

The cheese industry is as diverse as our culture. Flavors and types range from the elaborate old world cheese of Quebec to the world-class cheddar found throughout the dairy regions of Canada.

The process of making fine cheese varies from the slow, labor-intensive hand method for unique varieties to high-speed computer controlled processes for high volume production. However, the process becomes similar during the final steps: the packaging, labeling and cartoning.

R.E. Morrison Equipment Inc. supplies accessory products compatible with existing packaging equipment to provide:

- Conveyor cleaning and drying
- Accelerated brine evaporation
- Crumb removal
- Degassing of extruded pastes
- Package drying after hot water shrink tunnel
- Quiet vacuum for carton erecting
- Vacuum for vacu-lift systems
- Pan, tray and tote drying

The line of high velocity, blower driven air knife drying and blow off cleaning products have many cost saving and productivity increasing uses within the cheese packaging process.

Traditional use of compressed air normally fails to dry the product simply because it is too expensive to provide the volume of air necessary. Blower driven air knives not only work better, they use up to 75% less energy compared to compressed air. This creates the opportunity to remove liquids of dry particles from packages faster, better, and cheaper than compressed air.

Clean and dry Hepa quality air can be used to accelerate the evaporation of brine wash on cheese, making it possible to cut and package cheese wheels

without leaving them sitting in storage to dry. Most hard cheese is vacuum packaged for freshness and the package is shrunk tight using hot water. If the package remains wet it can't be accurately inkjet coded without using expensive inks, and the weigh scale becomes contaminated with water falling from the package. Consequently, the scale must be dried and re-calibrated frequently to show true dry package weight. Also, labels are more difficult to apply on a wet package. This is where the system excels. Installing a 7.5 or 10 Hp air knife drying system at the exit of the hot water shrink tunnel will solve all of these water related problems. If an existing 4-foot long conveyor is not available, the self-contained conveyORIZED blower system is available. The system comes as a complete drop-in addition with installed top and bottom air knives, a variable speed drive belt to match any



production speed, and a portable design allowing the system to be moved between different lines based on production.

When metal or plastic trays or totes are used they have to be cleaned and dried between uses. In small to medium production facilities often production stops while workers wash and dry trays to enable continued production. The air knife system dries the totes and trays immediately after the automated wash, eliminating the need for larger tray inventories and the expensive real estate required for ambient air evaporation drying.

The Becker line of German engineered and manufactured vacuum pumps are ideal for degassing pastes and spreadable cheese. Without air bubbles, the product reaches accurate fill volume and weight without the risk of air born bacteria within the product. Oil free or oil lubricated Becker pumps are world renowned as the vacuum source on wrapping and carton erecting equipment.

In highly automated factories, robotic pick and place systems use quiet, oil free, and compact Becker pumps as the vacuum source. Many available vacu-hoist vacuum assisted lifting equipment use Becker oil free rotary vane or regenerative vacuum pumps as the source. Not all vacuum pumps are created equal.

It is the internal manufacturing tolerances that provide a vacuum pump with a good volume to Hp ratio. As an example at full designed vacuum a 5 Hp Becker regenerative vacuum pump will often out perform a competitive 7.5 Hp model.

In Canada both large and small cheese producers use our Becker products. Canadian cheese products find loyal customers because of their outstanding quality and taste. However, a customer's decision to try a new brand is driven almost entirely by the packaging. For a competitive edge, the package has to be clean and clear of watermarks, with non-wrinkled labels and legible date codes. That's why R.E. Morrison products are used every day by Canada's top producers large and small; we dry products remarkably well.

