CAN SEAM INSPECTION

External examination of can double seams should be made at least every 4 hours of operation (once in the morning and once in the afternoon) to check for proper seam adjustment. Examinations should be more frequent if changes in can size, shut down, or problems with a particular sealing machine have occurred.

In order to make an internal inspection of the seam, the body and end must be separated in a manner which will expose the body hook and cover hook so they can be accurately be measured. This procedure is termed "cut-down", "stripping", or "tear-down".

The seam may be "cut-down" by filing the edge of the can lid with a flat file down to a point where the hooks of the seam are exposed. The seal can ten be examined visually for proper hook formation and tightness. The seal can be further evaluated by filing horizontally for about 1 inch along the top of the lid until the edges of the seam can be seen and pulling the outer edge of the seam downward separating it from the can body from the cover hook. (***See figure 1- cut down***). ***Figure 2***- Dixie Canner seam production will give you an idea of how the seam is made and how it should look.

Once the double seam has been removed from the body hook, it can be visually inspected internally for a number of possible defects listed below which are illustrated in ***Figures 3 & 4 .***

Cutover – is a situation where the seam is sharp enough to fracture the metal at the top inside portion of the seam. Possible causes are a worn seaming chuck flange or roll grooves, or the first or second seaming operations are set too tightly.

Droop- is a situation in which there is a projection of the double seam below the bottom of the normal seam. Possible causes include excessive body hook, or the first operation is too loose.

False Seam- is one where a portion of the seam is entirely unhooked and in which the folded cover is compressed against the folded body hook. Possible causes for this situation are a bent can flange, mis-assembly of can and cover, or the can is not centered on the seaming chuck.

Good seam formation cannot be judged by purely mechanical means or measurements. The evaluation of good double seams requires experience, skill, and above all good judgement.

FIGURE 1 CAN SEAM TESTING- Cut Down

**** Note- Picture is for full cut-down- filing can be done to see seam also as noted.**

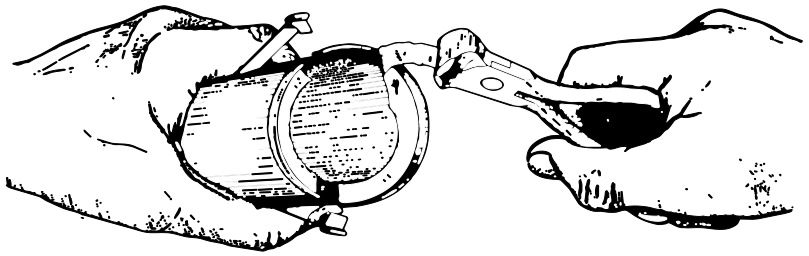


Figure 12 Tearing down the double seam.

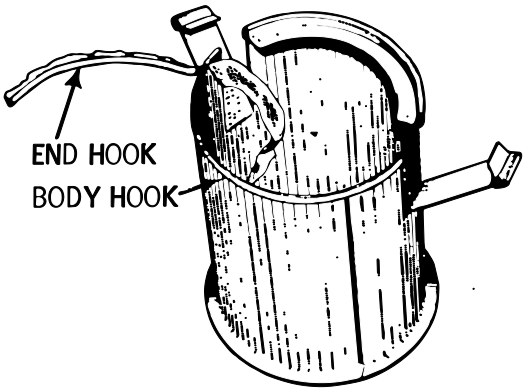
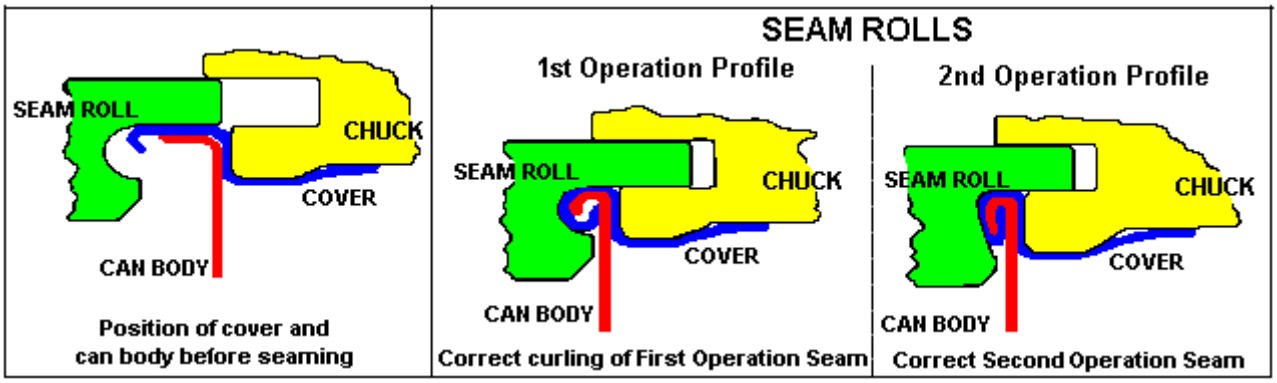


Figure 12 Disengaged cover hook.

