

SUBJECT COBALT-NICKEL-IRON (FERNICO &
KOVAR) PARTS TREATMENT

SUPERSEDED DATE

10/28/48

Treatments to which cobalt-nickel-iron parts are subject to during drawing and other manufacturing operations are given herein and series of standard treatments, when available for such parts, will be included herein under 'Parts Treatment Schedules'.

1. TREATMENT OF COBALT-NICKEL-IRON DURING MECHANICAL WORKING

A. Lubrication of Metal During Working

Only those approved lubricants found in S.N. 34-29-1 (34-29-1A) shall be used.

B. Cleaning of Parts Before Annealing

Use cleaning schedule W616 (Stdzg. Not. 34-1-1W, p603) for all lubricants.

C. Annealing Parts for Mechanical Working

Parts annealed for mechanical working should be fired in a hydrogen (line gas) furnace at $850^{\circ} \pm 30^{\circ}$ C. the time (15 minutes or as otherwise specified) depending on parts and character of working. Never allow the temperature to exceed the maximum specified.

D. The following Drawing and Annealing Schedules are for Lancaster Use Only, but may be used for Vendor Guidance if desired.

Schedule #1

Blank
Draw
Redraw
Redraw
Trim Flange
Anneal
Redraw
Trim
Anneal
Flatten

2. SPECIFICATIONS FOR COMPLETED PART

a. Surface and Finish

The surface of finished parts shall be smooth, and they shall be completely free of surface defects such as cracks, scale, seams, folds, and oxide inclusions. In addition, the parts shall be free of orange peel, objectionable scratches, grooves, and tool and die marks.

*** Lot no. spec. deleted.

STANDARDIZING SECTION
ENGINEERING DEPT.

7-4812-17-60 PCL10345-1211G