

Press Release

AES: making a material difference through energy optimisation in the textile sector

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A change of fortunes for South Africa's beleaguered textile sector depends on many factors – and leading operations and maintenance service provider to the steam and boiler sector, Associated Energy Services (AES), can make a material difference to its future success.

“AES has been active in the sector since the 1990s, and has first-hand experience of its implosion after trade liberalisation and an influx of cheap imports toppled less competitive local companies, leading to the loss of over 100 000 jobs. Now, we are well positioned to share our knowledge around energy optimisation, to make a real difference in the much-needed revitalisation of the textile sector,” says Managing Director, Chris Paterson.

Weaving a new textile tomorrow

According to Paterson, the company is already working with a large textile dyehouse in KwaZulu-Natal, looking at options for optimising its steam supply.

“Most of the current hope and positivity within the textile sector hinges on key market changes. Overall, according to the Industrial Development Corporation (IDC), the textile industry accounts for 14% of manufacturing employment (60 000 to 80 000 jobs) and contributes around 8% to GDP (gross domestic product).

According to the Cape Clothing and Textile Cluster (CCTC), a not-for-profit initiative established by government and industry to boost competitiveness, the sector stabilised after 2014 by implementing best practices, lean manufacturing principles and a government-supported machinery modernisation programme,” Paterson points out.

He adds that a global shift by retailers towards a Quick Response (QR) supply chain model - which hinges on stocking the most desirable products in the shortest possible time and rapidly replenishing big sellers - also favours local suppliers over offshore producers.

However, another trend - environmental sustainability or 'greening' - could prove a hurdle. Already, retailers are punting 'greener' fabrics that are natural, require less water and are sourced locally to reduce the carbon footprint associated with long-distance transport.

Fabric of the industry

AES believes that, given ongoing economic uncertainties, it is still early days for South Africa's textile industry. Companies - quite literally - need to cut their coats according to their cloth.

As Paterson explains, a single factory has multiple energy requirements: from using thermal oil for heat setting of materials, to using steam for washing textiles before dyeing and printing. During dyeing, steam opens open up the cellulose structure to allow for comprehensive dyeing. This can even raise the rate at which the dye is absorbed, increasing throughput. Steam is also used in laundry process to finish fabrics.

He notes that, to remain competitive, particularly in comparison with Asian producers where the cost of labour and energy is less, local manufacturers must focus on their cost inputs - and energy is one of the highest.

In addition to reducing fuel usage and cost per metre of fabric produced, AES also looks at how efficiently steam and thermal oil are used in the textile producing facility.

Commercial Director Dennis Williams explains: "If there is any waste in the system, the investment in terms of people, turnaround time and equipment changes is relatively small, but the benefits are considerable. Therefore, we advise companies to go for the low-hanging fruit of waste reduction first, to establish a proper baseline from which to make further choices. They might even find that waste improvements mean that changing to a different fuel no longer makes economic sense."

He says a cautious approach is needed: "Regarding efficiency and sustainability, it makes sense to manufacture locally. However to re-establish a whole supply chain requires massive capex investment – especially where textile plant assets were stripped and machinery is very outdated."

Opportunities for AES include advising and assisting with the starting up of mothballed textile plants – around boilers particularly, including sizing which is critical. The company also advises new investors on the most appropriate choices for the longer term, including sourcing skilled operational staff.

Sewing up sustainability

While the main consideration for the South African textile industry remains survival, local manufacturers need to go beyond improving technology, to deal with challenges like sustainability, carbon tax implications, water (condensate) and heat recovery. These are all areas where AES is already providing input.

“AES’s standard approach is to optimise what is there, generally by making an efficiency improvement. Reducing fuel consumption and emissions substantially improves sustainability,” says Williams.

He cautions that sustainability investments for the textile industry must be economically viable: “We work with textile companies to minimise waste and recover heat or water. Hopefully, those improvements will also improve competitiveness as this is what will drive their commitment to sustainability.”

Paterson is keen to see the local textile sector flourishing - but also more focused on addressing its safety issues. Fires, associated with the operation of thermal oil heaters have been a key challenge for textile companies in the past. AES is, again, well positioned to monitor and care for these sorts of assets.

“A significant value chain can be created via the textile sector: from cotton farmers to transporters, mills to dye houses and then cut, make and trim operations and retailers. This can create much-needed employment, with all the attendant socio-economic progress benefits. AES looks forward to contributing to that,” he concludes.

Ends

(870 words)

Note to Editors:

AES is a pioneering, innovative, reliable and experienced steam and boiler operations and maintenance (O & M) service provider. The company has been in existence for over 25 years and is widely regarded as the leading O & M provider in steam and boiler operations and maintenance service in South Africa. Target industry sectors include power generation, chemical, plastics and rubber, timber, pulp and paper, textiles, food and beverage, dairy, poultry and mining.

AES’s purpose is to assist industrial plants to optimise their energy production processes, and achieve energy usage best practices, through the following offerings: the mitigation of risk and the reduction of plant downtime; the procurement of efficient fuel combustion; assistance with the care of assets over the plant’s lifetime; diversification of the plant’s energy resources; improvement in site operations; and a reduction in carbon footprint.

AES subscribes to the highest ethics and operates according to high safety standards, process excellence and product and service innovation, exhibiting a commitment to quality, technology

advancement and the development of human capital. AES invests heavily in training and the promotion of talented people on an equal opportunity basis into the industrial operations environment. The company believes that making a positive difference to communities and the environment is the best way to ensure that everyone benefits from good work.

AES is ISO 9001, 14001 and 45001-certified, ensuring that the company maintains a focus on achieving, benchmarking and optimising its processes and activities.

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