Perfect Blend of Quality & Technology

THERMAL SHOCK CHAMBER

TEMP. RANGE
+200C TO -80C

FROST FREE
(VERTICAL)

ECO FRIENDLY
CFC FREE

S.R LAB INSTRUMENTS

G-16, M.K. INDUSTRIAL PREMISES CO-OP. SOC. LTD.SONAWALA " X " ROAD NO. 2,
GOREGAON (EAST), MUMBAI - 400 063. (INDIA)
TEL.: 022 - 2685 8753, FAX.: 022 - 2685 8362.
Email:srlabinstruments@vsnl.net

THERMAL SHOCK CHAMBER

Application :

Thermal Shock Chamber are designed for air-to-air thermal shock tests, to test components or equipment automatically submitting them to rapid temp. changes & are mainly used in spare research programs, Defense laboratories, Testing laboratories etc.

Construction :

The Chamber has a vertical design, the hot cabinet located over the cold one, fabricated on heavy angular structure with outer construction of CRCA / MS sheets with non-contaminent epoxy powder coated, Interior & the basket are of AISI 304 S S two individual doors fitted with sillion gasket for cooling chamber & heating chamber to avoid temp. losses.

Air Circulation :

Forced air circulation is provided within each chamber which ensures uniform temperatures, the fans are stopped automatically during the baskets transfer to reduce interaction between the cabinets.

Heating System :

Imported Encolite heaters provides heating for the hot chamber .

Refrigeration Systems :

Single stage compressor for temp. up to -20°C / -35°C & two to three stage compressor for temp. up to -40°C / -80°C, with cascade system, cooling coils, condensing coils, Low pressure / High pressure cut off, oil separators , fan motor, Dryers, filters, Headers, Copper coiling outside as well as inside the chamber etc,

Refrigerant :

CFC Free 134 for the first stage & CFC free SUVA - 95 for the second & third stages.

Working :

A pneumatic drive passes the basket upside & down between the two cabinets after the regular interval fixed in the system.

Specification :

Cold Chamber Temp. Range : -20°C / -35°C / -40°C /-80°C.
Accuracy : +/- 1°C.
Hot Chamber Temp. Range : + 200°C
Accuracy : +/- 1°C
Chamber Inner Dimensions : 30W x 30D x 20H cms.
Transfer Time : 30/60 seconds.
Operating Voltage : 230V AC / 440V 3 phase
Temp. Control : PID Temp. controller for Hot chamber, Cold Chamber & Cascade system.

Optional :

Microprocessor based PID temp. control with printer interface
GMP Model complete S S unit.

Safety Features :

Circuit breakers & cutouts for over & under temp. conditions. HRC fuses for compressors, Heaters & Mains

Special Care :

To be kept at a temp. of 25°C, +-2°C & servo controlled voltage stabilizer is recommended in case of voltage fluctuations