



ACCURATE SENSING

Always...

STANDARD AND CUSTOMIZED SOLUTIONS FOR TEMPERATURE SENSORS

RTDs | THERMOCOUPLES | THERMOWELLS | COMP. CABLES
T+ RH TRANSMITTERS | FLOAT LEVEL SWITCHES



► ABOUT US

RAYSTEK PROCESS INSTRUMENTS LLP, an ISO 9001:2015 Certified Company is one of the leading manufacturers of High Quality Temperature Sensors. We produce RTDs, Thermocouples, Thermowells, Cables & Accessories.

RAYSTEK was incorporated in 1996 by our Founder, Director Mr. R. V. Patel. During 15 years of his services in the industry, he has sensed a strong requirement of good quality, custom-designed Temperature Sensors. He founded Rays with a passion to provide high quality sensors.



Over the years, we have grown our product portfolio and customer base with expanding our manufacturing & technical capabilities and maintaining product quality and a customer oriented business model. Now, we have in-house metal cutting, shaping, machining, welding and finishing capabilities. We design and machine our own fittings, cases and assemble all the different parts. These support us in maintaining competitive costs and controlling quality.

At present, we have State-of-the-Art manufacturing facility, Research & Development facility, Testing and Calibration Lab all under one roof. Till now, we have designed and manufactured thousands of sensors as per customer requirements with superior performance at a lowest price. We understand the value of repeat business. Today 60% of our total orders are repeat orders.

We are committed to provide total customer satisfaction by continual improvements in our Products, Processes and People.

► FACILITIES

Welding & Brazing

Oxy-Acetylene Set, TIG Welding Machines, Brazing Machine, Spot Welding Machine.

Machines

Manual Lathe Machines, Drill Machines, Cutting Machine, Grinding Machines, Polishing Machines, Milling Machine, Curing Oven, Labeling Machines, Laser Machines.

Testing & Calibration

Universal Calibrator, Insulation Resistance Tester, Calibration Baths (Oil & Dry) (Range: Ambient to 1200°C), Universal Digital Controllers, Digital Ohm Meter / Volt Meter, Digital Multimeters, Master Sensors, Mechanical Checks (Lengths, Vernier Calipers, Thread Gauges)



► WHY RAYSTEK ?

Best Quality Products

Whether the order is for export or local, there is only one quality which is the best we can offer. There is no second or cheap quality at Rays. Our product quality and finishing will remain same over the time period and orders.

No order is too Small or too Big for Us

Whether the order is for 1 nos. sensor or 1000 nos. sensors per month, we welcome you all and will provide you best of our services and support. Our manufacturing capabilities enable us to provide timely delivery of bulk quantity orders every time.

Substitute for Imported Sensors

With years of experience in sensor designing and manufacturing, we can design and offer substitute for almost any Imported sensor. Our sensors are designed according to Indian working conditions. They are more durable and competitive in price yet best in quality.

Quality Raw materials

We purchase best quality raw materials from trusted resources only. We work extensively on deciding, purchasing and checking the quality of each material we purchase. We design and machine our fittings & cases rather than use ready made products.

► OUR ESTEEMED CUSTOMERS



► INDUSTRIES WE SERVE



Chemicals & Fertilizers



Cement



Ceramic / Refractory



Food & Beverages



Glass



Heat Treatment Furnaces



Metal or Steel



Petrochemicals



Plastic & Packaging



Power



Road Construction Equipments



Textile

► OUR COMMITMENTS

- » Ensure that our products will perform faultlessly and safely.
- » Provide Highest Quality Products with on time delivery every time.
- » Encourage and reward individual and group achievement.
- » Give unparalleled support to every customer.
- » Maintain a safe and pleasant work environment.
- » Listen to one another, respond with integrity and fairness in our actions.
- » Address all the issues with a positive approach of finding solutions which are beyond customer expectations.
- » Keep ourselves updated with Changing Technologies and introduce them to upgrade our operations & environments.

