Laundry Economiser

Case Study

TO UNDERSTAND

- The customer, a national laundry operator with two main sites, wanted to tackle this inefficiency head-on. Their goal was to reduce gas consumption and operational costs while supporting corporate sustainability targets focused on carbon reduction and environmental reporting.
- The customer's facilities included:
  - **Two laundry sites** operating **three boilers in total** (two on one site, one on another).
  - A strong internal sustainability mandate.
  - A requirement for technical reliability, certification, and safety compliance due to high system pressures (tested to 17.5 Bar).
- They needed a trusted engineering partner who could provide cost-competitive, compliant, and fully supported retrofit solutions without disrupting operations.

TO SOLVE

- Turnbull & Scott proposed the supply and installation of three flue gas economisers, complete with transition ductwork, to recover waste heat from each boiler's exhaust.
- The project scope included:
  - **Engineering and fabrication** of economisers rated to the customer's pressure and temperature specifications.
  - **Integration with existing boiler infrastructure,** allowing recovered heat to pre-warm process water for laundry operations.
  - Design for **retrofit** compatibility, ensuring minimal downtime and maximum reuse of existing plant layout.
  - Certification and testing to industry standards (12 Bar design / 17.5 Bar hydrotest).

TO DELIVER

- Project delivery was structured in phases:
  - **Phase 1** acted as a pilot installation at one site, used to validate performance and ROI.
  - **Phase 2** would extend to the remaining boilers following internal review and budget confirmation.
- Throughout the process, our technical and projects teams worked closely with the customer's engineering and operations managers to provide detailed documentation, drawings, and safety data. Timely communication was critical to support their internal approval cycles.

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