



Application Data

Redraw plugs

For forming seamless pressurized spray containers.

Description

A deep-drawn can was the original container for pressurized instant dispensing of consumer products such as tooth paste and shaving cream. Subsequently, the lockseam soldered container has been used in many applications but, for some of the higher pressure or critical applications, the deep-drawn container is still used. These cans are deep-drawn in seven or eight stages depending upon the size of the can. The forming is done on thin steel sheet and must be accurate and have a smooth surface, free of scratches, so that the container can be coated with the various appropriate labels. Almost every combination of draw die material and punch have been tested and the best combination has been proven to be "Ampco" plugs and carbide draw rings.

The customer has learned that the carbide draw ring is economically justified because of the long life and excellent surface they receive on the steel can. The can also slides along the punch surface considerably on this deep-drawing operation and, while the surface is not as critical as it is on the can OD, if the can were to gall or stick on the plug surface, it would interfere with the proper forming of the can over the punch. The punch must have a great amount of toughness to withstand the loads created during this high speed production. Former non-Ampco alloys have often been too brittle, causing cracking of punch lip, or too soft, with resulting short wear life. Careful break-in period work-hardens the surface and gives even longer punch life.

Material

AMPCO® 22 Centrifugally cast and rough machined all over.

Advantages

- a. Wear resistance.
- b. Excellent compatability with steel blank.
- c. Elimination of galling and dragging of the material over the punch.
- d. Non -magnetic - steel punches become magnetized and the cup is difficult to remove.

