

energy



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SOUTH AFRICAN OIL AND GAS ALLIANCE
UNLOCKING AFRICAN VALUE

CAPE MEDIA



John thompson
Boiler and Environmental Solutions

1935

75 Years of Boiler Manufacture in South Africa

2010

Full steam ahead

John Thompson is on the boil

A world-class producer of steam, a manufacturer of boilers that would please one of its erstwhile partners, Rolls Royce, and 75 years of excellence encapsulate the essence of John Thompson.

The company's principal focus is on being the best boiler and environmental solutions company serving the power generation and industrial markets.

The company designs, manufactures and services industrial water tube and fire tube boilers with steam outputs of up to 320 t/h.

It also produces related products, incorporating heat transfer technology.

It is furthermore responsible for the service and maintenance of utility boilers.

Although the company is celebrating its 75 years as a South African operation, it actually has more than 125 years of history in the boiler industry. The roots of John Thompson go back farther to 1824.

John Thomson first came to South Africa in 1935 and through an agency agreement soon established a useful order book.

Asked to what John Thompson attributed its longevity, Theo Lotter, divisional director of the company, points to three factors.

He says the quality of the products, the excellent service delivery as well as pin-point strategizing to ensure one manufactures and refines a product that satisfies market requirements, are critical.

Research and development

"It is important to do ongoing research and development. Without it, you won't survive for a long period.

"Research and development goes hand in hand with ensuring you have the right resources in place when the market requires it.

"That includes resources in terms of manufacturing capacity and the skills base of people," says Lotter.

It is not accidental that John Thompson is the largest and most modern heavy engineering manufacturing facility in the Western Cape.

The company also did not produce its best ever financial performance in the last financial year (ending March 2010) by fluke.

Lotter explained that the company decided a few years ago that more emphasis had to be placed on the retention and development of skills.

Because of the changing marketing conditions, it realized that it should focus closer on the potential of the service market.

Asked about the ability to stay pro-active and maintain the competitive edge in manufacturing world-class products, Lotter said the company actively participated in the export market.

Thereby it maintains close links with its export partners and modernizes the product constantly to achieve continuous improvement and maximum client satisfaction.

Furthermore, John Thompson stayed loyal to its local client base and defended its home market jealously.

The quest for continuous improvement

"We also implemented processes of continuous improvement in every aspect of the business.

"John Thompson does not believe in any specific magic system that you can



Theo Lotter
Divisional Director

implement. We have developed our own internal system for continuous improvement," says Lotter.

It is an in-house management system that benefited from the rich inheritance of a former major shareholder, Rolls Royce.

"We had access to their systems and best practices and benefited from that exposure.

"More recently an international company, Alstom, was the controlling shareholder, and during that time, technology transfer including systems and best practices took place and was advantageous to local business," says Lotter.

Range... and changing lanes

John Thompson manufacture boilers, mainly for the industrial market, from very small one ton an hour-steam capacity right up to 350 ton an hour-water tube boilers for the petro chemical industry and the sugar industry.

The company also boasts a large service division which focuses on maintenance and upgrading services at power stations.

It has various long-term maintenance contracts with Eskom to ensure its boilers function at maximum capacity.

The sale of new boilers maintain a mainstay of the business, but revenue from the provision of maintenance and efficiency services have become very important.

"In the overall business, 50% of our income is generated by new boiler-sales,

and 50% from services. These services include repair, maintenance, upgrades and retrofits," says Lotter.

The company focuses on retention and development of skills. "It is critical that our people are well trained and up to date. We train artisans in-house continuously.

"We also have close relationships with universities and engineering faculties to ensure that our engineers are up to speed with the modern technologies," says Lotter.

There is an in-house training centre providing specialist and advanced education on boiler schemes, for John Thompson-employees as well as external customers.

Recently, massive pressure has been exerted on the power generation infrastructure to sustain better maintenance requirements on power station boilers, a change that has benefited John Thompson.

