

TC540 Heating Thermal Cabinet and TC550 Heating and Cooling Thermal Cabinet

Designed for testing samples under predefined temperature conditions, Lloyd Instruments offers a range of thermal cabinets, providing a temperature range from -70°C to 300°C within a large general purpose test area.

A high speed centrifugal fan provides rapid air movement within the cabinet allowing rapid temperature cycling with minimal temperature gradients. Visual inspection is made easy thanks to a large triple glazed observation panel.

For added versatility thermal cabinets are mounted on wheels, which run on an independent base unit for backwards and forwards movement. This enables normal ambient tests to be carried out by simply sliding the cabinet free from the machine's crosshead.

All thermal cabinets are controlled by a sophisticated temperature control unit, that is housed in a separate control console.

The cabinet exterior is a one piece shell manufactured from merlin grey leathergrain PVC pre-coated steel. The cabinet interior is constructed from fully seam welded high grade polished stainless steel and is completely separated from the exterior panels by a thermal break. This minimises conducted heat transfer. The hinged door

incorporates a high temperature replaceable silicone rubber gasket, which provides a vapour seal against the chamber liner.

A 75 mm (3 in) diameter port is fitted in a central position in the working area of both the top and bottom panels. In addition, the cabinet is provided with a 20 mm (0.8 in) diameter cable entry and pressure equalisation port.

On models fitted with a cooling option (TC550), the spent cooling gas is vented by an exhaust outlet at the rear of the cabinet, which is connected to a suitable hose for dispersion to atmosphere.

TC540 Heating Thermal Cabinets

The TC540 is a high precision heating thermal cabinet, supplied complete with loadcell rods and a base assembly to fit all Lloyd Instruments twin column materials testing machines.

TC550 Heating and Cooling Thermal Cabinets

The TC550 is a high precision heating and cooling thermal cabinet supplied complete with loadcell rods and a base assembly to fit all Lloyd Instruments twin column materials testing machines. The chamber makes use of liquid nitrogen for cooling, which is stored in an optional Dewar flask.

Specifications

	TC540	TC550
Temperature Range:	40°C to 300°C	-70°C to 300°C
Temperature Accuracy:	0.5°C	0.5°C
Heating Rate:	10°C/min	10°C/min
Cooling Medium:	Not applicable	Nitrogen
Internal Height:	600 mm (23.6 in)	600 mm (23.6 in)
Internal Width:	290 mm (11.4 in)	290 mm (11.4 in)
Internal Depth:	280 mm (11 in)	280 mm (11 in)
Base Assembly/Loadcell Rods:	Supplied	Supplied
Supply Voltage:	240V ac	240V ac



TC540 Cabinet



TC550 Cabinet with Temperature Control Unit

Ordering Information

Model	Part No	Description
TC540	01/1668	Heating thermal cabinet for use with Lloyd Instruments twin column test machines
TC550	01/1669	Heating and cooling thermal cabinet for use with Lloyd Instruments twin column machines
DFI	01/1820	Dewar flask 30 litre capacity



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