# 13.Tin can Inspection

## 1. Objective:

To ensure that empty tin cans meet specified quality standards for dimension, seam integrity, lacquer coating, and overall suitability for food contact.

## 2. Parameters to Check:

| S. No. | PARAMETER | METHOD / INSTRUMENT |
|---|---|---|
| **1** | Dimension | Vernier Calliper |
| **2** | Internal Lacquer | Visual |
| **3** | Internal Strip Coating | Visual |
| **4** | End Plate Thickness (EPT) | Micrometre |
| **5** | Body Plate Thickness (BPT) | Micrometre |
| **6** | Seam Thickness (T) | Micrometre / Teardown |
| **7** | Seam Width | Vernier Calliper |
| **8** | Seam Length | Vernier Calliper |
| **9** | Countersink | Micrometre |
| **10** | Body Hook (BH) | Vernier Calliper |
| **11** | Cover Hook (CH) | Vernier Calliper |
| **12** | Tightness Rating | Leak Test (Water Bath) |
| **13** | Overlap (OL) | *Overlap = (Body Hook + Cover Hook) − Seam Thickness + End Plate Thickness* |
| **14** | AOL (Actual Overlap Length) | Seam Analyzer |
| **15** | Wrinkle Rating | Visual |
| **16** | Body Hook Butting | *BHB % = (Body Hook Length / Seam Length) * 100* |

## 3. Inspection Procedure:

- Randomly collect **5 cans** per 1000 pcs in the incoming lot.
- Inspect internal surface for lacquer coverage & pinholes.
- Measure EPT and BPT using micrometre at multiple points.
- Perform teardown of 1–2 cans to measure seam components (BH, CH, OL, AOL).
- Visually inspect for wrinkle, dent, rust, or uneven seam formation.
- Conduct leak tests on random samples.
- Record all findings in the Tin Can Inspection Log Sheet.

## 4. Acceptance Criteria:

- Seam values within tolerance of the specification.
- Lacquer coating must be continuous, defect-free.
- Tightness must pass the leak test.
- Wrinkle rating should not exceed accepted limit.