

ENJOY A GREENER CLEANER & SAFER WORKING ENVIRONMENT WITH THE GT65 AIR STREAM CHILLER



REDUCE PRECIOUS TEST HANDLER DOWN TIME, SAY NO TO LN₂



- High running cost
- Evaporation wastage
- Vacuum pipes & hoses replacement
- Hazardous O.D.H (low Oxygen level)
- Icing, wet floor
- Cylinders re-filling, shifting, rental & storage

COMPARISON OF TEST HANDLER

Cooling rate required inside handler test compartment from +100°C to -45°C
 Temperature distribution (Pre-cooling, I/O & Test sites)
 Temperature fluctuation (over time)
 Temperature changes at Test Contact Surface
 Dimensions (Model GT65-2D)
 Interface & Controlled by handler
 Continuous test between defrost
 Temperature distribution
 Potention hazards (Oxygen Deficiency Hazard - ODH)
 Wastage of LN₂ in storage due to vaporization
 Return of Investment (ROI)

LN₂ in PLC

≥3°C/min
 ±3°C
 ±2°C
 10°C max
 ≈Φ800 x 1800 (H)
 Yes
 6 ~ 36 hours
 ±3°C
 Yes
 Yes, ~30%
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GT Performance

≥3°C/min (lowest to -75°C)
 <±3°C
 <±2°C
 10°C max
 700 x 700 x 1900 (H)
 Yes
 **up to 48 - 72 hours
 <±3°C
 No
 N.A.
 Within 18 months

The GT-65 Air Stream Chiller is a 2 stage chiller designed for the control of environmental temperatures within an enclosed area. It is able to cool a designated area of temperatures down to -55oC with a cooling rate of at least 3oC/min. There are a number of industrial applications that can utilize this chiller, especially in the Semiconductor, Testing, Medical and Life Sciences industries.

Customization of the GT-65 chiller is often needed to match up with the compartment that requires cooling. From our experience, tests are usually conducted to find out the compatibility of both sets of equipment. Our team of Engineers would be able to assist you in such an evaluation to place you in a better position to assess the viability of this Engineering Solution we are presenting. Do contact us for more details for the conducting of these tests.

TECHNICAL SPECIFICATION FOR GT65-2D

Construction	Heavy gauge galvanized steel plate with powder coating (Beige) with continuous welded Swivel casters
External Dimensions	W700 x D700 x 1900 MM
Temperature Range	-65°C to + 30°C
Control Accuracy	±3.0°C @ -45°C
Temperature Ramp Rate	≥ 3°C/min from +100°C to -45°C (Average values without heat load)
Control System	Program logic controller (PLC) with operator keypad at front machine will be interfaced to the handler. When activated during the cooling cycle, cool air will be driven into the pre-cool test compartments.
Nitrogen / Dry Air Atmosphere	c/w Purge flow meter, Solenoid valve, Pressure regulator etc.
Defrosting	Approx. 48 hours continuous run (depends on handler and the ambient condition)**
Safety	Earth fault relay, MCB's protection Over temperature protection with audio visual alarm Overload protection for fan motors
Temperature Sensor	Type 'T' Thermocouple
Defrost Heater	By electrical heater
Noise	65 db(A) measured at 1m from the front in a non-reverberating room
Refrigeration system	CFC free refrigerants & additives Water-cooled condenser Patented "deep cool" air ducting
Air Hose	2 inches flexible hoses for cool air delivery with distance up to 1.6 meters Stainless steel air channels inside handler Flexible steel exterior shroud
Power	415 Vac , 3-Phase, 50 Hz, 4.5 KVA (average 3.6 KVA)
Cooling Water	18-20°C chilled water with a flowrate of 30L/min OR Air-cooled (depending on the facilities available on site)

