

Water Heater Test Facility

CAPABILITY SHEET · WHAT IT KEEPS, WHAT IT LOSES · HEAT KEPT AND HOT WATER GIVEN, MEASURED IN A ST

THE ONE IDEA

PRINCIPLE	What it keeps, what it loses.
WHY IT MATTERS	A storage water heater is rated by the heat it keeps and the hot water it gives. The loss is a small difference found over a long time, so the room and the inlet water are held steady and the energy is counted, not the dial.

THE FACILITY

STAND AND SUPPLY	A test stand that carries each heater as it is used, and a water supply with a reservoir, a pump and a conditioning loop that holds the inlet temperature steady.
DRAW-OFF	A valve and a flow meter that start, hold and stop each draw at the set flow, with the volume totalled and the outlet read fast.
ROOM	An ambient enclosure or room with conditioned, still air, with sensors where the method puts them, so that a draught cannot fake a loss.
SENSING AND COUNT	Probes at the inlet, the outlet and several heights in the cylinder, a power analyser that counts true energy through the thermostat cycling, and a logger that writes a record for every heater.

THE METHOD

ORDER	Specify, size, build, calibrate, run and prove. Showing that the room is still and that the inlet water holds steady are what a quick order skips.
LIMITS	Temperatures, flows, energies, times and sizes come from the method the customer names and from the heater, and are not printed here.

CONFIGURATIONS

PERFORMANCE BENCH	One heater on a stand with a conditioned supply, a draw-off control, an ambient enclosure and a logger, for energy, standing loss, hot water output, heating-up time and dial calibration.
MULTI-HEATER BAY	Several stands in one room on a shared conditioned supply and one logger, so that a batch is tested together and compared like with like.
SAFETY STATION	A guarded station for the leakage, high-voltage and thermal cut-out checks with the heater at working temperature, interlocked and apart from the performance bench.

STANDARDS & SCOPE

STANDARDS	Public references: IS 2082 for electric storage water heaters for household use, IEC 60379 for methods of measuring their performance, and IEC 60335-2-21 for their safety.
SCOPE BOUNDARY	It is the water heater test facility: not a heat exchanger test bench, not a flow calibration rig and not a climatic and environmental test chamber.
STATUS	Neometrix engineers water heater test facilities to order, and no delivered water heater test facility is claimed.

DEFENCE PROGRAMMES DESK

sales@neometrixgroup.com · +91 7777 876 876 · neometrixgroup.com
Neometrix Defence Limited · E-148, Sector 63, Noida, Uttar Pradesh, India