

## F16 Specific Heat, Equivalent of Heat and Thermal Expansion



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### **Experiments:**

1. Specific heat of metal
2. Electrical equivalent of heat
3. Thermal expansion of metal

### **Specification:**

1. Dual thermometer x1
  1. Measure range: - 50°C ~ 1230°C (- 50°F~1999°F)
  2. Resolution:  $\pm 0.75\%$
  3. Dual function meter's display
  4. Measurement select 0.1° or 1°
  5. Sensor type : Thermocouple K(NiCr-NiAl)

6. Record Maximum. and minimum reading and data hold.
  7. RS-232/USB interface (optional)
  8. Size: 180x72x32mm
2. Aluminum experimental platform x1  
Aluminum alloy, a 3 D biconvex guide track ,on the top surface, is fastened by U-shaped clips at below and both sides, one of which is adhered to an meter of inclination of 45-degree. And the type of three-point level-supporter of the size 60 x12x4.5cm, at both ends, is subjected.
3. Thermal expansion test metal bar x3  
Copper, stainless and aluminum bar  $\Phi$ 6mm L500mm
4. Dial indicator with slide x1  
Measure range:0~10mm  
Resolution: 0.01mm
5. Bar heater x1  
Heating wire hide in alum. slot support by AC/DC power supply to produce radiant heat to keep the test bar raise temperature.
6. Test bar stop x1
7. Calorimeter with heating wire x1  
Double stainless layer vacuum tank 800ml with Styrofoam cover and heating wire acrylate cover
8. Specific heat test metal x3  
Copper, stainless and aluminum block. At top with tie stud small hall for temperature sensor
9. Acrylic transparent windshield x1