



Heat Treatments

QUALITY • SERVICE • EXPERTISE



Other Heat Treating Offerings HTL Fact Sheet 15

In conjunction with our specialised processing facilities covered on other Fact Sheets, we have also endeavoured to provide our industry with the broadest range of capability that we can. To this end we are able to offer the following services (amongst others). Should your solution not be immediately evident from the following, or our other Fact Sheets please get in touch with us and discuss your need as it may still be achievable even if not specifically mentioned.

► Bulk Processing

Production quantities of small components can be economically processed in our modern, controlled atmosphere Shaker Hearth Furnace. Capable of Carburising and Carbonitriding of low alloy or mild steels and neutral hardening of carbon, alloy or spring steels. Automation and unattended operation make this a very economical solution compared to batch processing.



Shaker Hearth Furnace

► General Heat Treating

We have a full range of general heat treating available; annealing, stress relieving, tempering, solution, precipitation, etc. Pictured to the right is our largest Bogie Hearth Furnace which has internal dimensions of 1100 x 1100 x 3000mm.



Solution Annealing of Stainless Steel tubes

► Non-Ferrous Heat Treating

HTL use a Dual Drop Bottom Oven specifically designed for the solution treatment of aluminium or copper alloys. Features include: computer control and data logging, hot or cold water quench, <5 second quench delay, approved to AMS-2750D class 2 for aircraft aluminium heat-treatment.



Dual Drop Bottom Aluminium Oven

► Cryogenics

Cryogenic tempering is a heat treatment in which the material is cooled to cryogenic temperatures as low as -185°C , usually using liquid nitrogen. It has been shown to increase strength and hardness in some circumstances, sometimes at the cost of toughness. Whilst the cryogenic process is a relatively new discovery, there is evidence that most tool steels will demonstrate an increase in wear resistance after cryogenic processing. This treatment is more suitable for tool steels, high-carbon and/or high-chromium steels where the absolute maximum possible wear resistance is the primary requirement.



Cryo Chamber with tempering ability