► TEMPERATURE SENSOR TYPES

RTD Sensors (PT-100,PT-1000,PT-200, CU-50):

An RTD (Resistance Temperature Detector) works on the principle that the electrical resistance of a metal, typically platinum, increases predictably as its temperature rises. Known as a positive temperature coefficient (PTC). RTDs are generally used in Chemical, Pharmaceutical, Dairy, Food industries where accurate temperature measurement is required at low temperature.

Temperature Range: -200°C to +400°C

Thermistor Sensors/ NTCs :

Thermistor sensors work on the principle that the electrical resistance of a metal decreases predictably as its temperature rises leading to negative temperature coefficient (NTC). Thermistors are generally used in HVAC, Medical, Cold Storage and Consumer Electronics Industries.

Temperature Range: -50°C to +120°C

Thermocouple : T type (Copper/Constantan)

T type thermocouple is the best choice for measuring low temperatures. This thermocouple is highly stable and suitable for low-temperature applications in industries like Pharmaceutical, Food & Beverages, Cryogenics, Freezers & Chillers, Scientific Research. It consists of a positive leg made of Copper wire and a negative leg made of Constantan (Cu & Cu-Ni) alloy wire.

Temperature Range: -185°C to +300°C

Thermocouple : J type (Iron/Constantan)

J type thermocouple is a cost-effective temperature sensor made from Iron (positive) and Constantan (negative) wires. It is most commonly used in plastics, rubber, and food processing industries. Due to the oxidation (rusting) problems associated with the iron leg, care must be taken when choosing this type for use in oxidizing environments above 537 °C.

Temperature Range: 0°C to 700°C

Thermocouple : E type (Chromel/Constantan)

The type E thermocouple is composed of a positive leg of chromel (90%nickel/10%chromium) and a negative leg of constantan (45%nickel/55% copper). Type E sensors can be used in sub-zero, oxidizing or inert applications but should not be used in sulphurous, vacuum or low oxygen atmospheres.

Temperature Range: -200°C to 900°C

Thermocouple : K type (Chromel/Alumel)

K type thermocouple has a Chromel (90% nickel/10% copper) positive leg and an Alumel (95%nickel/ 5% manganese, aluminum and silicon) negative leg. K type thermocouple is most commonly used and has a wide temperature range of upto 1200°C.

Temperature Range: 0°C to 1200°C

Thermocouple : R/S/B type (Platinum/Rhodium)

R/S/B type thermocouples are made of precious metals like Platinum/Rhodium and very expensive compared to other thermocouples. These thermocouples have very higher temperature range and are widely used in blast furnaces, glass manufacturing plants, and high-temperature kilns.

Temperature Range: 0°C to 1700°C

Thermowell :

Thermowell is a mechanical device designed to protect temperature sensors from the damaging effects of corrosive media, high pressure and velocity in industrial applications. It acts as a protective barrier, allowing sensors to be replaced or calibrated without shutting down whole process or system.

