



Metal Packaging and Beverage Can Manufacturing Course: Two-Piece Cans, Ends, Coating and Seam QC



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Introduction:

Metal packaging and beverage can manufacturing, covering two-piece cans, ends, coating and seam QC, is a 1-week course for can plant production, process and quality staff, ending with a Can Line Quality and Spoilage Reduction Plan for a case can plant. Plants lose output and customer trust when split flanges, thin walls, coating voids and short body hooks surface at the filler. Nominees already run or support cuppers, bodymakers, coaters, neckers or end presses and learn through inspection walkthroughs of stations, defect cans and seam teardowns. CoreConcept Training Center delivers this metal packaging and beverage can manufacturing course.

Course Objectives:

- Trace the two-piece can route from aluminium or tinplate coil through cupper, bodymaker, trimmer, washer, coaters, decorator and necker-flanger, naming the quality checks at each station
- Set cupping, redraw and wall ironing conditions in the bodymaker and read wall thickness, dome depth and trim height results against the can specification
- Control washer chemistry, base coat, inside spray coating weight and curing so that enamel rater metal exposure stays within the customer limit
- Produce shells and convert them into easy-open ends with sound score residual, rivet, tab and compound lining placement
- Perform double seam teardown and visual checks, measuring body hook, cover hook, overlap, seam thickness and countersink, and diagnose seam defects with the filler
- Measure spoilage and line efficiency by station and build a Can Line Quality and Spoilage Reduction Plan for a case can plant

Target Audience:

- Bodymaking and front-end production staff responsible for cuppers, bodymakers, trimmers and tooling changes
 - Coating and decoration process staff responsible for washers, base coat, inside spray, ovens and printers
 - Necking, palletising and back-end line staff responsible for necker-flangers, light testers and can inspection
 - End and tab making staff responsible for shell presses, compound liners and conversion presses
 - Quality control staff responsible for in-line gauging, seam teardowns, customer complaints and can release
 - Technical service staff responsible for filler seamer set-up support and spoilage investigations at customer plants
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Course Outline:

Day 1: Two-Piece Can Route, Materials and Current Line Baseline

- Two-Piece Can Route Map From Coil to Pallet
- Aluminium and Tinplate Coil Properties for Can Bodies
- Beverage Can Versus Three-Piece Food Can Construction
- Can Specification Sheet Reading for Body and End
- Station Spoilage and Line Efficiency Baseline Survey

Day 2: Cupping, Bodymaking, Trimming and Washing Practice

- Cupper Blank and Draw Settings With Earing Control
- Bodymaker Redraw and Wall Ironing Die Pack Set-Up
- Dome Forming, Wall Thickness and Tear-Off Diagnosis
- Trimmer Height Control and Flange Edge Quality Checks
- Can Washer Stage Chemistry, Rinse Conductivity and Drying

Day 3: Coating, Decoration, Necking and End Conversion

- Base Coat and Inside Spray Gun Alignment Checks
- Coating Weight Measurement and Oven Cure Window Control
- Enamel Rater Metal Exposure Testing and Porosity Limits
- Die Necking Stages, Flange Width and Light Tester Rejects
- Shell Press, Compound Lining and Conversion Press Score Checks

Day 4: Double Seam Inspection, Can Defects and Filler Interface

- Double Seam First and Second Operation Roll Profiles
- Seam Teardown Measurement of Body Hook and Overlap
- Cut-Over, Vee, Droop and Deadhead Defect Diagnosis
- Filler Seamer Chuck, Lifter Pressure and Headspace Settings
- Customer Complaint Investigation and Retort Food Can Failures

Day 5: Inspection Walkthrough and Can Line Quality and Spoilage Reduction Plan

- Case Plant Inspection Walkthrough From Cupper to Palletiser
 - Defect Can Sample Diagnosis Against Station Setting Records
 - OEE Loss Calculation for Bodymaker and Necker Bottlenecks
 - Statistical Process Control Charts for Seam and Coating Results
 - Can Line Quality and Spoilage Reduction Plan Completion
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Skills You Will Gain:

- Two-Piece Can Process Control
- Wall Ironing Tooling Set-Up
- Internal Coating Integrity Testing
- Can End Conversion Checks
- Double Seam Teardown Analysis
- Can Defect Root Cause Diagnosis
- Spoilage and OEE Loss Analysis
- Filler Seamer Troubleshooting

Why Attend This Course:

- Deliver a Can Line Quality and Spoilage Reduction Plan for a case can plant to the plant manager and the quality head
- Decide whether a seam, coating or flange defect originates in the can plant or at the filler seamer, and which station setting to change
- Avoid rejected can lots, leaking filled product and customer claims caused by unchecked coating weight, short hooks or split flanges
- Coach shift crews on teardown routines, enamel rater checks and station spoilage records using the plan templates

Conclusion:

Back at the plant, the participant presents the Can Line Quality and Spoilage Reduction Plan to the plant manager, the quality head and the technical service lead. They use it to rank which bodymaker, coating, necking, end or seam losses to address first, which in-line gauges and teardown frequencies to adopt and how to share seam findings with filling customers. After the first month under the plan, the team should review spoilage per station, enamel rater results, seam measurements and customer complaints, then adjust limits and settings.

Frequently Asked Questions FAQ:

What should participants know before a metal packaging and beverage can manufacturing course?

Participants should already work on or support a can body, coating, necking or end line, or handle can quality. Bringing station setting records, spoilage reports or seam teardown sheets from their own plant helps them apply the walkthrough and loss analysis directly.

How does a metal packaging and beverage can manufacturing course differ from a general packaging management course?

It covers running a can plant: cuppers, bodymakers, washers, coaters, neckers, end presses and seam checks. A general packaging management course compares pack materials, writes purchase specifications and plans transport tests, treating metal cans as one material among several.

Why does double seam quality matter in metal packaging and beverage can manufacturing?

The double seam is the only closure between the filled product and the outside. Short body or cover hooks, low overlap or loose tightness let gas escape or microorganisms enter, so can makers and fillers measure seams by teardown and agree limits together.

What do participants take back from the metal packaging and beverage can manufacturing course?

Participants take back a Can Line Quality and Spoilage Reduction Plan for a case can plant, with a station spoilage template, coating weight and enamel rater log, seam teardown sheet and a defect root cause guide they can adapt.
