SANSEL®

TEMPERATURE CALIBRATOR
MODEL : TCAL 1500 / 1500

For Inspection of

Thermometers

Inspection is performed by comparison of the temperature measured by test piece and the block temperature indicated by the calibrator or compression with master thermocouple reading.

Thermocouples

A separate temperature measuring instruments is required for inspection. The inspection is performed by comparison of the temperature indicated on the external measuring instruments with the reference temperature of the calibrator.

INTRODUCTION

Exact temperature measurements and monitoring are must in application crucial to operational safety of machinery and industrial installations. Regular inspection of the temperature sensors used in these applications is absolutely essential for economical and technical-safety reason and is already prescribed as obligatory in many sectors.

"SANSEL" Series TCAL 1500 / 1500 is a Micro controller Based Precision "Dry Block" Temperature Calibrators Generates True Reference Temperature. The Temperature Controller of the Calibrators Uses a Auto Tune PID Controller Algorithm. This Response Closely Follows the Heating Curve of an Actual Thermal System. Place the Sensor to be Calibrated in the Calibrator.

Set the Temperature from 4.3 inch Touch screen . Both True and set Temperature can be Read. When Stabilization Occurs, Simply Read the Temperature and Re- Calibrate the Process System or sensor. TCAL 1500 / 1500 Calibrator may be Used for Calibration of all Type of temperature sensors above 500°C to 1500°C range - K, R, S, B, etc.,.

Applications

☐ Energy - Production and Energy -Distribution Sectors
☐ Glass, Ceramic, Semi Conductor Industries
☐ Steel Material Processing Industries
☐ Calibrators laboratories etc.,.

The temperature calibrators and calibration bath are already a part of the Standard equipment of the above listed sectors.

FEATURES

- ✓ Range from 500 to 1500°C
- ✓ Resolution 0.1°C
- ✓ Stability to ±0.5°C
- ✓ Accuracy better than 0.5% of reading
- ✓ PC Interface RS 485 (optional)

- ✓ No Liquids, Safe dry Calibration
- ✓ Temperature Switch Test
- ✓ NABL Traceable Calibration Certificate
- ✓ Semi Portable & Rugged

Technical Specifications

Model	TCAL 1500 / 1500
Temperature Range	500 °C to 1500 °C
Bath Temperature Control	Digital Temperature Controller with Auto Tune PID Algorithm
Resolution	0.1°C
Stability	± 0.5°C
Accuracy	better than ± 0.5 % of reading
Display	4.3 inch True TFT DISPLAY with touch screen
Temperature readout	°C / °F
Switch test	Provided
Heating time (to max)	60 Minutes to 3 ½ Hrs (Amb. to 1500 °C)
Inter changeable Thermo Well	6,8,10,14,18,22, in mm (Approx)
Stabilization time	30 minutes
Well Dimension(dia. X depth)	70 x 215 mm
PC Interface	RS 485 (optional)
Power supply	110V AC or 230V AC 50/60Hz
Power consumption	3500 VA
Dimension (W*D*H)	520 L X 410 W X 625 H (mm)
Instrument Weight	48 kg (without well insert) (Approx.)

Note: Due to continuous product improvements, Published specifications may change with out notice

Standard Delivery

1. Basic Instrument
2. Spare fuses
3. Cable for Thermostat Switch Test
4. Tool for Insertion Tube
5. Instruction manual
6. Mains card
7. Traceable calibration certificate

Optional

1. 110V AC 60Hz Power supply
2. Reference Standard Thermocouple
3. NABL Certificate
4. Additional Thermowells / Insertion Tubes (as per customer requirements)