

## Sulzer celebrates 100 years of engineering excellence in South Africa

Stood in front of Sulzer's Johannesburg Service Center, one can't help but be intrigued by the history of this company and how it has helped shape local industry. This is not only the story of a business, but a 100-year-old tale of a country's continuous journey from one engineering innovation to the next through to the modern era.



In 1922, the two entrepreneurs founded Rice & Diethelm Limited, offering  
reconditioning services for pump equipment

The past, present and future of Sulzer in South Africa is intertwined with the stories of the mining, power generation, utilities and industrial sectors across the region. For a century, Sulzer has strived to improve the critical equipment that powers these markets.

## A centenary to remember

“We are incredibly proud to have supported and contributed to the development of industry in South Africa over the past century. Our customer-centric approach has meant that we have continually evolved our services to meet the needs of regional customers right up to the present day. To help customers overcome today’s most pressing engineering challenges, we are expanding our local support for electromechanical equipment and renewable energy projects. We always want processes to work better, whether that is by providing new equipment, improving the performance of existing assets or delivering innovations,” says Henry Craukamp, Managing Director at Sulzer in South Africa.

**In 1972, Sulzer launched a dedicated department to support the power generation, mining and textiles department**

## The Past

### Start as you mean to go on

Like all good stories, the tale of Sulzer in South Africa starts with a mystery. Nobody can trace the exact origins of the first Sulzer pump that was provided to the region, but we know it arrived in 1908. Sulzer diesel engines and boilers were also present at power plants in the country by the early 1900s. At the time, South Africa contained thirty of the world’s most profitable gold mines in the Transvaal - all of which were transitioning from steam power to electricity. This brought with it the challenge to effectively supply and maintain the equipment used at these locations.

Enter Charles Robert Diethelm, a Swiss engineer working at Orenstein & Koppel supplying pumps, engines and boilers for Sulzer. However, a general strike in 1913 and the effects of World War I on supply chains caused the company to shut down in 1916. Another key player struggling to supply machinery to his customers was American Frank Peabody Rice. They met each other while working for agencies supplying the mines, and quickly realized that their interests aligned.

In 1922, the two entrepreneurs founded Rice & Diethelm Limited, offering reconditioning services for pump equipment. With this, the story of Sulzer in South Africa had begun.



## Bringing Swiss engineering to South Africa

Sadly, Rice, an active man who had served in the U.S. Navy during the Spanish American war, died suddenly in 1925 at the age of 54. The passing of the founder was marked by a key business development – the move to electrical services. Furthermore, new engineers were hired, some of which were credited with 'knowing every pump on the Witwatersrand by its first name'.

Despite the challenges of the Great Depression, Diethelm grew the business. The emergence of electrical services was bolstered by the supply of transformers for power stations and hydropower installations from the mid-1930s, helping to build a modern energy infrastructure in South Africa. In 1936, Diethelm set up a new pump reconditioning workshop and store in Jeppeshtown.

With global supply chains again interrupted by the outbreak of World War II, Rice & Diethelm Limited began producing approved spares for Sulzer pumps in South Africa. The company had always represented Sulzer, but this was a key development. It culminated in 1946 with Sulzer signing an agreement with Rice & Diethelm Limited for the manufacture of pumps in South Africa.

## The golden rules of success

Gold has long been a key catalyst in world history. The opening of new mines in the late 1940s increased gold output, and along with it, the demand for dewatering pumps. This was matched with large quantities of capital entering the country, which fueled an economic boom overnight.

Rice & Diethelm Limited struggled to meet demand, so the company became public in 1949 to source funds for growth. Diethelm sold his stake in 1950, with Sulzer taking overall control of the company. He was to pass away in Johannesburg in 1959.

The opening of a new pump factory in 1951 put Sulzer in prime position to meet increased demand in the 1960s. Centrifugal pumps were required to move large quantities of water at new mines located underneath reservoirs. This spurred innovation towards bigger and better pumps. In November 1968, Sulzer helped overcome the flooding of West Driefontein Gold Mine by quickly supplying eight 300 HP 3-stage units. It was estimated in 1972 that Sulzer pumps were moving 70 million gallons (approx. 318 million liters) of water out of African mines a day!

Sulzer and Rice & Diethelm Limited merged in 1966 to become a private company again. Beyond power generation and mining, textiles was another important industry and in 1972, Sulzer launched a dedicated department to support the sector. The company had introduced the projectile weaving machine back in 1953, and the new division was designed to maintain and produce industrial equipment. A diversified portfolio was to remain a hallmark of the company into the modern era.

## Switch on the power

Towards the end of the swinging sixties, Sulzer foresaw a drop in demand for mine dewatering pumps in South Africa. Consequently, it moved to support the power generation market. As well as landing contracts to supply custom boiler feed pumps for the Electricity Supply Commission, Sulzer delivered pumps and oil-free compressors for the construction of power plants including Komati, Camden, Grootvlei, Hendrina, Arnot and Kriel. Other utilities contracts were won too, such as the of supply pumps to Rand Water Board to meet increased public demand.

