

Application Report

BRUSHWELLMAN
ENGINEERED MATERIALS

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Industry: Appliance Controls Product: Beryllium Copper Strip

Small appliance thermostat controls utilize beryllium copper strip for movable contact springs. The application requires a material with good electrical conductivity as well as high strength.

These thermostats are used in modern coffeemakers, like the one shown, as well as in other small appliances and office equipment.

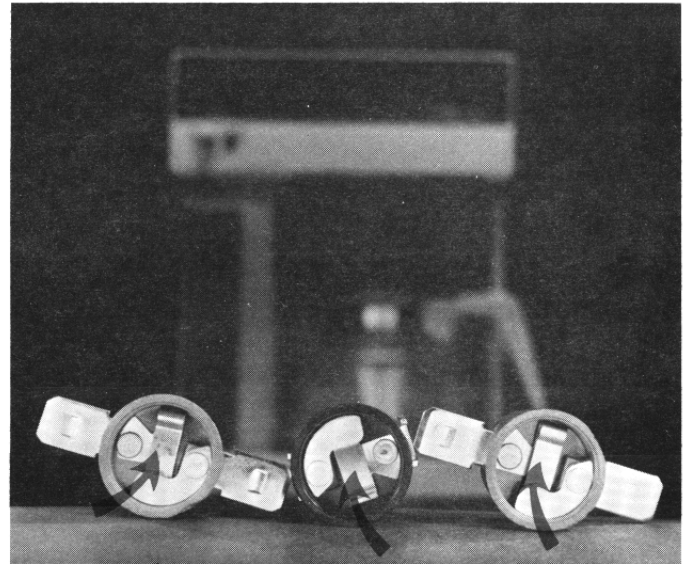
Design Requirements

- High Strength
- Resistance To Stress Relaxation
- Good Electrical Conductivity
- High Fatigue Strength
- Low Modulus Of Elasticity

The low modulus of elasticity of beryllium copper permits greater deflection of the spring to enable close temperature control.

With its excellent resistance to stress relaxation, beryllium copper can maintain its design contact force even at temperatures of 260°C.

By using a mill-hardened material for these applications, the manufacturer eliminates heat treatment, cleaning, and pickling. Brush Wellman supplies high strength, high conductivity beryllium copper in a full range of mill-hardened tempers.



For additional information, contact:

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