



Amb. to 1000°C

- Designed to pre-warm and anneal Standard Platinum Resistance Thermometers
- Maintenance Free Use
- Automatic Temperature Cycling

The Annealing Furnace, model 414, is designed to heat, anneal and cool Standard Platinum Resistance Thermometers (SPRTs) prior to calibration. The temperature range of the Furnace, from ambient to 1000°C, enables all types of SPRTs to be annealed.

One of the duties of a calibration laboratory manager is to ensure that the SPRTs used in the Laboratory are fully annealed and still within specification.

Just using the thermometers within the laboratory will cause work-hardening to take place within the platinum coil of the SPRT.

Therefore regular annealing is required to ensure the SPRTs are in an ideal condition.

In 1990 the then new temperature scale ITS-90 specified the use of SPRTs up to the Silver point (961.78°C). At these temperatures quartz is very porous and in reducing atmospheres the SPRTs can quickly become contaminated. The Isotech Annealing Furnace offers a safe solution for those who wish to anneal SPRTs up to 1000°C.

To prevent contamination at high temperatures a constant flux of pre-heated air passes over the SPRTs being annealed. A comprehensive handbook accompanies the Furnace.

The furnace has been upgraded to benefit from the latest technology. Fitted with a crystal clear colour display the furnace is now fully programmable. Programs can be created for the cycling of SPRTs - with the ability to set the dwell time at the annealing temperature and heat up and cool down rates along with the number of temperature cycles. Multiple programs can be stored - each with up to 25 segments. The furnace heat up cool down history is logged and can be exported to a USB

drive. The PID control parameters are now dynamically optimised at different temperatures optimizing furnace stability.

This Furnace is installed easily and requires no maintenance.

# Furnaces Annealing



Model	414
Temperature Range	Ambient to 1000°C
Control	0.1°C Resolution. Gain Scheduling Action and Power Feedback
Furnace Depth	450mm
Diameter	50mm
Interfaces	Ethernet and USB Host

Power	110Vac 50/60Hz 2kW or 230Vac 50/60Hz 2kW
Dimensions	Height - 800mm Width - 400mm Depth - 620mm Weight - 40kg

**How to order**  
414 Annealing Furnace