



Alpha-Rowen Ltd

ABOUT THE COMPANY

Based in the heart of the Black Country, Alpha-Rowen provide austempering, oil hardening and stress relieving services to a variety of metal industries. The company employ 15 full time members of staff. 90% of production output is attributed to austempering, and 10% to oil hardening. As for the primary operation (austempering), steel is heated to between 820-880°C to change its structure, the metal is then quenched in nitrate salt baths and held at a constant elevated temperature to achieve the desired material properties.

WHY DID THEY WANT TO PARTICIPATE IN THE PROGRAMME?

Alpha-Rowen is an energy intensive business and so wished to further improve the energy efficiency of their site. This would reduce energy consumption and ultimately costs to the business.

HOW WERE RISING ENERGY COSTS IMPACTING THE BUSINESS?

Energy is one of the main costs to the business. The processes are hugely energy-intensive, and with gas prices rising six-fold the viability of the business was in doubt.

WHAT IS THE POSSIBLE IMPACT OF IMPLEMENTING THE RECOMMENDATIONS FROM THE ASSESSMENT?

As a result of optimising furnace burner control, Alpha-Rowen expect to save 245,600 kWh of gas, 44.9 tonnes CO₂e (carbon dioxide equivalent) and over £40,000 per annum. Via reconfiguration of the a M&T system, Alpha-Rowen expect to save 38,200 kWh of electricity, 8.6 tonnes CO₂e and almost £15,000 per annum. In total the expected annual savings amount to 283,800 kWh, 53.5 tonnes CO₂e and circa £55,000.

"I was delighted by the depth of insights gained from the free business energy assessment provided by the Black Country delivery team (Pro Enviro) for the BEAS - Decarbonisation Net Zero Programme. The recommendations the assessment provided were not only practical but should also lead to a noticeable reduction in our energy costs. The added benefit is that the quantified opportunity it generated made grant applications far more straightforward"

Mike Leach, Managing
Director



Pro Enviro

ENGINEERING A GREENER WORLD