

engineered efficiency

www.eng-eta.com.au

Ph: 08 9467 6382

“Efficiency Through Analysis”

Helping Australian companies streamline their processes and drive down costs.

Case Study – Process water heating by waste heat recovery

Engineered Efficiency recently completed the design and manufacture of 2 heating skids for the Northern Minerals Browns Range Project.



Factory testing one of the skids prior to despatch.

The rigs will recover heat from the diesel fuelled power generator cooling water systems. The

cooling water from the generators is pumped through a plate heat exchanger on the skids where it heats process water that is used in the CCD and Leach circuits. Our system design means that the operation of the gensets are unaffected by the installation.

The system features a recirculation pump with an integrated VSD and controller, which means the process water outlet temperature is controlled directly without the need for any PLC or DCS integration.

Although they look small, each skid can recover over 200kW of heat from the generator cooling water system. Based on projected demand, the heat recovered annually by the skids would require approximately \$200,000 of diesel to generate. This cost saving means that the capital cost of the heat recovery skids will be paid back within weeks.

About Us

Engineered Efficiency is a Western Australian business focussed on helping small to medium companies streamline their production and maintenance processes and reduce input costs from utilities and reagents. We do this through working closely with our customers to understand their business needs and processes and apply our experience and knowledge to provide practical and fit-for-purpose solutions.



Our Managing Director, Jon Langford, has over 20 years experience in design, construction and maintenance of process plants and commercial buildings. Jon started Altrum Pty Ltd in 2002, providing process engineering, chemical manufacturing and storage, and heat transfer solutions across Australia.

Jeff Hughes Director, Mechanical and Projects, is a mechanical engineer with over 20 years of experience on projects for the mineral processing, utilities and chemical industries. He has extensive experience managing multidiscipline engineering teams on all phases of projects from scoping studies through to construction and commissioning.