



CONTRACT REPORT



Customer:

Chemical plant (Marshal Isotop)

Boiler Type

Steam Boiler - 2 x 4Ton/Hr

Fuel Fired:

Natural Gas

Fuel Saving:

Fuel input to steam ratio improved by 20%

Tech Centre

MELKAM GROUP Ltd.



On this site our technology centre MELKAM have upgraded the burners on 2 x 20+ years old 4 T/hr steam boilers. The existing burners could only fire the boiler at max. 3 T/hr steam output, so both boilers had to be on-line to meet the steam demand. Operation was done normally with one leading boiler and with a manual change over.

The old burners were running on heavy fuel oil, however it was quite difficult with a lot of operating issues, inefficient running, dark smoke exhaust from time to time and unexpected shut downs due to bad flame stability. These issues and environmental reasons prompted the client to move to natural gas fuel and replace the burners to solve the multiple problems they were experiencing not just with combustion, high running costs, but also on the control/remote monitoring aspect.

Project Results:

- a. Using our superior flame characteristics within the burner meant the full boiler steam output could be achieved, it is 25% more compared to the old burner.
- b. Full load achieved by using 1 boiler only as apposed to 2. Boiler Number 2 is now only used as a backup.
- c. Fuel consumption BTU (heat input) / T/hr of steam has reduced by almost **20% - huge fuel savings achieved.**
 - i. Substantial O₂/excess air reduction and increased turndown ratio.
 - ii. Set point control to 0.1 bar/1psi accuracy.
- d. **System has been running 6 months with no faults at all!!**



Before



After

For more information on Limpsfield burner range, please do not hesitate to contact us.

Limpsfield Website: www.limpsfield.co.uk
Tel: 00 44(0)1959 576 633

Melkam: www.melkam.co.il
Tel: +972-4-6213515

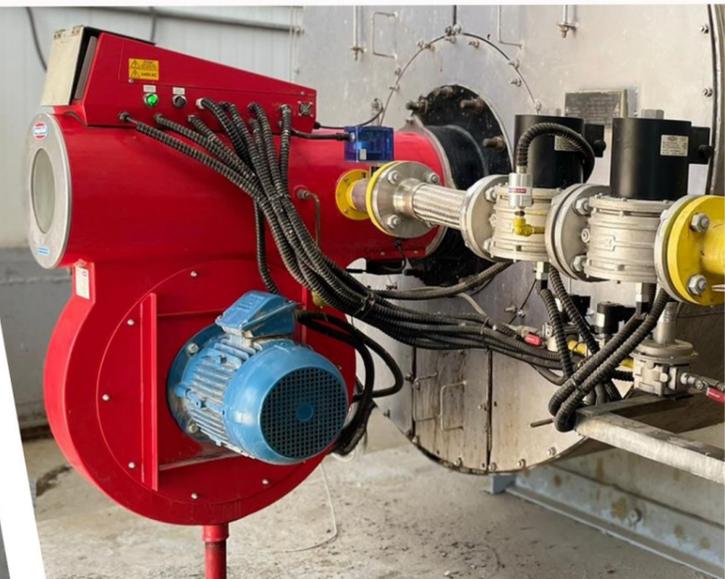
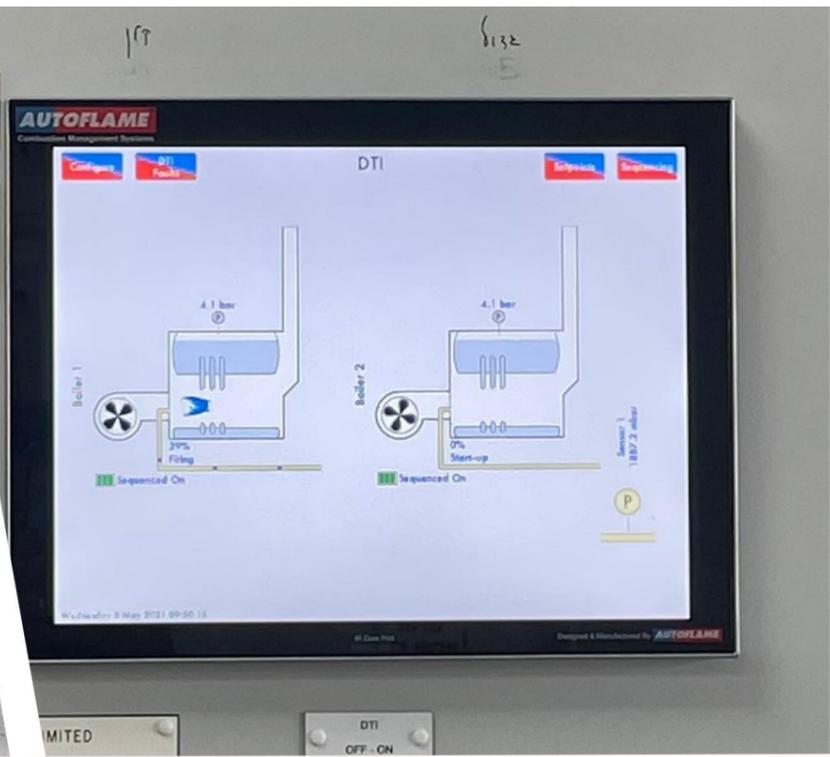


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The customer has had no boiler management system and thus the Autoflame DTI (Data Transfer Interface) was installed to allow full boiler management, remote control (via Ethernet and Modbus), history log and also the monitor of the inlet NG pressure to site, which is a new feature of the Autoflame Mk8 DTI unit.

The client is extremely satisfied with the products and the installation and services that MELKAM provided and now allows for other potential new clients to also look at the site as a great reference install.



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