

SOP - Test Method for Assessing the Dryness of Can Ends

(Ref: MPE Stress Corrosion Technical Bulletin)

1. Equipment required:

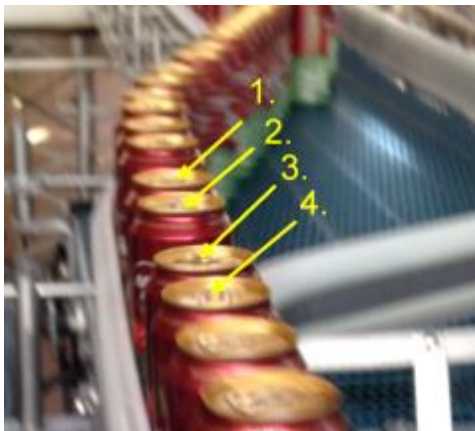
- a) A balance that is accurate and repeatable to at least 0.001g.
- b) Air tight containers and swabs:
 - Sterile tubes and cotton wool buds or
 - Sealable polythene bags (containers) and filter papers

2. Test Procedure:

- a) Weigh swabs in the sealed containers to an accuracy of 0.001g. Record the weights.



- b) Take samples from the line directly after the dryers and swab immediately.
 - If drying in single lane, take 4 samples from each lane.
 - If drying in bulk, take 4 samples evenly across the belt.



- c) Carefully use the swab to remove all residual water from each individual End, including under the tab and in the countersink and score. Wearing of gloves is important to prevent contamination of the items to be weighed (sweat, moisture) to avoid spurious results.



- d) Reseal the swab into the container.
e) Reweigh container and swab. Record the weights.



- f) The difference in weight is taken as the amount of moisture remaining on the End.

3. Test Frequency

Recommended daily, but should be continually reviewed depending on consistency of results and process capability. Visual checks should be carried out on an ongoing basis to verify drying performance is maintained.

4. Standard to be achieved

The objective is to achieve zero residual moisture on the ends but the following is an achievable minimum practical operating standard, based on available modern equipment.

It is recommended that this specification is used when purchasing new drying equipment.

Recommended Operating Standard	Standard Action
Target average less than 3mg per End	
Single End - 9mg or greater	Establish cause & rectify. Recheck to ensure standard is achieved
4 can average - 7 mg or greater per End	Establish cause & rectify. Recheck to ensure standard is achieved

5. Points to note

- a) The time between sampling and testing should be kept to a minimum.
- b) Prevention of contamination of the items to be weighed is important to avoid spurious results. Wearing of gloves is essential.
- c) The swabs should be out of containers for the minimum time between taking weights to prevent moisture pick up / loss.
- d) Effective moisture/water removal from body and dome of the can is also recommended, to prevent secondary corrosion and pack sweating.