

MechChem

AFRICA

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- CASE STUDIES
- KEY SERVICES
- PRODUCTS

2026 PROFILE

MechChem Africa: integrated, technical, smart and connected

MechChem Africa (MCA) adopts an integrated approach to technology solutions, with its content enriched by deliberately seeking out and unpacking technical areas of interest in mechanical and chemical engineering.

Industry-focused, MCA promotes responsible engineering and highlights opportunities for African companies to become more internationally competitive. We promote and value: good design, decision-making and procurement practices; appropriate solutions at the lowest lifecycle costs; energy and production efficiency optimisation; environmental responsibility; sustainable development; and smart, modern and innovative technologies and business practices.

South Africa and Africa wide distribution

Country/Region	Distribution	%
South Africa	8 287	77.5%
West Africa	1 034	9.7%
Southern Africa	553	5.2%
Eastern Africa	287	2.7%
Central Africa	343	3.2%
North Africa	55	0.5%
Rest of the world	134	1.2%
Total ABC	10 636	100%

MCA is sent to engineering companies, plant managers and decision-makers in South Africa and across the African Continent (e-Editions). Q1 2025 ABC distribution: 10 636.

INFORMING AFRICAN MANAGERS ON INTEGRATED ENGINEERING SOLUTIONS

ABC distribution: 10 636 | Bi-monthly e-Newsletters: 7 425 | Unique website visitors: 2 037 | LinkedIn followers: 5 325

MCA bimonthly features for 2026

Published as a bimonthly e-edition magazine with six issues per year, *MechChem Africa* covers a very broad range of technical topics and fields. To cater for this diversity, mechanical and chemical engineering topics are clustered into features, which will be dealt with as outlined below:

FEATURE SUMMARIES:

* Jan-Feb, May-Jun, Sep-Oct

- Minerals processing and materials handling
- PowerGen, PetroChem and sustainable energy management
- Water, wastewater and pumping solutions
- Hydraulics, pneumatics and automation systems
- Maintenance solutions and asset management
- Heating, ventilation and air conditioning (HVAC)
- Localisation, local manufacturing and food processing
- Product & industry news
- Innovative engineering

* Mar-Apr, Jul-Aug, Nov-Dec

- Minerals processing and materials handling
- PowerGen, PetroChem and sustainable energy management
- Water, wastewater and pumping solutions
- Hydraulics, pneumatics and automation systems
- Power transmission, bearings, bushes and seals
- Environmental management and cleaning technologies
- Products & industry news
- Innovative engineering

The outside front cover and cover story

MCA's front cover is an opportunity for a company to sponsor a product, development, success or any aspect of its offering. A unique company branded image is used on the front cover for each issue of the magazine. The cover sponsor is also entitled to a double-page spread (DPS) cover story about its offering or products, which can either be supplied or written by MCA's editor.

FEATURE BRIEFS:

Minerals processing and materials handling (featured in every issue)

This feature combines two of the largest technology areas associated with the mining industry.

Minerals processing involves techniques associated with beneficiating raw materials: chemical manufacturing and treatment processes; mill circuit processing and treatment, separation, flotation and leaching baths, electrowinning/electroextraction, etc. Metallurgy, foundry processing and steelmaking, polymer processing and future material trends are covered; as are plastics, rubber and composites; polymeric materials, coatings, chemicals, nylons, fabrics, printing, purification, separation, fibre reinforcing, fibre glassing, material properties and coatings.

From the materials handling perspective, the feature focuses on the equipment and solutions for handling bulk materials as well as for screening, lining, conveying, sorting and separating. Some topics covered include: bulk materials handling equipment (stackers, reclaimers, train and ship loaders and unloaders); belt conveyor systems and apron feeders; crushers and screens; sampling and weighing solutions; pneumatic conveying; overhead gantries; earthmoving equipment, wheeled and tracked loaders. Factory, warehousing and logistics handling solutions are also included.

PowerGen, PetroChem and sustainable energy management (featured in every issue)

This feature is an energy related feature that deals with the efficient generation and use of electricity, fossil fuels such as petroleum, renewable

fuels such as hydrogen, and the production of chemicals.