► RTD Sensors (PT-100,PT-1000,PT-200, CU-50), NTC



Weatherproof RTD Sensor



Flamperooft RTD Sensor



Weatherproof RTD with N-U-N Extension



Teflon Coated RTD for Acid and Alkali Applications



Mineral Insulated RTD



Sanitary RTDs



RTD with Triclover Connection



Triclover RTD with KNE Head

► **RTD Sensors (PT-100,PT-1000,PT-200, CU-50), NTC**



All SS Flameproof RTD Sensor



All SS Weatherproof RTD Sensor



Food Penetration Probe



Duct Mount RTD For HVAC Industry



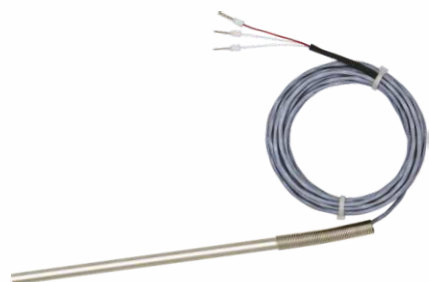
Bearing Temperature Detectors



RTDs for Jet, Jigger Dyeing Machines

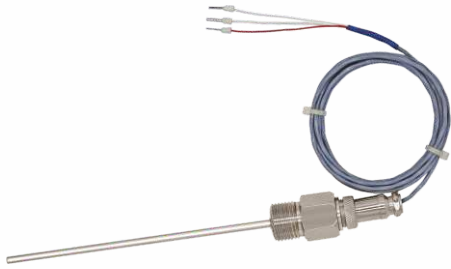


RTDs for Stenter, Printing Machines

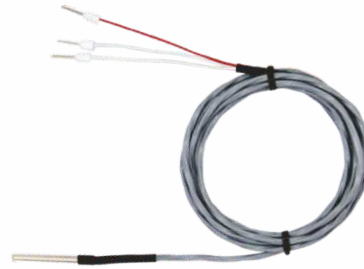


Transition Joint RTD Sensor

► RTD Sensors (PT-100,PT-1000,PT-200, CU-50), NTC



Sensor with Connector for Quick Disconnect



Miniature RTD for Deep Freezer or Lypholizer



RTD for Autoclave Validation



Autoclave RTD



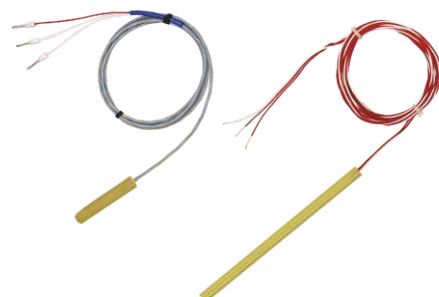
Stick On sensor for
Surface Temperature Measurement