In 1976, a purpose-built pump manufacturing facility was opened in Elandsfontein

### New factory for Sulzer pumps and cooling towers

The new factory at Elandsfontein on a 3,5 ha site is being managed by Mr. Herbert Strasser, a Sulzer employee for 20 years. The new plant is manufacturing components for the entire range of Sulzer pumps, which has enabled Sulzers to double its manufacturing capacity. Mr. Ian Cave, who is in charge of the cooling tower section, also at Elandsfontein, now has 50% more capacity. This more modern factory has sufficient space to manufacture all the piping required for cooling towers, which will enable Sulzer's industrial equipment department to attend to more turnkey cooling plant projects.



The original Rice and Diethelm workshop and store in downtown Johannesburg which was acquired by Sulzer in 1951.



The new factory at Elandsfontein.



The strategy worked. By 1972, the company had 390 employees and in 1976, a landmark, purpose-built pump manufacturing facility was opened in Elandsfontein. As well as manufacturing market-leading pumps, the site offered a full range of Sulzer spare parts. The seeds of a combined supplier of new pumping assets and a service provider for rotating equipment had been sown.

## The OEM service provider

---

A new customer service department saw the launch of a dedicated workshop for rotating equipment in 1979. With some equipment in South Africa beginning to show its age, it was a prudent development for the company and its customers. Agreements with original equipment manufacturers (OEMs) to produce approved spares only strengthened the offering.

As big hair and power dressing took over the world in the 1980s, Sulzer was taking on the challenge of becoming a world leading independent service provider (ISP) in South Africa. A new engineering department emerged in 1984 to support this. By the end of the decade, Sulzer was a fully established ISP for rotating equipment from almost any brand.

Marine diesel engines were another area of focus, with facilities in Durban and Cape Town supporting Sulzer units with spares and servicing. It was an important undertaking, as it was estimated that a third of ships passing through South and Southwest African harbors in 1984 were equipped with Sulzer diesel engines.

## Becoming a technical powerhouse

---

With a strong OEM pump offering and a rapidly expanding servicing department, the nineties were a period of steady growth for what became known as Sulzer Pumps South Africa Pty Limited in 1992.

From supplying 100 hydro-powered turbodrills to mines to delivering three water supply pumps to a city in China – the company continued to win big orders both locally and internationally. Arguably the biggest success of the decade was the signing of maintenance partnerships with public utilities, many of which Sulzer still holds to this day. Building on these successes, a new pump service center was opened in Welkom to boost capacity.

From humble beginnings supporting imported Sulzer equipment at the turn of the twentieth century, Sulzer in South Africa has grown into a technical powerhouse supporting and shaping industry in the region. Inarguably, its engineering capabilities helped to shape modern, industrial South Africa.

## The Present

---

### A one-stop-electromechanical-shop

Henry Craukamp, Managing Director at Sulzer in South Africa, walks through the new electromechanical services facility recently opened at the Johannesburg Service Center: “We not only want to improve our customers’ pump performance, but the entire associated drivetrain as well. This new facility strengthens our ability to refurbish motors, gearboxes and generators so our customers in South Africa have an extensive one-stop-shop for their rotating equipment.”

This latest investment was spurred on by numerous successful electric motor and gearbox refurbishments. From renewing equipment driving boiler-feed pumps, the business began completing a host of larger projects, one of which included a complete pump, motor and gearbox refurbishment for a dock after a recent flooding event. Now, customers can access reverse engineered OEM quality gear sets, OEM approved gearbox spares and motor repairs from a single source.

This move to support the complete pump drivetrain illustrates that Sulzer is continuously growing its offering in South Africa. As is to be expected of a company backed by a century of innovation, its facilities and capabilities are diverse and technically impressive. In fact, it is pushing the boundaries for its customers across industry.

### Next generation pump innovation

---

As a global pump OEM, Sulzer’s pump services in South Africa are world-class. A center of excellence for vertical pumps, barrel pumps, multi-stage ring pumps, high-pressure pumps and everything else in between – the company has advanced manufacturing facilities, state-of-the-art workshops, assembly areas and testing capabilities. Equally adept at servicing own-brand pumps or units from any other manufacturer – Sulzer has made a huge mark in the aftermarket too, becoming the go-to ISP for pumps in South Africa.

“We have nine testing facilities for pumps, including a 4 MW performance test bed that is one of the largest in the Southern Hemisphere. That’s not all, we’re flexible too. We recently constructed a bespoke test can for an 18-metre-long pump and motor assembly. We’re not just about producing reliable and efficient pumps in volume, we adapt to what the customer needs,” says Robert Blignaut, Head of Sales at Sulzer Pumps in South Africa.

This adaptability has been illustrated in the pump maintenance support that the business offers to public utilities. The maintenance contracts have grown to encompass more and more pumps from varying brands that may require refurbishment.

Flexibility is key to successfully delivering this contract. As the pumping infrastructure in South Africa begins to age, Sulzer must be ready to meet the needs of legacy equipment. Exceptional reverse engineering capabilities, the ability to produce complex parts such as impellers in-house, and the technical expertise to deliver innovative retrofits means older pumps can reach new heights of reliability, performance and efficiency. It’s a cost-effective proposition for any operator.

