

Improper Seam Sealing on Canning Equipment



ILC Assignment:

- Determine the cause of improper seam sealing on the can filler/seamer equipment.

ILC Analysis:

- Two years after the can filler/seamer was purchased new, it was discovered that random cases of cans were experiencing seam failures during production as well as leaking from punctures.
- All of the cam followers for the seaming head had seized due to over-usage.
- All bearing rollers were missing on the bottom bearing of one of the can conveyor rotating shafts.
- Fill system actuation forks exhibited wear beyond their useful life.
- Inadequate lubrication was found on several components.
- For proper can seal, it was required that each of the four stations was properly shimmed before operation (based on the height/geometry of the given can) and all rollers/cam followers must be operational (not seized).

Summary:

- ILC concluded that improper sealing of the cans was due to individual components not performing as intended due to the lack of proper and timely maintenance of the machine.
- The seized cam rollers were caused by flat spots on the cans, not allowing them to seal properly.
- Reported can puncture was consistent with improperly adjusted (inadequate shims) or broken machine components contacting cans during or after the seaming operations on the machine.