

Brief History of Bulk Ice Cream Packaging

The Need to Change Now

June 2021

Proprietary Information Packet of Weidenhammer New Packaging

Bulk Ice Cream History - Metal Rings

- Commercialized in 1930's by Sealright (now Huhtamaki)
- Represented a significant improvement over the previous all metal container
- Pros
 - Hoop Strength at top and bottom
 - Satisfactory lid fitment
 - Industry standard (they built the industry)
- Cons
 - Razor sharp edges
 - Machine must be well maintained and serviced
 - During use, bottom drives open increasing cut hazard
 - Not water-tight (2 way channel)

Bulk Ice Cream Present – Paper/Plastic Rings I

- Commercialized by D. Thomas in 2004
- Represented a significant improvement over the Huhtamaki metal ring container
- Pros
 - Eliminate cut hazards in supply chain
 - Differentiated look for brand owners
 - Offered with a plastic lid
- Cons
 - Complex forming machine
 - No paper lid option

Bulk Ice Cream Present – Paper/Plastic Rings II

- Commercialized by Huhtamaki in 2005
- Needed to have a product offer versus D. Thomas
- Pros
 - Eliminated metal
- Cons
 - Lid fit issues due to ring design
 - Ring fit issues
 - Use of Hot Melt (hidden cost and operation issue)
 - Complex machine
 - Not embraced by the company
 - Strategically continue to support metal rings

Bulk Ice Cream Present – Paper/Plastic Rings III

- Commercialized by Weidenhammer in 2008
- Represented a more optimum combination of materials and machine
- Pros
 - Built on D. Thomas success
 - Water-tight sealing design
 - Simple, modern forming machine technology
 - Excellent lid fit performance (paper or plastic)
 - Rings do not cut, dent, or break like metal ones
- Cons
 - At launch, an "unknown" packaging provider
 - Slightly different size than market standard

Bulk Ice Cream Present – All Paper (APD)

- Commercialized by Weidenhammer in 2014
- Represented a more optimum combination of materials and machine
- Pros
 - Built on customer preferred Weidenhammer package and forming machine ideology
 - "Retail" level graphic display
 - Modern, automated forming machine technology
 - Lowest Total Cost of Ownership (TCO)
 - Excellent lid fit performance (paper or plastic)
- Cons
 - Reduced inherent hoop strength at top of drum

Bulk Ice Cream Present – "the Alpha"

- Commercialized by Weidenhammer in 2021
- Represents unparalleled automation of high-efficiency forming with "traditional" paper/plastic drum design
- Pros
 - Built on customer preferred Weidenhammer package and forming machine ideology
 - Modern, automated forming machine technology
 - Forming speed beyond compare
 - Leverages work-horse equipment elements with novel solution for automation
 - Excellent lid fit performance (paper or plastic)
- Cons
 - Ideal for ice cream producers of scale to fully utilize benefits

FAQ's – What about finger/hand/arm cuts

- Totally eliminated!!
- Current metal rings are a known cut-hazard
 - At the time of drum formation
 - At the time of ice cream filling
 - At the time of ice cream scooping
- Reduction of risk from bio-hazard handling if cut happens in store (is the product disposed of properly)
- Reduction of insurance risk exposure (analysis by insurance brokers)

FAQ's – Does it support metal detection

- Yes.
- 100% metal-free construction
- Allows for metal detection of a single drum inline or other configuration as required