“Digital services are our latest pump innovation,” Robert explains. “BLUE BOX™ is an advanced Internet of Things (IoT) capable pump analytics platform for asset optimization and real-time predictive maintenance. It combines IoT and Sulzer’s Advanced Analytics Engine to provide continuous condition monitoring for pump assets and deliver predictive maintenance actions that will minimize downtime while maximizing both performance and reliability.”

As well as designing new advanced pumps that offer increased efficiency, Sulzer is supplying and installing variable frequency drives (VFDs) on existing pump drivetrains in South Africa. These are delivering sizable reductions in power consumption and helping customers to reduce their carbon footprint.

Even as a global pump expert, you can’t afford to stand still, which is why Sulzer is doing the opposite.

## Out in the field

With industry blossoming in South Africa, Sulzer has invested heavily in its field service teams. From mines to power plants, Sulzer field service teams are present on-site providing dedicated maintenance services around-the-clock.

The ability to seamlessly integrate with customer operations has been a huge advantage for the division. There are 13 dedicated service islands supporting boiler feed pump drivetrains located at coal fired power stations throughout the region. In fact, 180 personnel and 65 vehicles are embedded at customer facilities nationwide.

Sulzer South Africa has in excess of 180 field service staff stationed at various customer sites, supported by additional on call service teams, which provide highly responsive maintenance, monitoring, inspection, installation and commissioning services across industries and borders. This includes recently completed projects in various countries across the border of South Africa. Work is backed by a comprehensive spares supply service, especially for pumps and gearboxes, as well as large workshop capacity throughout South Africa.

Sulzer South Africa held a celebration at the Johannesburg Service Centre to make their 100-year anniversary



---

## The Future

---

### Powering a better world

Renewable energy is rapidly expanding in South Africa, and Sulzer is keeping pace. To illustrate this, Thinus Conway, Field Service Manager at Sulzer in South Africa, is visiting a new-build concentrated solar plant (CSP) located in the stifling heat of a semi-arid desert. This is the kind of landmark renewables project that Sulzer is offering increasing support for, as Thinus attests.

“Molten salt provides thermal storage at these facilities, which is moved through the system with pumps, with the hot salt used to heat water to create steam and drive a turbine. Sulzer is a pioneer in molten salt pump technology, and we are very experienced in repairing these pumps regardless of brand,” he says.

Sulzer is conducting monitoring, physical analysis and performance optimization for pumps at CSPs in South Africa. BLUE BOX is playing a key role, allowing operators to take a more proactive role in securing pump reliability and up time – a key benefit for a CSP or any other power plant. With these services, Sulzer is supporting the exponential growth of the renewables sector in the region.

New electromechanical services are helping too. Refurbishments of motors and gearboxes are improving renewable power generation uptime, with operators able to access complete rotating equipment support from a single source. Sulzer is also championing VFDs for use with motors across industry, delivering energy savings that benefit both operators and the environment.

---

Henry Craukamp, Managing Director at Sulzer, gave an insightful presentation to the guests at the customer day, held at the end of February, 2023



---

## A legacy beyond equipment

---

Sulzer has always been defined by its people. From the very beginning, the company has prided itself on having an expert local team that can support customers with the best solutions. Beyond engineering though, the team is making an impact in the community.

The company continues to train and hire young apprentices, and in 2022, welcomed three young women studying for their engineering degrees. One long-standing employee, Cedric McDougall, was recently presented with an award for helping more than 400 apprentices become fully qualified during his 33-year tenure. As well as bringing fresh talent to the company, such work benefits South Africa by nurturing a new generation of young engineers ready to support domestic industry.

“We work with charities too,” says Natasha Olivier, Executive Assistant at Sulzer in South Africa. “On Nelson Mandela International Day, we join various local initiatives to support our community, such as litter picking. Annually we hold a company golf day, with all proceeds going to charity. In 2022, we raised money for Rare Diseases South Africa, which is a non-profit organization advocating to ensure that people living with rare diseases and congenital disorders experience greater recognition, support, improved health service and better overall quality of life. The second charity we supported was Life 4 U Foundations, which focuses on developing the youth and the community of Tembisa. Our team is all South African, so these issues are close to our hearts.”

---

## Consistently leading industry for a century

---

From maintaining Sulzer pumps in the 1900s to supporting new renewables projects that will change the modern energy landscape forever – Sulzer has kept pace with its customers in South Africa and helped define their technical progress. An upgraded electromechanical services department and the increasing support for clean energy is only the next chapter, written from lessons learned in the past.

---

[sulzer.com](https://www.sulzer.com)

---

A10583 en 2.2023, Copyright © Sulzer Ltd 2023

This article is a general product presentation. It does not provide a warranty or guarantee of any kind. Please contact us for a description of the warranties and guarantees offered with our products. Directions for use and safety will be given separately. All information herein is subject to change without notice.