



Metal Can Defects

Identification and Classification

Amend.no.1

30/06/93

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DEFECT: MISEBOSSING

CLASSIFICATION:

Misembossing is considered a serious can end defect if:

- 1) the metal shows signs of fracture at the the point of embossing; or
 - 2) any part of the embossing has struck a sensitive area such as an easy open pull ring or scoreline.
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DESCRIPTION:

Misembossing includes sharp, illegible, misplaced, or multiple embossing. Sharp embossing may fracture the coating, leading to corrosion and perforation, or it may fracture the metal plate. Misplaced embossing which interferes with the pull tab or is on the scoreline or reinforcement lines or rings is likely to cause a fracture of the metal plate.

COMMON SOURCES:

1. A can end going through the embosser twice.
 2. Excessive embossing pressure.
 3. Mismatched embossing dies.
 4. Misfeed of can into embosser.
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DEFECT: MISEBOSSING



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DEFECT: OVERFILL, FLIPPER, SPRINGER, AND SWELL

CLASSIFICATION:

Must be treated as a serious container defect unless testing proves otherwise.

DESCRIPTION:

The terms overfill, flipper, springer, and swell are used to describe cans which have end(s) distended to varying degrees from several causes. The cans must be checked for microbial growth, chemical reaction such as hydrogen gas production, internal corrosion or weight.

COMMON SOURCES:

1. Overfilling or failure to draw a proper vacuum.
 2. Microbial spoilage with gas production resulting from under processing.
 3. Microbial spoilage with gas production resulting from post-process contamination.
 4. Microbial gas production during time lag between closing and processing.
 5. Hydrogen gas production from a chemical reaction of product with the metal plate.
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DEFECT: PANELLING

CLASSIFICATION:

Panelling is considered a serious container profile defect if the can body has been sharply distorted such that the internal coating has fractured or the double seam or side seam has been distorted.

DESCRIPTION:

A permanent distortion (collapsing) of the can body generally observed on larger sized containers. Appears as flat, vertical panels or indentations of the can body.

COMMON SOURCES:

1. Excessive closure vacuum.
 2. Excessive external pressure on the can during processing.
 3. Excessive pressure during cooling.
 4. Inadequate plate gauge or temper.
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DEFECT: PEAKED CAN

CLASSIFICATION:

A peaked can is considered a serious container profile defect if the can end has been sharply distorted such that the metal plate or coating has fractured or the double seam has been distorted.

DESCRIPTION:

A permanent outward distortion of the can end in the form of pyramidal-like deformities near the double seams, resulting from a large differential between internal and external container pressures. Excessive peaking will adversely affect the integrity of the double seam.

Alternate Terms: Buckling, Buckled End

COMMON SOURCES:

1. Insufficient closure vacuum.
 2. Insufficient external pressure during cooling.
 3. Incipient spoilage before processing, resulting in vacuum loss.
 4. Inadequate plate gauge or temper of the end plate.
 5. Overfilling of the can.
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