

Liquid Filler

Problem:

A major soup Canned Foods Processor had developed new product formulations that required a means of adding light liquids and/or water to containers without spillage before being closed. The final operation used in filling a major portion a canned product requires a “Topping-off or Brining” operation with water or light liquids. Other existing methods and equipment had limited filling ranges and speeds. They turned to Millard Manufacturing Corp for a solution to the following problems.

- *Spillage or waste*
- *Lack of precision control over flow of liquids*
- *Smaller equipment footprint needed*
- *Safety and Sanitation concerns*
- *Limited can flow rates*

Solution:

MMC engineering and sales worked with our customer to develop a “Liquid Top-off Filler” design by incorporating a tried and true method of “Over-Flow” technology along with a container tilt mechanism for weight and head space control. This simple and innovative machine was integrated to the in-feed system of their existing can closer. This new line provided the customer with faster can flow rates and precision head space flow controls, all inside a smaller footprint following strict Safety and Sanitary Design Standards.

- *Food Safety: “In-House” Passivation for Sanitary durability*
- *Sanitary designed for easy cleaning operations*
- *Simple controls to adjust head space*
- *(3) Separate weir controls to keep liquids flowing consistent along can path*
- *Precision flow valves for smooth liquid transition into the cans*
- *Filler liquids are reclaimed and circulated to eliminate waste*
- *Single point lubrication throughout machine*
- *Adjustable speed controls to synchronize with downstream pacing operations as an option*
- *Minimal moving parts and wear points*
- *Heavy Duty Stainless Steel Construction*
- *“Factory Acceptance Testing” (F.A.T.) at MMC with customer approvals*



Results:

Millard’s Liquid Filler provided a precise weight control system with minimal splashing within the required footprint supported by our Safety and Sanitary Design Standards.

- *Can flow rates up to 1,000 cpm (cans per minute)*
- *Reduced waste to almost “ZERO” by recycling overflow*
- *Fill Weight variability reduced by 50% (0.10 oz. to 0.05 oz.)*
- *Reduced footprint*