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 trued 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