

**24 Hour  
Helpline  
09890919191**

# Ajay Syscon Private Limited

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## Digital Pyrometer For Various Industries Tempstick 429

### STURDY, ACCURATE, EASY TO USE, PORTABLE & DEPENDABLE

The Tempstick 429 has evolved totally to suit a harsh and hostile industrial environment. It has proved to be the most dependable molten metal temperature measuring instrument when used with our BMD, Thermotips or Minitips for furnace, ladles and tundish in Foundries and Steel Plants.



#### For molten:

Steel  
Cast Iron  
Copper  
Brass  
Bronze  
Aluminium alloys  
Gold  
Silver

#### For Surface, Gas

Fertilizer  
Sugar  
Chemicals  
Cement  
Paper  
Heat Treatment

### FEATURES

- Easy to use, light weight, portable and rugged unit that survives the toughest conditions
- Plateau Detection Software
- Accuracy of  $\pm 1^{\circ}\text{C}$  due to its microprocessor based technology
- Overall system accuracy of  $\pm 3^{\circ}\text{C}$
- Rechargeable Nickel-Cadmium battery and automatic low battery indication
- Bright 0.6" digital display
- Automatic power shut-off
- Buzzer that indicates end of the measuring cycle
- No mechanical switches
- Can be used with both lance and probe attachments
- Last reading always remains in memory
- Choice of peak hold or tracking mode in 429 K
- Available with K or S/R/B thermocouples

## OPERATION

Specially designed for noble metal (S/R/B) type, the pyrometer from Ajay Syscon can take temperatures of molten steel, cast iron, copper, brass, bronze, aluminium, alloys etc.

As you dip the Thermocouple Tip in molten metal, the microprocessor reads the millivolts and mathematically converts it, to give you the temperature reading. The indicator lamps (LEDs) on the front panel indicate and sound a buzzer as the correct reading is displayed. This entire process completes within 3 to 5 seconds, after which the Thermocouple Tip can be withdrawn.

The microprocessor studies the temperature values and detects exact temperature of molten metal with its flat plateau detection method, thus rejecting variations due to slag temperature differentials, furnace hot spots, transient electrical spikes etc. When used with a permanent Marshall Probe (K-type), it is useful for applications for lower temperatures and can be used in Track/Peak Hold modes.

## APPLICATIONS

Model 429 S/R/B is used in Ferrous Foundries and Steel Plants. Model 429 K can be used with different types of probes in Non-Ferrous Foundries, Fertilizer, Sugar, Chemicals, Pharmaceuticals, Cement, Paper, Process Industries, Metal Processing and Heat Treatment shop.

## CONSUMABLES

Model 429 is used with Ajay Syscon's Minitips, Thermotips or BMD tips. The Minitips and Thermotips are expendable temperature sensors in cardboard tubes, whereas the BMD is a multiple dip type temperature sensor that can be reused for 6 to 8 readings in a slag free metal bath.

## TECHNICAL DATA

**Measuring range**  
540°C - 1750°C S/R/B  
0 - 1200°C "K"

**Operating temperature**  
0 - 50°C

**Accuracy of display**  
± 1°C

**Calibration**  
IPTS 68 or IPTS 48

**Linearisation**  
Over the entire measuring range

**Display**  
4 digits, 7 segment LED's  
Height - 0.6"

**Power supply**  
4 Ni/Cd Battery 1.2 V each  
Type 'AA'

**Indication of battery voltage**  
460 - 545  
460 indicates-charging needed  
545 indicates-fully charged

**Temp. Detection method**  
Flat Plateau - 429 R  
Peak Hold/Track - 429 K

**T/C element**  
Pt/Pt Rh 10%, 13%, 6/30%  
Cr / Al

**Response time**  
3 to 5 seconds for 429 S/R/B  
Approx. 30 seconds for 429 K

**Housing**  
Dust proof Aluminium  
housing with handle

**Automatic cold junction compensation**

**Weight with standard lance**  
2.3 kg

### Error Codes:

If T/C breaks during measurement, 9999 is displayed  
If flat plateau is not detected, 9001 is displayed  
If hardware problem occurs, 9002 is displayed  
In case of reverse input, 622 is displayed

All our products are certified to meet ISO/QS standards

*Specifications may change without prior notice due to continuous development.*