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 month, MechChem Africa is mailed to 3 000 subscribers all over South Africa.

CERTIFIED CIRCULATION FIGURES

Second quarter 2019 – Total circulation 5 057

ENDORSEMENTS

MechChem Africa is endorsed by:
**PRINT READERSHIP**

<table>
<thead>
<tr>
<th>Industry sector</th>
<th>Percent %</th>
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<tbody>
<tr>
<td>Chemical and mechanical engineers in industry</td>
<td>23.34</td>
</tr>
<tr>
<td>SAIChE IChemE, chemical and petrochemical processing</td>
<td>16.79</td>
</tr>
<tr>
<td>Associations and training centres</td>
<td>5.78</td>
</tr>
<tr>
<td>Product distributors</td>
<td>13.28</td>
</tr>
<tr>
<td>Welding and fabrication</td>
<td>10.20</td>
</tr>
<tr>
<td>Mining, metallurgy and cement</td>
<td>6.35</td>
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<tr>
<td>Corporate communication</td>
<td>7.41</td>
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<tr>
<td>Municipalities and local government</td>
<td>8.03</td>
</tr>
<tr>
<td>Food, beverage and pharmaceuticals</td>
<td>1.84</td>
</tr>
<tr>
<td>Water, wastewater and pollution management</td>
<td>2.70</td>
</tr>
<tr>
<td>Engineering consultants, designers and contractors</td>
<td>1.73</td>
</tr>
<tr>
<td>Power generation</td>
<td>2.54</td>
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<tr>
<td><strong>Totals</strong></td>
<td><strong>100 %</strong></td>
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**AFRICA READERSHIP**

Every month we email a growing number of PDF replicas into Africa (currently 945). This counts towards our audited circulation.
The online replica of MechChem Africa is available on the Crown Publications website www.crown.co.za or directly at www.mechchemafricamagazine.co.za. The online version of MechChem Africa is read by national and international subscribers who do not receive the printed version of the magazine, by subscribers who can’t wait for the magazine to arrive or those who want to find particular articles in past issues. Online readers can easily access back issues and, using the search facility, find past articles. For advertisers, hyperlinks to company websites offer a further benefit.
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 three groups of features, effectively dividing the magazine into three quarterlies, each with its own distinctive flavour. The features and their clustering are outlined below:

January, April, July and October

**Power transmission**
We interpret power transmission in the wider sense to 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.

**Computer-aided engineering**
IT now embraces almost every aspect of engineering, including: solid and 3D modelling, digital or virtual prototyping, 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; IT tools for energy efficiency and proactive maintenance also feature.

**Minerals processing and materials**
From a chemical perspective, this feature will focus on the minerals processing 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 applications and future material trends are covered; as are plastics, rubber and composites; polymeric materials, coatings, chemicals, nylon, fabrics, printing, purification, separation, fibre reinforcing, fibre glassing, material properties and coatings.

February, May, August and November

**Maintenance and asset management**
There is an increasing drive towards maximising productivity from equipment, extending its life and minimising energy use. The end goal is the lowest possible lifecycle costing. To achieve this, however, 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: modern maintenance; reliability engineering; condition monitoring and asset management; lubrication and contamination management; tribology, lubricants, lubrication systems, industrial oil solutions and oil quality; quality management and monitoring; corrosion/thickness testing; remote diagnostics; environmental management systems; and inspection skills training.

Materials handling
With mining dominating business across Africa, the mining industry is the end customer for many engineering companies and original equipment manufacturers. This 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, warehouse and logistics handling solutions are also included.

Corrosion control and coatings
Appropriate corrosion control leads to better reliability and longer life, protecting metal components from degradation because of moisture, salt spray, oxidation or exposure to a variety of environmental or industrial chemicals. This feature deals with the anti-corrosion coatings that act as barriers between attacking agents and structural materials and the treatment and corrosion protection techniques employed to minimise corrosion damage.

Heating, cooling, 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).

Water and wastewater solutions
As a consequence of the global warming debate, water is now being indentified as a scarce resource. In South Africa, acid mine drainage (AMD) problems as well as acid rain contamination of water resources are ongoing problems. This feature aims to highlight the technical solutions available for water and wastewater treatment for both municipal supplies and industrial wastewater. Water purification systems, testing and monitoring solutions, recycling and conservation are also highlighted.

March, June, September and December

Pump systems, pipes, valves and seals
Pumping systems are intensive energy consumers and the modern trend is to optimise pumping efficiency in every 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.

Chemical, petrochemical, oil and gas
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.
Power generation, sustainable energy and energy management
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: demand side management (DSM), reducing peak demand, load-shaping and demand side efficiency; 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.

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 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.

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. 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.

Regular features
Special report: A placeholder for exciting developments in industry; special events, launches or notable success stories.
On the cover: Provides a unique image for each issue of the magazine. The cover sponsor is entitled to a double-page spread (DPS) article about its offering or products.
Innovative engineering: Current and future technology developments.
Product and 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.
Back page: A short future-technology article, an upcoming event of particular interest and a summary of other upcoming events.