

# **Allweld** Marine & Industrial

*"The Best in the Weld"*

## **HEAT TREATMENT SERVICES**

Heat Treatment is the controlled heating and cooling of metals to alter their physical and mechanical state. Heat Treatment is often associated with increasing the strength of the material, but it can also be used to alter certain manufacturing objectives such as improving machining qualities, improving formability, restoring ductility after a cold working operation and reducing stresses created by hot processes such as welding. It is also regularly used to expand large metal parts to fit over interfering tolerances.

Allweld's Heat Treatment division complements our welding division offering with both on-site and workshop services. Localised heat treatment, stress relieving and pre-heat procedures can be designed to suit metallurgic requirements. as well as heat treatment procedures can be drafted to suit material requirements.

The division is headed by an internationally qualified heat treatment technician with almost 30 years experience within the petrochemical industry having operated in the USA, UK, Saudi Arabia, Malaysia, West, East and Southern Africa

The Heat Treatment Division equipment consists of a range of fully calibrated KVA and mains heat treatment machines with digital recorders, thermocouple leads, ceramic pad heaters and extension cables.

Reference customers include Milnerton Refinery, Cape Town Nuclear Power Station, the biggest cement manufacturer in South Africa and numerous general engineering companies throughout South Africa.



Setting up stress relieving



On soak at 615 Degrees for two hours



After stress relieving



50 AMP KVA's with build in programmers



Recorder with heat cycle in progress

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