

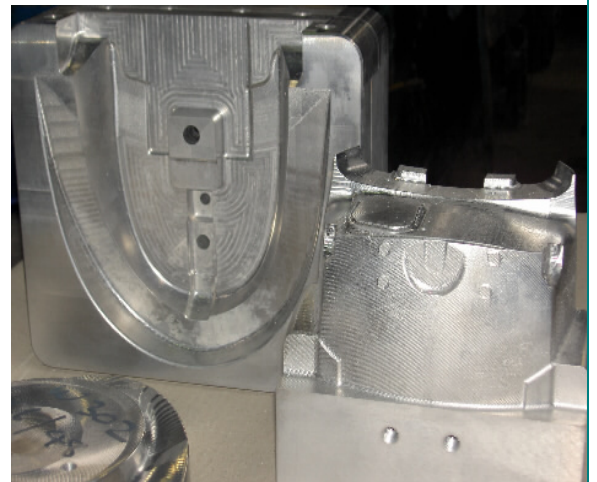


## Vacuum Hardening

Heat Treatment Australia has significant vacuum furnace processing facilities at our Brisbane branch. We currently have three furnaces on site which have a large load carrying capacity and operating temperatures of up to 1220°C. Our largest furnace has the capacity for positive quenching in the pressure range up to 5 bar which allows for the successful treatment of high speed steels. The vacuum process allows for the treatment of tool steels without surface oxidation. This leaves the surface of the tool free from flaking or discoloration and therefore reduces the finishing time of the toolmaker after heat treatment. Most steels which can be vacuum treated have lower distortion levels than conventional oil hardened tool steels which makes finish machining easier.

Many steels can be processed using the vacuum technologies that are available at Heat Treatment Australia. These include: -

Plastic mould steels	K600
Cold work steels	k100 K340
Hot work steels	W302 W321
High speed steels	S600 S500
Stainless Steels steels	N320 and 400 series
Stainless steels	300 series annealing



Heat Treatment Australia has an extensive library of technical literature from tool steel manufacturers to enable the correct processing and the maximum obtainable properties from each type of steel.

Please feel free to contact us to discuss your vacuum processing requirements.