

## INDUSTRIAL PACKAGING OF BAGS, BOXES, CASES, AND CARTONS

*A simple and efficient way to seal industrial packaging systems*

### Application

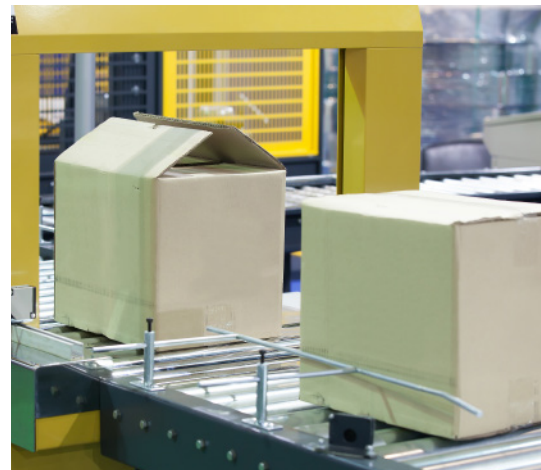
Many industries use automated packaging machines to prepare their products for distribution. Two common packaging technologies include "form, fill, & seal machines" and "hot melt glue sealers." Form, fill, and seal machines typically create the finished packaging of products that are sold in bags such as chips, candy, medical devices, vegetables, pet food, grains, condiments, capsules & pills, nuts, and many more. Hot melt glue sealers complete the final stage of the packaging process for items sold or shipped in paper boxes or cardboard cases/cartons. Common industries using these products include food processing, consumer & household products, pharmaceutical, beverage, beauty/personal care, electronics, toys, and more. In both processes, high-temperature heat is required to complete the process. In the form, fill, and seal process, the bags must be bonded together using a heated clamp at each end, and in hot melt processes, glue must be melted before being applied to create the final seal. In both, space restrictions, heating tolerances, sanitary concerns, quality issues, and unique design requirements of the heating elements must be solved to determine the best heating option.

### Solution

BriskHeat cartridge heaters will fulfill all heater requirements for most fill, form, & seal machines and hot melt glue seal applications. They are available in diameters as small as 0.125 in (3.2 mm) and lengths as short as 1 in (25.4 mm). They can be manufactured with built-in thermocouples for precise temperature control. The outer sheath is 304 stainless steel with options for 316 and incoloy. Materials are suitable for use in food production environments, and most cartridge heaters are cRUus approved, RoHS, and CE compliant. There are 16 lead configuration options, 11 fitting & flange choices, and 6 end seal/potting options for maximum design flexibility. Right angle leads with flexible stainless steel conduit is a popular configuration.

### Additional Uses

BriskHeat cartridge heaters have watt-density capabilities up to 300 W/in<sup>2</sup> (46.5 W/cm<sup>2</sup>), standard diameters up to 1 in (2.5 cm) and lengths up to 3 ft (0.9 m), curved design and multi-zone choices, an incoloy sheath option, and can reach temperatures of up to 1,600°F (871°C). This versatility makes BriskHeat cartridge heaters an attractive solution for many heating applications.



#### Industries

Food & Beverage Processing	Pulp & Paper/Packaging
Injection Molding/Plastics/	Manufacturing
Rapid Prototyping	

#### Types of Users

Production Engineers &	Facilities Maintenance
Managers	Process Engineers
Design Engineers	Plant Managers