

## Choosing The Best Steam Boiler For Your Needs

With so many types and makes of steam boilers on the market, from electrode to gas, diesel or coal-fired options, it's difficult to know which one is best for your specific requirements. Given the safety issues of operating steam boilers, the capital outlay required and the running and maintenance costs, it's important to understand your options before making a selection.

Lionel Maasdorp, General Manager at Allmech, leading South African manufacturer of boilers and supplier of water treatment components, says that the starting point is to understand how much steam your application requires. "Our recommendation is that if you need anything less than a tonne, your best bet is an electrode boiler," he says. "If it's not an option for you – for example if there is no electric power supply – you can look to diesel or gas-powered options. For applications that require more than five tonnes of steam, you need to look at coal-fired or heavy furnace oil boilers."

Another important consideration is whether your steam requirement is for a constant flow, or if you're working in a batch processing environment. For example, Maasdorp says that one of Allmech's clients in the glass manufacturing industry needed a low average steam generating capacity, but when they looked into the production process, the company realised that significant steam was required at specific intervals. This necessitated a bigger boiler size.

On the other hand, a bakery client was able to cut costs substantially by moving away from diesel-fired boilers to electrode boilers because the maintenance and servicing requirements were much lower. "Electrode boilers are cleaner and don't require as much space (or fuel storage space), and are quicker to reach temperature," says Maasdorp. "They have a lower carbon footprint and only require operator input to switch on and off, rather than requiring two to three people to operate at all times, like a coal-fired boiler. They were thus the perfect choice for the bakery application."

Beyond size and initial cost, companies also need to consider a boiler's "life cost" – how much will it cost to run, service and repair. "Ask about the warranty on the boiler, and find out about whether the company you are purchasing from is able to undertake servicing and supply replacement parts if required," Maasdorp advises. "Check that you are buying from a reputable supplier with a good track record, who is able to help

with a solution for your specific requirements. When it comes to boilers, there is no such thing as a one-size-fits-all product. Safety is paramount. Look at certification and accreditation. For example, all our boilers are certified to UK BSEN12953 and SANS 347 standards.”

An added benefit for Allmech customers is that the company operates a water treatment division and is thus able to supply a comprehensive range of products and services, from the boilers themselves to the valves, chemicals and water softeners required. “We look at the whole picture before recommending a boiler,” says Maasdorp. “We can supply anything from a 12kW element boiler to a 2 500kW electrode option.”

Allmech supplies boilers throughout South Africa to southern Africa and beyond, with installations in eSwatini, Mauritius, the DRC, Zambia and Saudi Arabia, among other places. The company will be exhibiting at The Water Show Africa 2020, running from 31 March to 1 April at the Sandton Convention Centre. “We hope visitors will stop at our stand – we’re more than happy to answer any questions around selecting boilers, water treatment requirements, or any other boiler and water treatment related queries,” Maasdorp concludes.