

Case Study



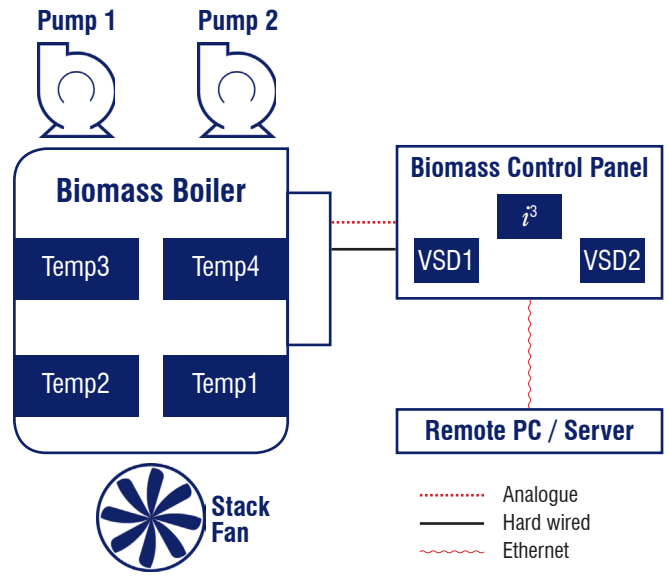
*i*³ Intelligent Controller

Biomass Solution



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- Application:** Biomass boiler control system
- Equipment:** IMO i³ and iDrive VSD's, remote (thermocouple) temperature probes, remote pumps and exhaust fans
- I/O Count:** Panel and Field based
- Special Note:** The Biomass boilers are available with a variety of control options. The i³ is pre-programmed and functionality commissioned as required
- Requirement:** Standalone control of state-of-the-art Biomass boiler, capable of operating in environment of dust and fluctuating temperatures



The OEM had a requirement for a control system capable of operating as 'standalone' or as part of a networked system, where remote monitoring/support could be offered. The IMO i³ range of Integrated Controller easily satisfies this requirement, with its easy to use programming software and remote connectivity packages. The IMO solution is the solution of choice for OEM's.

The 4 off type K temperature sensors are connected to an IMO 4 channel thermocouple module (IOS/M04ITX-D1) and Fan 1 and Pump 1 are connected to the VSD's. Pump 2 is DOL. All IO are controlled by the i³: depending upon the values of T1 to T4, Fan 1 and Pump 1 speeds are adjusted as required to provide optimum performance of the Boiler. Likewise, Pump 2 is operated as required.

All performance data is stored on the i³ Micro SD card, for easy analysis of performance. As an option, the data can be transferred to a PC, enabling the Boiler to be remotely monitored and supported.

"Prior to IMO, we had tried several PLC and HMI combinations, but none proved able to withstand the operating conditions that we regularly encounter. In my opinion, the IMO i³ is head and shoulders above any other PLC/HMI device on the market. We now offer 'off the shelf' solutions to suit a variety of requirements, which require minimal additional engineering input."

Testimonial from End User

"With the clearly laid out screens, commissioning of the boiler was very easily achieved and day to day operation is easily achieved with the simple control interface of the i³"

Testimonial from Technical Director, Integrator

