



SUBJECT CLEANING OR CLEANING & ANNEALING  
 RIBBON AND WIRE

SUPERSEDED DATE 11/5/46

Superseded former 14-3-15.

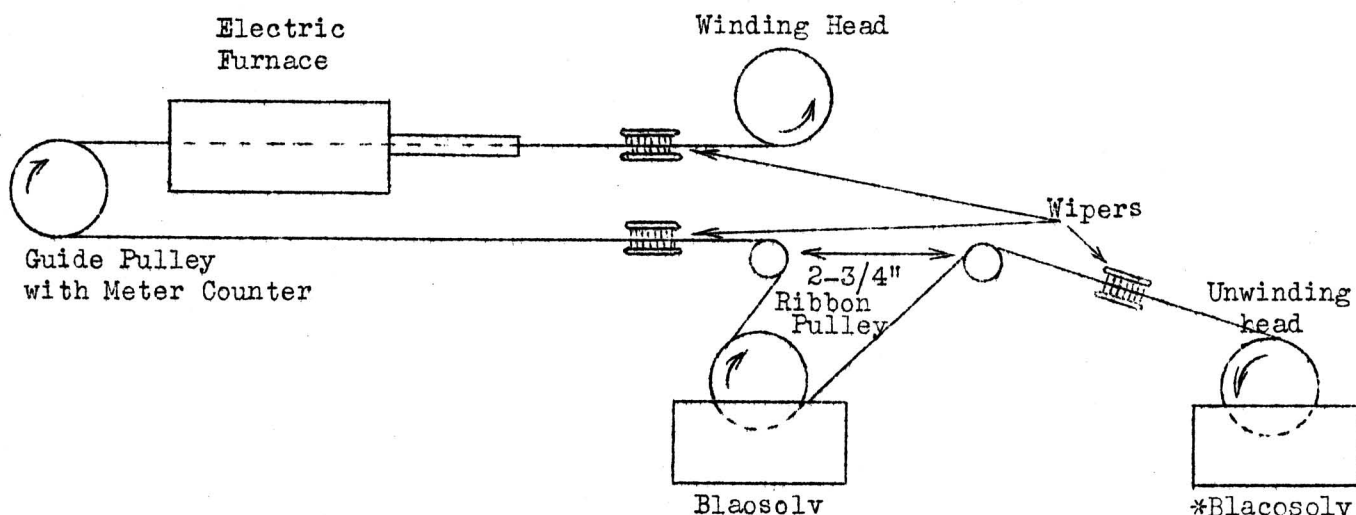
The cleaning of ribbon or wire according to the herein given schedules requires the use of solvents and cloth wipers. Ribbon or wire cleaned in this manner should be free from gas due to surface contamination. When ribbon or wire must be both cleaned and annealed the two processes may be combined, the annealing following immediately after the cleaning.

1. EQUIPMENT

1. Cleaning and annealing apparatus - (Mounted on bench in following sequence):
  - a. Unwinding head above pan 2" x 5-6" dia.
  - b. A pair of felt pads weighed down with small weight.
  - c. 2 pulleys or spools approximately 4" in dia.
  - d. Felt wipers held together by clamp.
  - e. Guide wheel with meter counter.
  - f. Hydrogen furnace - 24" tubular electric furnace (20" length hot zone) with 12" exit tube terminating in 1/8" brass pipe nipple.
  - g. Felt wipers held together by a clamp, mounted on ring stand.
2. Microscope - 30X Binocular.
3. Micrometer - Barrel type.
4. Torsion balance.
5. Ribbon or wire sample cutter.

\* SCHEMATIC DIAGRAM

(Used for cleaning and annealing molybdenum ribbon)



\*\*\*Indicates elimination of methanol bath

PC23744-35/EG



SUBJECT RIBBON AND WIRE CLEANING & ANNEALING  
 Process Specifications

SUPERSEDED DATE 1/17/49

2. MATERIAL

B38 Blacosolv or a similar solvent.

\*\* DANGER

BLACOSOLV SAFETY PRECAUTIONS: See S.N. 33-2-11C.

Pads - 2" x 3" x 1/4"-5/16" white felt,

Cloth Wipers - Such as two thicknesses of white cloth, for instance Balbriggan,  
 cut into pieces about 2" square.

2. SCHEDULES

SCHEDULE NO. 1

(Used initially for molybdenum ribbon)

- a. Sequence of travel of ribbon: From spool on unwinding head and in pan of Blacosolv, between wipers, then Blacosolv, thru wipers, over guide wheel, thru furnace, between wipers, unto winding head.
- b. Speed - 14 mts/min.
- c. Temperature - 1275°-1325°C, approx. 90V.
- d. Processing Instruction
  1. Pulleys or spools should be immersed below surface of liquids at least 1/3 of their diameters.
  2. At the present time solvents are changed every other day.
  3. Adjust tension to keep ribbon taut without stretching.
  4. Use wiper cloths by folding double around ribbons. Cloths and pads may be used several times by repositioning them as they become dirty.
  5. Weights on felt pads should not be heavy enough to cause ribbon to stretch.
  6. Use line or dried line hydrogen in furnace at rate of 15-20 C.F./hr.
  7. Wind spools with approx. 400 meters of finished ribbon underwinding a piece of white paper 3" x 9" after each 35 meters to prevent damage to ribbon on spooling. Leaving a loose end of ribbon (about 15-18" long) exposed for making weight and width checks, cover turns on spool with with paper wrapper and affix tag.

Inspection - Inspect ribbon as specified in Material Handling Spec. 33-M-14.

SCHEDULE NO. 2

(As used initially for annealing flat ribbon made of N9, N91N97 & S16)

Same as Schedule No. 1 except omit blacosolv wash,

Inspection - Inspect ribbon (or wire) as specified in respective handling specifications (N9, N91, etc.)

ENGINEERING SECTION  
 STANDARDIZING

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