The installed fleet of boilers in Southern Africa is ageing, and therefore with greater maintenance requirements burdening certain companies, these companies have opted to focus on their core business.

There is a greater move to outsourcing repairs and maintenance services, which have created an even bigger service market for John Thompson.

To effectively execute on its service delivery the company has factory trained technicians based in Cape Town, Johannesburg, Durban, Witbank and Port Elizabeth to provide a national network of service for all aspects of boiler combustion – electrical, coal, oil, gas and mixed fuel.

Lastly, the company had to grow and expand its export market. That is because the local market is not big enough to sustain a competitive, manufacturing facility like John Thompson has.

Enlarging its international footprint

The African market provides 40% of John Thompson's export market. Another 40% of the purchases is done by the Asian market.

Indonesia is the single biggest market in that region. The rest of the world provides the additional 20%.

The company sold three hundred boilers to Indonesia in the past five years.

"We visit our markets on a regular basis, and our technical employees are constantly travelling. We focus on markets where we see

growth and where there are requirements for installation, like Indonesia."

John Thompson is keen to expand its footprint into Africa, with development capacity in Mozambique and Zambia, and the possibility of growth in Zimbabwe within the next three years.

"We obviously track the industries that we service, like the beverages industry.

"They move into the growing economies and evolving markets first.

"If there is growth, they will set up a plant. We become aware of that and follow the growth potential.

"There has been growth in the African economies the past few years, from a low base. But that is good news for us," says Lotter.

Key ingredients of success

Quality is one of the cornerstones of the successful undefeated 'innings' of 75 by John Thompson. It is closing in on a century, and Lotter attributes it to the adaptability of the company.

"We are flexible in terms of meeting customers' requirements.

"Also, we are aware of the need to remain price competitive while also being sensitive to volatility and exchange rates," he says.

Leadership has contributed to the continued excellence of the company.

The management invests in the 2000 workers through continuous appropriate training, while also ensuring that they are paid market-related salaries.

We advocate individual freedom, and stimulate creativity by allowing room for new ideas.

Most of the workers have reacted positively to our managerial style.

Many employees boast the 25- and 30-year certificates for service to John Thompson as a testimony to enjoyment of their 8-to-5 experience.

Clean and green

The success of the company flows from its vision to strategise and forecast market needs.

"Our forward planning is driven by fuel and there are three factors, fuel availability, fuel quality and the costs of the different fuels.

"And our ability to forecast in which way the market will move and to successfully align with that, is critical," says Lotter.

The use of electricity has become risky, both in terms of cost and questions about availability. The cost of oil has risen sharply.

Therefore the coal-fired boiler remains the most viable option for steam demands greater than 1000kg/hr and basically the only option for demands greater than 3 000kg/hr.

With its new range of coal fired boilers the company has managed to achieve savings and reduced levels of emissions considered impossible a few years ago.

A lot of emphasis will be placed on renewable energy resources in the future. His belief is that the clean solution will be the winning solution.

There will be some utilisation biomass-firing such as wood and waste products, but in South Africa there is a limited supply of that.

In the medium- and long term, the only sustainable renewable source will be solar.

It will never completely replace other fuels, but it will contribute to reduced emissions.

John Thompson has been a pioneer in implementing technology by burning bagasse – waste sugar cane – as a fuel to supplement coal, says Lotter.

Challenges and future expansion

The major challenge for 2011 is to stay focused and to grow the business locally, as well as to enter into new export markets, says Lotter.

John Thompson would like to increase and accelerate research and development of new products as well as its services-sector.

The company is keen to grow the After Sales and Service Business and focus on key international customers in terms of new boiler plant solutions for the export market.

Lotter also foresees some exciting changes in the energy market going forward, possibly more than has been witnessed for years.

One of these will be the clean solutions to existing installations. This will include upgrading and installation of new environmental equipment to improve emissions at existing boiler installations.