Fear of global warming is driving the energy sector towards increased efficiency, lower emissions and more cost-effective renewable solutions. These are all associated with more complex and interesting technologies. *MechChem Africa* supports the drive towards cleaner technologies, but understands that these must remain cost-effective and sustainable in the long term.

This feature deals with the important field of energy efficiency engineering: demand side management (DSM), reducing peak demand, load-shaping and energy efficiency initiatives; distributed energy generation, net metering and feed-in technologies; efficient and renewable power generation, coal-fired and nuclear power stations, steam and gas turbines, generator technology, power plant automation systems, concentrated solar power, photovoltaic systems, wind turbines, sterling engines, hybrid systems, fuel cell technology, diesel generators and alternative fuel.

Also included is the petrochemical industry and its transformation to cleaner production. With the development of synthetic fuel production processes such as Sasol Synfuels' CTL coal liquefaction process, the petrochemical industry has become a flagship industry in South Africa. Oil and gas finds in both East and West Africa and shale gas exploration in the Karoo are likely to lead to significant growth of the industry. Biofuel production facilities and waste-to-gas plants are also emerging to reduce our dependence on non-renewable energy sources. As well as dealing with the technologies for distilling, refining and blending different fuels, this feature will look at the extended chemical and petrochemical industry offering, including plastics, fertilisers, lubricating oils and waxes.

Maintenance solutions and asset management

There is an increasing drive towards maximising productivity from equipment, extending its life and minimising energy use.

The end goal is to maximise operational efficiency and uptime while minimising costs of ownership over the lifetime of an investment.

To achieve this, however, modern and improved maintenance and asset management practices are imperative, from equipment design and commissioning to end-of-life decommissioning. This feature highlights this increasingly important field.

Topics include: the value of connectivity, Industry 4.0 and the IIoT in modern maintenance; reliability engineering; condition monitoring and asset management; corrosion control; lubrication and contamination management; tribology, lubricants, lubrication systems, industrial oil solutions and oil quality; quality management and monitoring; remote diagnostics; environmental management systems; and inspection skills training.

Water, wastewater and pumping solutions (featured in every issue)

Water is now a scarce resource, particularly in South Africa where rising population levels and recent droughts have raised concerns that some areas



of the country are likely to 'run dry'.

In addition, acid mine drainage (AMD), raised salination levels of our river water as well as contamination of water resources via leaching from mine pond waters and slurry dams are ongoing problems.

This feature aims to highlight the technical solutions available for water and wastewater treatment for both municipal supplies and industrial wastewater. Topics include: Water and wastewater treatment solutions; filtration, UV-disinfection, seawater desalination via reverse osmosis (RO) and nanofiltration (NF); ion exchange water filtration; mine wastewater and acid mine drainage treatment plants; water recycling; pollution mitigation; food grade purification systems, testing and monitoring solutions, recycling and conservation are also highlighted. Pumping systems are intensive energy consumers and the modern trend is to optimise pumping efficiency in every way possible. Mining, slurry and dewatering pumps dominate the industry, but water and wastewater are also becoming critically important.

From the chemical perspective, safe pumps are a vital component of all chemical, petrochemical, chemical and food-grade transfer systems and these all require fit-for-purpose materials, coatings liners and seals.

Heating, ventilation and air conditioning (HVAC)

Combined, HVAC comprises some of the world's most energy-intensive applications. This feature focuses on future energy-efficient solutions that reduce the cost and reliability of heating, cooling and ventilation technologies.

Increasingly, this also includes renewable solutions such as concentrating solar power, combined cooling and heating (CCH) and tri-generation (CCHP).

Localisation, local manufacturing and food processing

High quality manufacturing machinery and processes are essential for any African country, including South Africa, wanting to be globally competitive, which is key to economic growth and prosperity. This feature focuses on successful manufacturing solutions and experiences with a view to fostering localisation.

Also of rising significance across Africa are the Food and Beverage industries, which are increasingly localised and require the highest levels of contamination control from the processing equipment used.

Topics covered include: process control equipment and monitoring, plant software and sensors, production management and plant efficiency, local manufacturing success stories and processes, NC-machines, lathes, milling machines, boring machines, bending, forming, pressing, stamping and cutting processes and machinery, plasma and laser cutting equipment and joining techniques and all of the food grade equivalent components and systems necessary for successful and save food and beverage processing.

