



Belz Training Institute

"BELZ" provides training on International Standard ISO/IEC:17025 : 2017 & technical competency programs.
"BELZ" supports testing and calibration laboratories for Accreditation as per National/International standards



Belz Calibration Laboratory

One of the leading independent laboratory providing quality calibration services for testing & measuring instruments. The Company caters to different industries like Automobile, Pharmaceutical, Health care, Engineering, R&D, FMCG, Public Sector etc.



Automated Calibration Services

- ISO 17025 Complaint
- Fast Turnaround
- Audit Logs
- Due Date Reminders
- Data Integrity
- Paperless Operations

Accreditation

Belz calibration laboratory is accredited as per International Standard ISO/IEC: 17025 : 2017 by **NABL** (National Accreditation Board of Testing and Calibration Laboratories).



Received QCI Dr. S.K. Joshi, National Laboratory Excellence Award (3rd position) pan India basis in October 2022.

Calibration

"BELZ" Calibration facility meets the stringent requirements of International Standard ISO/IEC:17025 : 2017. High accuracy calibration equipments, trained personnel & strict environmental conditions are maintained to ensure low uncertainty of measurement

"BELZ" Calibration laboratory has strength of over 60 experienced & extensively trained engineers to provide competent & reliable calibration at laboratory or at customer's site.



Dimension



Torque/Force



Mass/Volume



Pressure



Electro-Technical



Thermal



Relative Humidity



High Current/Voltage



Energy/Power



Gas Flow



Density



Liquid Flow

Belz Instruments Pvt. Ltd.

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Belz Instruments Pvt. Ltd.

MANUFACTURER

- **Thermocouples**
- **Resistance Temperature Detectors (RTDS)**
- **Thermocouples Wires & Cables**
- **Process Control Instruments**
- **UPS & Battery Charger**
- **Laboratory Equipment**

SERVICES

- **Calibration** • **HVAC Validation** • **Testing** • **Training** • **Consultancy**



Building Competencies by Technology

Belz Instruments (P) Ltd.

Established in the year 1995 we have built a legacy by providing quality products, training, calibration & consultancy services. We have a core strength of 100+ Engineers, a 1000+ client base spread across the Indian subcontinent and the Middle East region.



Mr. Ashok Kumar Nehra, MD of the company receiving MSME National Award (1st prize) from Hon'ble Prime Minister of India Dr. Manmohan Singh.



CLIENTELE



Product Overview

Online UPS/ Battery Charger



Relative Humidity Generator / Calibration System

First indigenously developed RH Generator/ Calibrator with know-how from NPL (National Physical Laboratory), New Delhi.



Specification:

RH Range	10% to 95% RH	Stability	of the order of 20 minutes
Uniformity	+/- 1% RH	Technology	Two-Pressure Technique
		Carrier Gas	Nitrogen or Air

Cryo Bath 196
Range: -196°C to Ambient Temperature

The product has been developed with in-house R&D at Belz. The product is unique as it facilitates calibration over wide range of -196°C to Ambient, at very low cost.



Temperature Indicator and Controller



Temperature Sensors

A Thermocouple consists of two dissimilar metallic wires, the positive and the negative wire, which have a common junction at one end (i.e. Hot Junction). A difference of temperature, between hot junction and cold junction (i.e. free ends) of thermocouple legs produces thermoelectric voltage, the value of which depends upon the temperature difference between the hot junction and the cold junction.