Portable RTD Hand Probe



Validation Thermocouples / RTD



Stator Winding RTDs

► **RTD Sensors (PT-100,PT-1000,PT-200, CU-50), NTC**



Bearing Temperature Detectors



Bearing Temperature Detectors



RTD for Surface Temperature Measurement of roller



RTD for Calender, Zero-Zero Machine



J Shape RTD for Yarn Dyeing



NTC Sensor for Cooling Application



NTC Sensor for Cooling Application



Miniature NTC with Connector

► THERMOCOUPLE SENSORS



Mineral Insulated Thermocouple



Thermocouple For Boiler



**Ceramic Tube Thermocouple
for Temp. Upto 1600 C**



SiCTube Thermocouple



Thermocouple for Salt Bath



Angular Thermocouple for Molten Metals



MI Thermocouples for Tube Skin Temperature Measurement

► THERMOCOUPLE SENSORS



**Standard RTD / T/C for
High Temperature Applications**



**Thermocouple with Hardened Tip for
Abrasive Environment**



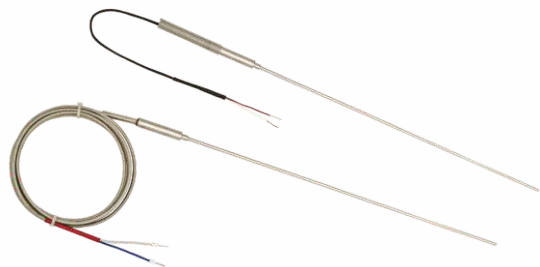
Thermocouple for Asphalt Plant



Thermocouple/ RTD for Asphalt Plant



MI Thermocouple with Connector



MI Thermocouple with Extension Cable

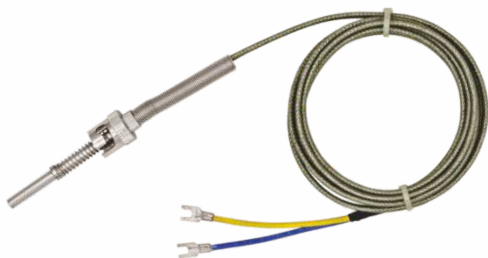


Hand Probe Thermocouple



MI Thermocouple for Furnace Validation

► THERMOCOUPLE SENSORS



Press Fit Bayonet Thermocouple



Spring Holder Thermocouple



L - Shape Spring Rotate Thermocouple



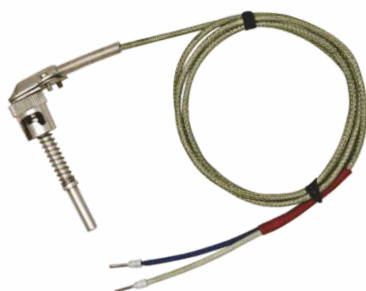
L - Shape Press Fit Bayonet Thermocouple



Reduced Tip Bayonet Thermocouple



Compression Spring Thermocouple



L - Shape Bayonet Thermocouple



SS Sleeve Bayonet Thermocouple

► THERMOCOUPLE SENSORS



Melt Bolt Thermocouples



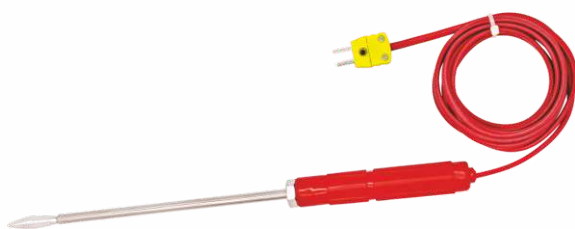
Washer/Ring Type Thermocouple



Surface Mount Thermocouple/ RTD



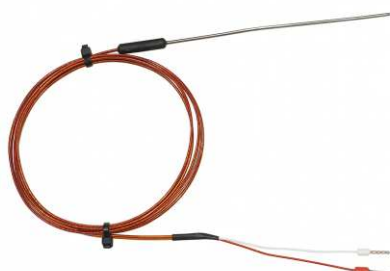
Bolt Type Thermocouple



**Leaf Type Hand Probe for
Surface Temperature Measurement**



Manifold Thermocouple/ RTD



MI Thermocouple for Hot Runner



Angular RTD for Dryers and Chillers

► THERMOWELLS



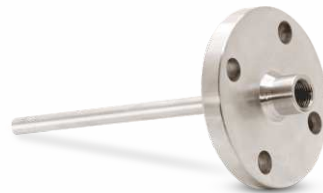
Fabricated T/W with Process Connection



Fast Response Stepped Bar Stock T/W



Bar Stock Tapered TIW



Flanged Thermowell



Socket-Weld/ Weld-in T/W



Sanitary T/W

► Float Level Switches



► T+ RH Transmitters



Dust Mount T+RH Transmitter
with Display



Duct Mount T+RH
Transmitter



Distance Mount T+RH Transmitter
with Display



Distance Mount T+RH
Transmitter



Wall Mount T+RH Transmitter
with Display



Wall Mount T+RH Transmitter

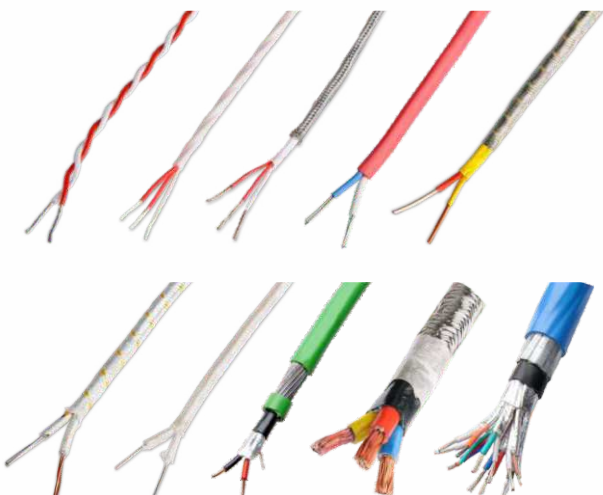


Wall Mount RH Sensor



T+RH Sensor for Sterilizer

► Cables



► Temperature Transmitter & Connectors



Exporting Countries...



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