Power transmission, bearings bushes and seals

We interpret power transmission in the wider sense, meaning we include the prime movers such as engines, electric and hydraulic motors; as well as gearboxes, geared motors and reducers. We also see variable speed or variable frequency motor drives (VSDs and VFDs) as integral components of modern transmission systems.

Bearings remain the most critical rotating shaft component, along with other drive train essentials, such as hubs, bushes, couplings (including fluid couplings), universal joints and taper locks. Sealing solutions, lubrication systems and contamination control solutions are also covered.

Hydraulics, pneumatics and automation systems (featured in every issue)

This feature reflects the increasing overlap between hydraulic, pneumatic, electric and mechatronic automation. It supports companies that specialise in developing and manufacturing, supplying and supporting hydraulic, pneumatic and electric actuation systems and mechatronic systems as well as those promoting automation and the use of Industry 4.0 and the Industrial Internet of Things (IIoT).

The feature covers equipment for applications such as automating the water industry via valve actuators; industrial presses; mobile equipment; hydraulic drives and motors; pneumatic automation and handling systems; hydraulic pumps, motors and actuators, valves and control systems,

manifold blocks as well as oil and oil-free air compressors, pneumatic motors and actuators, valves and pneumatic control systems. Associated dehumidification and filtration solutions and cooling are also featured, along with electric servo motors a linear motors.

With the rise of Industry 4.0 and the Industrial Internet of Things (IIoT), the feature also aims to promote appropriate automation for productivity and quality improvements via the use of robotics custom-designed automation systems and software. The feature embraces the integrated nature of mechanical systems with electronics and IT-based sensing and control systems, ie, Mechatronics.

Instrumentation and process monitoring and control of mass flow, pressure, temperature, composition and more, are critical for the control and automation of reactions employed at chemical process plants and laboratories. The reliability and control precision govern the operational efficiency of the automated plant or process.

From a CAE perspective, IT now embraces almost every aspect of engineering, including: solid and 3D modelling, digital or virtual prototyping, digital twinning, engineering analysis, digital simulation, finite element analysis (FEA) and computational flow dynamics (CFD); chemical process flow simulation; pipe and piping design; computer-aided manufacturing (CAM), injection mould design, rapid prototyping, numerical control (NC) simulation and verification; case studies in engineering, design for manufacturing; EPC-tools, plant and product lifecycle management (PLM) and product data management.

Environmental management and cleaning technologies

Disposing of waste in a way that does not impact on the environment is an imperative for the planet and a legal requirement for industry. Recycling of waste streams has also now moved from being a chore to an income-generating opportunity. This feature aims to promote the circular economy, recycling, reusing and remanufacturing technologies and best practice waste management solutions: pollution control, emissions scrubbing; treatment and disposal of effluents; sorting, shredding and recycling solid waste; and waste-to-fuel services and plant.

Products & industry news

A collection of short industry news items in support of advertisers and industry. This is an opportunity for companies and advertisers to promote new engineering products, components or service offerings via short articles, photographs and cost-effective, associated advertising.

Innovative engineering

Innovative engineering is an editor's choice feature that strives to bring noteworthy innovations and modern technology developments to the attention of MCA's readers in Africa.

Special report

This is a placeholder for exciting developments in industry; special events, launches or notable success stories.

Back page

A short future-technology article and/or an upcoming event of particular interest.



10 Reasons to advertise in *MechChem Africa*

- 1 Specialists in technical communication and unafraid of writing technical articles
- 2 Understanding of engineering and engineers
- 3 High percentage of original content
- 4 Multi-disciplinary content spectrum
- 5 Ability to unpack subtle and complex product differentiators
- 6 Proud supporters of localisation
- 7 Advocates of high quality standards
- 8 Passion for unravelling integrated systems
- 9 Promoters of efficiency improvements and lowest TCOs/LCCs
- 10 Value sustainability and environmental responsibility

Frequency

Every second month, *MechChem Africa* is distributed to an audience circulation of over 10 000. In addition, the content is shared with over 7 000 people via our fortnightly Newsletters and over 5 000 followers on LinkedIn.

Certified circulation figures



Q1 2025 – Total circulation 10 636

Endorsements

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