### Resistance Temperature Detectors (RTD's)

Resistance Temperature Detector's (RTD's) are constructed with a wire coil or a thin layer of metal to form a precision resistor. The resistance value changes very accurately and repeatedly in a positive direction when heated (Positive temperature coefficient). RTD assemblies can be used in a wide variety of configurations for all industries to give the highest accuracy of temperature measurement.

#### Advantages
- Most accurate
- Best stability
- Higher linearity
- Best interchangeability
- Wide temperature range

#### Disadvantages
- Current source required
- Smaller resistance change
- Low absolute resistance
- Self heating
- Higher sensor cost

#### Temperature Range
-260 to 850°C