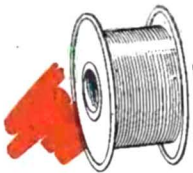


# MAKING TUBES IS EASY... If YOU KNOW HOW!



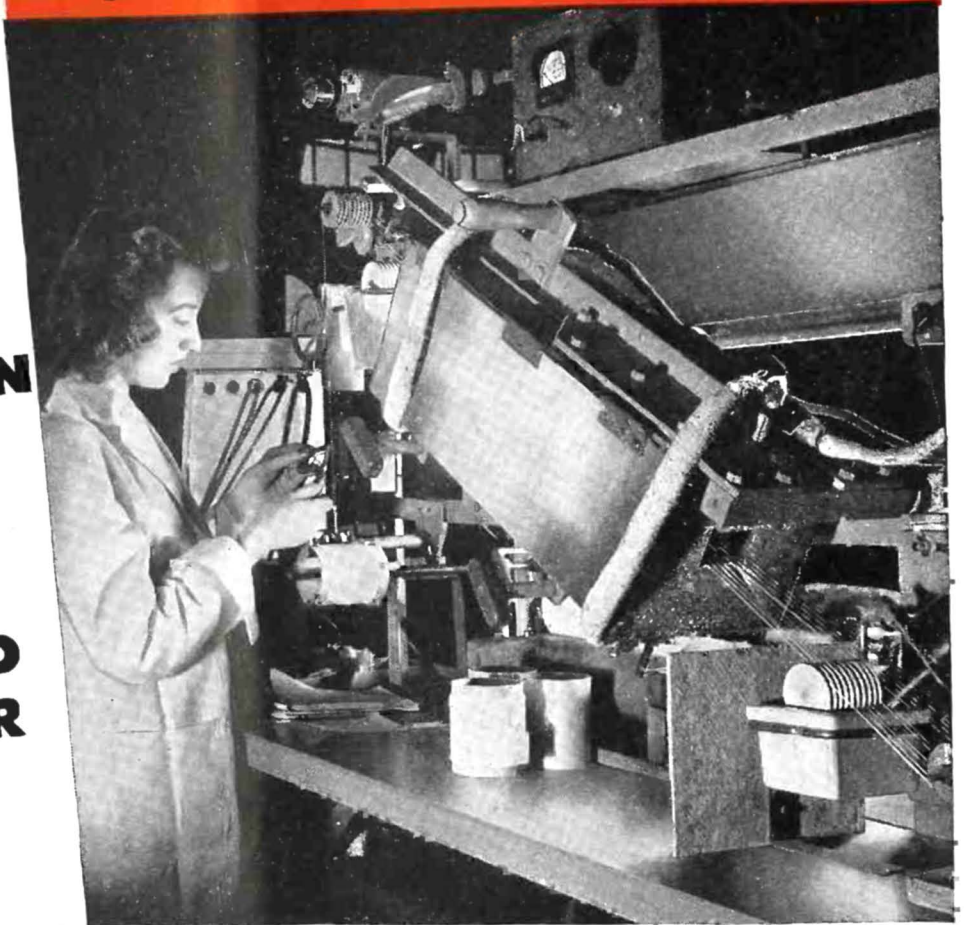
**HEATER  
COATING**



**BARE  
TUNGSTEN  
WIRE**



**COATED  
HEATER  
WIRE**



## HYTRON KNOW-HOW MAKES EASY THE APPARENTLY EASY

**M**ERELY to apply an insulating coating to tungsten heater wire—that should be easy. To say the illustrated heater-wire coating machine simplifies the job appears a paradox. Why, the machine looks like a product of Rube Goldberg's fertile mind!

Imagine, however, the complexity of producing a thin but perfect insulating coating—a dielectric with a resistance of tens of megohms—yet capable of operating at over 1500° Kelvin! Chemical purity of the coating must be rigidly controlled. Application must be in thin multiple layers to achieve uniform adhesion and density. Thickness must be exact for correct stacking of the folded heater when inserted into the cathode sleeve. Just the right degree of hardness must be

maintained to provide stiffness without brittleness.

A complex precision machine actually does simplify the job. Fundamentally its compact mechanism unspools and spools the wire. Guided by threading pulleys, the wire passes eighteen times through coating cups and drying oven via a cross-over figure-8 path. Speed and oven temperature are finely regulated. An ingenious electromagnetic device smoothly maintains proper wire tension. Completely coated wire is wound by a spooling head in a basket-weave pattern.

The know-how of this Hytron coating operation is hidden away within the cathode sleeve. Trouble-free tube performance, however, gives you concrete proof of the know-how Hytron constantly strives to expand.

SPECIALISTS IN RADIO RECEIVING TUBES SINCE 1921



# HYTRON

**RADIO AND ELECTRONICS CORP.**

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