Figure 12 from A Quality Control Manual for Crab Canners by NCA, 1974.

FIGURE 2 : Stages of Formation of Double Seam



Double Seam Terminology

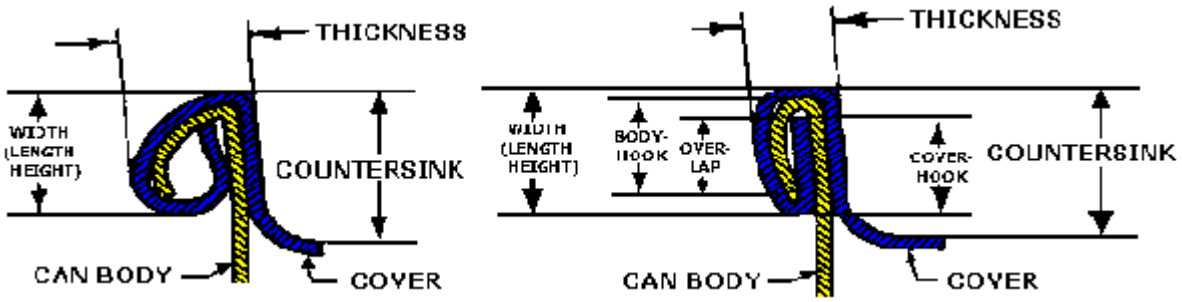


FIGURE 3 -CAN SEAL PROBLEMS

Figure 14 DOUBLE SEAM FORMATION

Figure 4- Cover Hook inspection

Figure 13 COVER HOOK WRINKLES

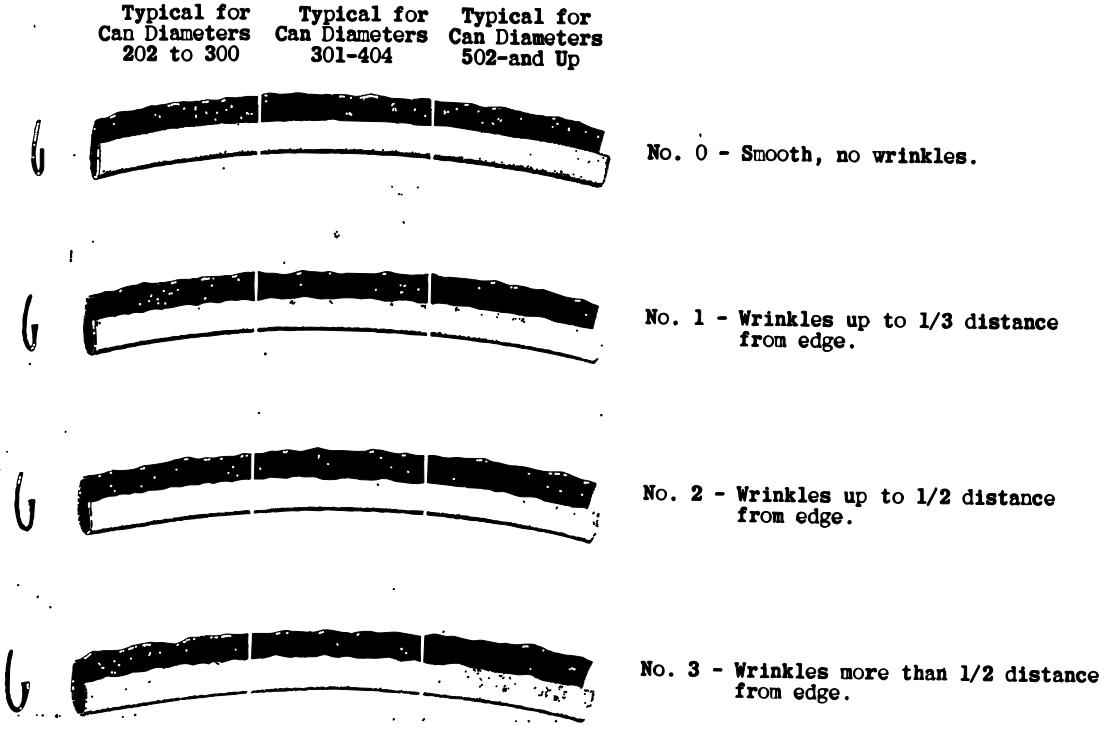


Figure 13 from A Quality Control Manual for Crab Canners by NCA, 1974.