APPLICATION

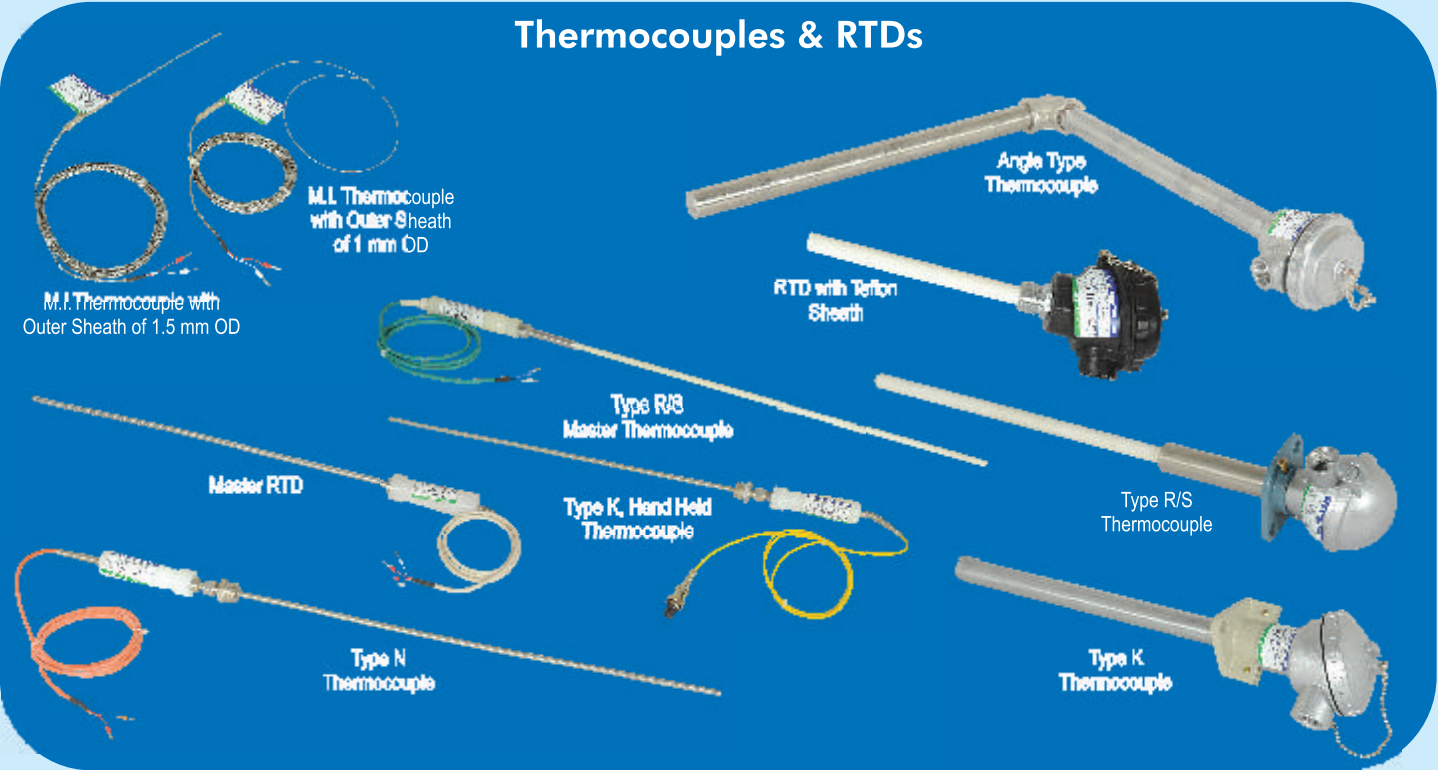
Thermocouples are used as sensing device for measuring controlling and recording temperature in the range -200°C to +1800°C. Thermocouples are being widely used in various industrial fields such as Chemicals, Petro-Chemicals, Fertilizers, Iron & Steel Non-Ferrous Metal, Glass, Cement and Refractory Factories, Nuclear & Thermal Power Generating Plants etc.

- STRAIGHT TYPE THERMOCOUPLE ASSEMBLIES
- ANGLE TYPE THERMOCOUPLE ASSEMBLIES
- COMMON THERMOCOUPLE TYPES:
 - TYPE 'K' (NiCr/Ni), TYPE (Fe/Ko), TYPE 'R' (Pt. Rh.13%/Pt)
 - TYPE 'S' (Pt. Rh.10%/Pt), Type 'N' (Nisil / Nicrosil)
- PROTECTING SHEATHS

The thermocouple element is protected by metallic or non-metallic protection sheaths. Proper selection of the outer sheath depends on the field conditions at site and the requirement of temperature and chemical aggression etc.

METALLIC PROTECTION TUBES

The metallic protection tubes are available in standard outer diameter of 22 mm & 2 mm thickness. However tubes with other outer diameter can also be provided on request.



Thermocouple Extension Wires / Compensating Cables

- PVC / PVC (Extrusion) •Fibreglass / Fibreglass silicone Impregnated •Asbestos / Asbestos •Teflon / Teflon •Neoprene / Butyl Rubber •Silicone / Silicone Rubber

Control / Armoured Cables

Control cables are made of Electrolytic grade copper bare or tinned with high grade PVC coating and are available in 0.5,0.75,1.0,1.5,2.5,4.0 and 6.0 sq mm conductor size. (Upto 1100 V grade conforming to IS 1554).

Belz Testing and Validation Services

Belz performs the HVAC validations as per ISO 14644, EUGMP, WHO Geneva, MHRA (European Countries) guidelines for all room classifications.

- Air velocity / Air change per hour test •Hepa filter Integrity test
- Air borne particle count test •Recovery test
- Air flow pattern test •Light Intensity measurement
- Sound level measurement •Temp & RH mapping
- Compressed Air Testing as per ISO-8573



HVAC Validation of Pharma Industries