

Local fabrication experts serve niche in pressurised equipment

In the 10 years since Efficient Engineering launched its pressurised equipment division, the company has built a world class reputation among its customers. These include leading players in the petrochemical, oil and gas sector, who rely on the company's depth of technical expertise, specialised equipment and reliable delivery of complex solutions.

South Africa's oil, gas and petrochemical market is based on stringent global standards, and Efficient Engineering's pressurised equipment division has shown it is up to the mark in consistently meeting these demands.

It has been little more than a decade since the division was launched, but the company has already established a customer base that has become accustomed to the highest level of quality and certification. According to Gerhard van Zyl, Business Unit Manager of the pressurised equipment division at Efficient Engineering, the company's success is based on its embedded experience, its specialised infrastructure, skilled artisans and its certification and compliance with global standards.

"From preliminary design through to fabrication and delivery, our customers are confident in our ability – having experienced our commitment to service levels



A typical pressure vessel produced by Efficient Engineering.

for many years now," says van Zyl.

He highlights that the oil and gas industry adheres to the strictest technical requirements, so the company has always positioned itself in line with the highest standards and protocols. This is supported

by its fully integrated ISO 9001 quality certification and ISO 45001 occupational health and safety management system.

"Customers in our sector will often also conduct detailed audits on our capability before entrusting us with any of their contracts," he says. "Our progress to date is therefore built on earning their trust through our compliance and consistent delivery of quality while providing cost effective results."

Among the demands on the technical side are that fabrication must be guided by a full engineering package including quality plans, welding procedures and detailed equipment performance and testing specifications. Van Zyl says customers are also aware that the company has its own certified professional engineer with international accreditation to ECSA standards who signs off on its designs before these progress to a SANAS-approved inspection authority.

"We have the infrastructure to conduct almost all tasks in-house and can therefore control quality and lead times very closely," he says. "We also source the materials – which are often specialised to suit specific applications – from trusted local and overseas vendors."

In the pressurised equipment segment, welding skills and compliance are vital to ensuring quality and safety, he emphasises. Efficient Engineering also has internation-



A converter fabricated at Efficient Engineering's facility.

ally qualified welding engineers, recognised by the Southern African Institute of Welding, who conduct the prerequisite in-process welding inspections during fabrication.

The market's trust in the pressurised equipment division can be demonstrated through the completion of a number of impressive projects. In one of the leading examples of this, the company locally produced the largest liquid petroleum gas (LPG) storage 'bullets' yet to be fabricated

in the southern hemisphere. These measured 70 metres long and six metres in diameter, weighing 580 tonnes each. Five were produced for a gas storage facility on South Africa's west coast.

"The division is also involved in maintenance and replacement of plant and equipment during shutdowns, where our capabilities have created a real niche for us," says van Zyl. "Customers really appreciate the pride we have in our work, our attention to detail and our ability to work

in line with their extremely demanding shutdown schedules."

Its well-equipped Germiston premises includes column and boom welders that can operate up to six metres high and with six metre reach and automatic state-of-the-art orbital tube-to-tube sheet welding equipment, as well as non-destructive hydraulic testing and coating applications in its dedicated, environmentally friendly grit blasting and painting facilities.

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A process column leaving the Efficient Engineering facility.

Building SA's engineering base for growth

Already leveraging the global economic recovery, Efficient Engineering is gearing up for continued growth – while strengthening the industrial foundation of the South African economy.

According to Gary Colegate, chief operating officer at Efficient Engineering, the company has seen exciting growth in orders from OEM customers in the mining sector who recognise its world class design and fabrication capability. Its ongoing upskilling efforts have been matched by the latest technology, including a recent R55-million investment in state-of-the-art CNC floor- and table-type machining centres – probably the largest in the country.

Buoyant commodity prices have been driving both new projects and expansions across the mining sector, Colegate points out. Much of the company's new business is from significant aftermarket demand, such as buckets or bowls on rigid earthmoving trucks. He notes that many global OEMs active in South Africa are looking to maximise their local content, due to considerations of cost effectiveness and disruptions in global logistics.

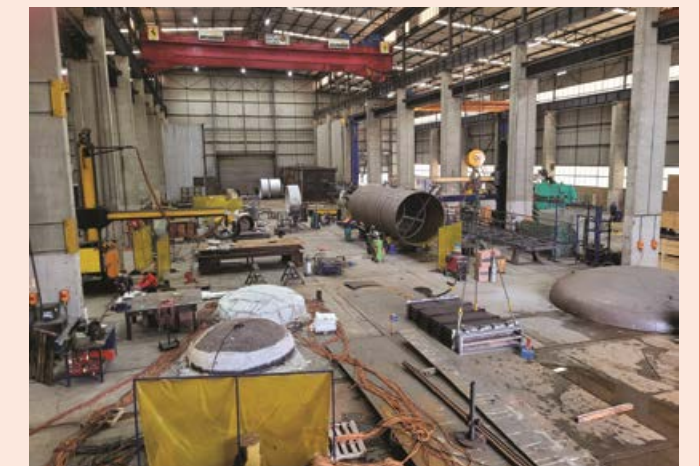
As a result, Efficient Engineering has had considerable success in capturing business from its overseas competitors. Its agility and ability to fulfil orders rapidly have given it an advantage in an environment where issues in global supply chains have led to longer lead times.

"With our engineering legacy dating back over half a century, we employ some of the most experienced artisans and boilermakers in South Africa," he says. "Our quality systems and in-house design and production capacity ensure that we compete toe-to-toe with the world's best; matching them in terms of our cost-competitiveness and quality," he says.

"On the strength of the growing interest from global customers

in our offerings, we believe the future looks bright," he continues. "Based on our record performance this year, we continue to invest in technical capacity so we can constantly improve our output capacity and turnaround times."

"As a leading player in the engineering sector, we have always worked hard to support South Africa's industrial platform as a basis for economic success. In fact, there is widespread commitment in the private sector to developing the local economy and creating employment opportunities. We need a combined effort from all stakeholders, including state-owned enterprises, to support local production," Colegate concludes.



Efficient Engineering is a local fabricator geared for continued growth.



Efficient Engineering has the infrastructure to design and fabricate specialised pressurised equipment and heat exchangers.