is, of course, more work to be done in order to make us fully integrated to the voestalpine Böhler Welding family. This

without forgetting the solid background, partnership and strong connection with Afrox. We will continue our work to further connect with various specialists within voestalpine Böhler Welding to exchange ideas and best practices,” he says.

Some examples he gives are:

- Global process development: To improve measurement and analysis, target setting, and to introduce best practices wherever possible and wherever they can further improve our current manufacturing processes.
- R&D, which is a big area for cooperation: Reviewing compositions, identifying new raw materials and introducing new and different welding consumables, etc.
- Procurement: Access to a global purchase network will give us a lot of new opportunities for optimisation in terms of cost and quality.

When asked about organisational chal-



COO, Christo Wiid, and quality, R&D and technical service manager, Annah Magopa.

lenges and specific strategies to convince local employees to embrace the change, Laren says that change in an organisation is always challenging: “But there is a long tradition of welding electrode production in Brits and the employees are very professional and specialised. My experience, so far, is only positive and our staff is highly motivated to continuously improve our factory performance and to drive change.

“New inputs and ideas from voestalpine Böhler Welding, along with the opportunity to become part of a global company with a clear focus on the highest levels of process technology and product quality have all been only positive,” he adds.

On the issue of collaboration of the JV partners, he says it is not without challenges, but Laren is finding inspiration in combining the procedures and processes from two big welding companies to identify optimum solutions. “As a Joint Venture company, we have very strong support from both partners and we have a clear focus. Process and product development, global supply chain and application know-how is being supported by voestalpine Böhler Welding, while support for important key functions such as Purchasing, Finance, Human Resources and IT is coming from Afrox. It is a winning combination!”

Also important for voestalpine Böhler Welding, Laren points out, are sustainability and reducing the plant’s carbon footprint. “In addition, compared to imports from overseas, we have significantly improved availability and lead times for key locally produced consumables,” he says.

Christo Wiid, COO of the JV, who has a solid and long background in Afrox,



The highly motivated voestalpine Bohler Welding Africa team, from left: Gerrie Meyer, Mxolisi Maphanga, Alpheus Mogale, Annah Magopa, Vincent Sohkane, Dimakatso Mashilo, Christo Wiid, Legogang Menyatswe, Jonathan Maswanganyi, Riaan Baker, Barend Steyn, and Martin Laren.

continues: “The JV now has access to a wealth of experience and knowledge from the voestalpine Böhler Welding Group. Value has been added to all aspects of manufacturing: technology, manufacturing techniques, productivity improvements, materials knowledge and sourcing – the whole spectrum.

“voestalpine Böhler Welding is a partner that truly understands welding electrode production. It is great to be part of this global company,” he says, adding, “and we are now well positioned to support the growth of this business.”

Describing the new innovations and the range of welding consumables currently being manufactured at the Brits plant, Wiid says the plant has an excellent lay-out with very good material flow. Production is divided into two value streams:

- A ‘Standard’ high-volume stream for rutile and basic, low hydrogen electrodes. These are produced in a highly efficient process with automatic batch weighing at the start of a high speed, twin head extrusion line with integrated continuous low and high temperature electrode baking.
- A ‘Special’ stream for stainless, medium alloyed, heat resistant, repair and maintenance electrodes produced on smaller extrusion lines followed by batch drying. Both value streams deliver product to semi-automatic packing lines that accommodate all the packaging options: standard cartons and vacuum packs along with small 1 kg and 2 kg packages. This combination is ideal to position voestalpine Bohler Welding Africa as an efficient volume producer as well as a flexible producer for smaller batches of more specialised electrodes.

“Furthermore, we are very proud of our facilities and equipment for testing

incoming raw materials and wires, and our finished product testing laboratory for chemical and mechanical testing of the manufactured consumables and associated weld specimens. The facilities are fully operational and utilised and will be further expanded by adding a weld demonstration and testing facility to support customers with weld tests, training and welder/procedure qualifications,” notes Wiid.

“We also have a lot more space at the Brits factory to further expand our locally manufactured product range and to grow locally produced volumes of the voestalpine Böhler Welding and Afrox product ranges, along with strong commitment from both JV partners to make the necessary investments,” he adds.

The production programme is very wide ranging, from high-quality 6013 rutile electrodes and basic coated 7018 low-hydrogen electrodes to stainless, heat resistant and repair and maintenance electrode compositions. “We produce the well-known and recognised electrodes such as Vitemax, Cobalarc and CR70, but our programme is now also complemented by the world-famous Böhler Welding electrodes: FOXA-OHV, FOX A-EV 50-1 and the Avesta 308L-16, 309L-16, 316L-16 and 2209-17 stainless electrode.

“The inputs and ideas we get from voestalpine Böhler Welding group company help us to overcome the challenges faced when it comes to the introduction of new or different raw materials and this also helps to further develop and improve our products,” says Annah Magopa, Quality, R&D and technical service manager.

“As the only global welding consumables manufacturer with a local production facility to service the South African and the sub-Saharan African markets, there is a need to guarantee the high quality



Laboratory Supervisor, Lydia Motaung, at the spectrometer for testing weld-metal chemical compositions of test specimens.

standards that people have come to expect from the brands Böhler Welding and UTP,” she notes.

Brits has a long tradition of producing covered electrodes and many of the staff were there in the early days of the company. “The team is highly motivated to further develop and improve processes, products and services to our customers and we continue to work to empower and develop our staff, while also advancing our B-BBEE status,” adds Laren.

“Our Brits facility is solid and we have high levels of expertise in all areas. Afrox electrodes are well known for their excellent quality and performance and, while it is always a challenge to introduce new products and processes, I am fully convinced that the Böhler Welding and UTP electrodes being produced also consistently meet the highest global quality standards as well as the expectations of all our JV customers,” Martin Laren concludes.

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Martin Laren, CEO of the voestalpine Bohler Welding Africa JV, at the off-loading side of the continuous furnace.