Application Report



AR 35-32-13

Industry: Instrumentation Springs Product: Beryllium Copper Strip

These photo-etched beryllium copper springs are used in geophones, palm-size instruments which detect vibrations in the earth when conducting seismic surveys for oil exploration. The inertial element which measures the vibrations is suspended from these very delicate springs.

Design Requirements

- Excellent Photo Etching Characteristics
- Excellent Spring Properties
- Flatness and Gauge Uniformity
- High Strength
- Good Fatigue Properties

The fine detail in these springs necessitated that the part be made by photochemical etching. This modern manufacturing process provides a high degree of detail not possible with conventional stamping methods at competitive production costs. For this application, Brush Wellman provides beryllium copper Alloy $25\,^{1}/_{2}H$ temper made to a rigorous specification for gauge uniformity and flatness. Parts are heat treated after photoetching.

For additional information, contact:

Marketing Department Alloy Division Brush Wellman Inc. 17876 St. Clair Avenue Cleveland, Ohio 44110 (216) 486-4200

