Hydra Arc: a plant maintenance and fabrication leader

Lizelle Maciel of the Hydra Arc Group tells of the company’s 30-year history and gives a sense of the company’s transition from a supplier of specialist welders into a leading provider of maintenance fabrication services to petrochemical and other industries.

Hydra Arc was started in 1987 by José Maciel, who recognised the need for skilled welders to service the local petrochemical and power industries. One year later Maciel founded Hydra Arc (Pty) Ltd as a specialist supplier of specialist contract welders to service plant needs. The company quickly became a fully-fledged maintenance contractor and, in 2002, Jomele Training and Placements was established to recruit, train and place skilled artisans for its clients and for its own contract needs. By that time, mechanical and piping construction services had been added to its offering.

Notable progress since then includes: the move in 2010 into MEIP Construction Projects that involved the fabrication of modular plant assemblies, the first of their kind in the Southern Hemisphere; and the addition of water storage solutions to the portfolio in 2015, which are fabricated under-roof at Hydra Arc’s Sky Hill facility before being transported to site.

With IWIW 3834 certification under the SAIW’s Welding Fabricator Certification Scheme along with an SABS ISO 9001:2015 certificate until December 2021, and an ASME U-stamp, the Hydra Arc Group of today provides project management, procurement, construction, fabrication maintenance and related services to clients in the petrochemical and other industries. Companies within the Group fabricate vessels, supply specialised construction and welding consumables and provide skilled construction and maintenance labour.

“Our core business is welding. We combine the latest technology with the best welding skills on carbon steel, stainless steel, aluminium and chromium-and nickel-based alloys using processes such as Gas Tungsten Arc Welding (GTAW), Shielded Metal Arc Welding (SMAW), Flux Core Arc Welding (FCAW), Submerged Arc Welding (SAW) and Oxyfuel Welding (OFW),” says Lizelle Maciel, the company’s marketing manager.

“We aim to achieve excellence in all that we do, making sure that our quality management systems comply with and exceed internationally recognised quality standards,” she adds.

Describing the company’s vision and values, she says that Hydra Arc aims to become a global leader in the steel construction and fabrication industries. “We are on a mission to become the best in all we do while delivering long-term value to our clients, the community and our people,” she says.

As a leading South African pressure vessel and piping fabricator, Hydra Arc’s state-of-the-art equipment, design capability and skills enable the company to fabricate very large pressure vessels and an unlimited range of piping and structural steel to meet the most stringent local and international specifications.

The company’s Sky Hill complex has successfully completed small, medium and large fabrication projects, from design to delivery. “Our focus remains on quality and the rapid, cost-effective fabrication and refurbishment of vessels, piping and equipment through the innovative use of the latest fabrication technologies,” Maciel says.

On the training side, The Hydra Arc Group’s Mshiniwami Artisan Academy, which is a division of Jomele Training and Placements, currently trains 1,000 learner welders, 450 pipe fitters and 50 boilermakers per annum. “The success of our training is evident in the fact that 96% of our graduates are currently employed in their trade, with the rest having taken up supervisory positions. Added to this, our commitment to skills development and empowerment is illustrated by our current Level 2 B-BBEE certification,” she continues.

To date, the Hydra Arc Group has successfully completed a number of significant construction projects, including: pressure vessels; heat exchangers; duplex and super duplex piping and vessels; storage tanks; complex piping systems; dragline buckets and shoes; and modular structural assemblies. “By integrating and focusing our existing fabrication, construction, maintenance and labour skills to execute medium to large construction projects, our financial stability and our ability to deliver on projects are enhanced,” says Maciel.

As a leading provider of maintenance services Hydra Arc enables clients to optimise their use of assets and enhance the productivity of their facilities, while maintaining the highest levels of safety and quality. Dependability, expertise and operational safety have established the company as one of the leading onsite service providers in the industry.

Group maintenance services include: overall shutdown management and execution; vessel repair, piping replacement, mechanical overhauls and high pressure cleaning; and on-going plant and equipment maintenance in complex facilities. The Hydra Arc Group has also developed its own tooling and equipment supply business, WeldMech – Tooling & Equipment Solutions, which provides all the specialised tooling requirements for the Group and for clients’ short- and long-term needs.

“We aim to achieve excellence in all that we do and to ensure that all our employees share and consistently act in terms of our common values. We believe in sharing our success by enriching the lives of others through skills development, job creation and community programmes, while also being committed to making a difference to our planet and our people through environmentally sound and suitable workplace practices,” Maciel concludes.