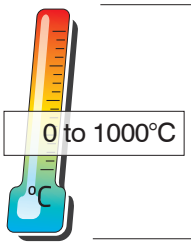


Thermocouple Standards
Platinum/Gold

- Pure Metal Construction
- Best Homogeneity
- Alternative to HTSPRTs

Since 1995 Isotech have been producing various designs of special Au/Pt, Pt/Pd, Pd/Au thermocouples for researchers. From our experience we can now offer the most popular of these, the Au/Pt thermocouple in a standard form.

All wires are 99.999+% pure and are fully annealed according to the recommendations of McLaren. Assembly also follows his prescriptions which have never been bettered.

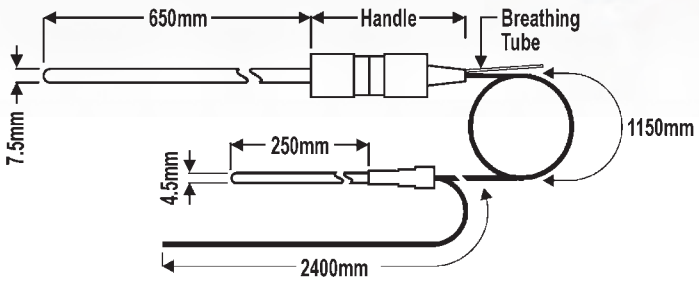
After final assembly and annealing the Au/Pt thermocouples will conform to IEC 62460, Edition 1 2008-07.

For the smallest uncertainties we calibrate the thermocouple at the Zinc, Aluminium and Silver Fixed Points.

We achieve these results because:

1. All materials are selected for their purity and high quality.
2. All parts are pre-aged and annealed prior to construction.
3. The construction allows for differential expansion of the Gold and the Platinum by having a coil of platinum bridge the two thermo elements at their measuring junction.
4. There are no joins between the measuring and reference junctions.
5. The reference junction is also researched and we use thermally pure copper wire of selected diameter which has been pre-annealed in inert gas to maintain the accuracy of the measuring junction.

Alternative to HTSPRTs
Construction allows for differential expansion
Accuracy of up to ±0.05°C



6. The reference junction needs to be placed in an accurate reference system such as a Water Triple Point Cell or an Isotech ice point reference.
7. An article describing in detail the construction, handling and operation of the thermocouple is provided free with each unit.

Temperature Range	0°C to 1000°C
Sheath materials	
Measuring Junction	Quartz
Reference Junction	Stainless Steel
Thermo-element Purities	
Platinum	99.999% Pure
Gold	99.999% Pure
Calibration Options	Isotech Traceable Calibration at Zinc, Aluminium and Silver Fixed Points. NPL: Fixed Point Calibration: Calibrated at Fixed Points of Zn, Al and Ag (UKAS)
	Uncertainty: 0 - 400°C ±0.07°C 400 - 1000°C ±0.05°C
Dimensions	Refer to diagram
Carrying Case	Included as standard

How to order

Model type: Au/Pt Thermocouple

Including emf vs. temperature traceable calibration certificate and carrying case.