

# Heat Sealers



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## Overview

GEA Avapac continuous heat sealers are designed to close a wide range of bags used in dairy and food ingredient plants.

The bag is levelled as it enters the sealer which eliminates the need for cutting and resulting wastage. Auto-levelling (available on HS 1200 and HS 800) allows for a fully automated bag handling process from bag filling through to palletising.

The internal liner is sealed by application of heat, and is then scored without damage to the outer paper to form a free floating internal pouch within the bag. This pouch can be easily removed and passed into a hygienic environment avoiding exposure of the product to contaminants or unfiltered air.

The outer paper bag is then folded and closed by re-activation of the pre-glued strip. Options for alternative bag closure methods are available.



### 1. Integrated Controls

Optional stand-alone control or fully integrated to an automated packing system.



### 2. Automatic Levelling

Ensuring that the top fold closure is parallel to the top of the bag.



### 3. Seal Cleaning

Eliminates powder from the seal area to ensure reliable hermetic sealing.



### 4. Height Adjustable

Manual handwheel or motor driven system to adjust sealer height for variable bag lengths.



### 5. Heat Sealing

Multiple stage sealing and scoring to provide hermetic closure of inner plastic liner.



### 6. Fold-Over System

Reactivates the pre-applied glue strip and closes the outer paper liner of the bag.



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## Design Objectives

- To be integrated in fully automated bag packing lines or, alternatively to work as a stand-alone unit using an operator interface
- Avoid bag trimming
- Handle a wide range of bag sizes and types
- Provide a robust and reliable inner liner seal and high quality closing function
- Compliance with hygiene standards
- Provide integrated and extensible control for other equipment in a bag handling plant
- Ease of operation and maintenance

## Features

- Manual or powered height adjustment for a wide range of bag lengths
- Automatic bag top levelling (HS 800 & HS 1200)
- Bag mouth cleaning and dust extraction prior to sealing
- Heat sealing and Scoring of the inner liner
- Automatic closing of step-top bags
- Quick-release systems for heating and scoring parts
- Extensible PLC control for additional line components

## Standards

(a) EU Directives and their harmonized standards:

- Machine Safety 98/37/EC;
- Noise 2003/10/EC;
- Electromagnetic compatibility 2004/108/EC;
- Pressure equipment 97/23/EC;
- Hygiene EHEDG Guidelines; and compliance with

(b) US standards covering:

- Hygiene USDA Guidelines; FDA Codes of Federal Regulations – (CFR series 21)
- Machine Safety OSHA 1910 Subparts O&S; ANSI B11.19; ANSI/PMMA B155.1; NFPA 70 & 79; ANSI/ISA 12.10.05

## Bag requirements

- Length = 750-950mm, width = 480-600mm
- Multi-wall Kraft paper bags with PE internal liner and pre-applied glue strip
- Bag over powder = 250-300mm



## Process Engineering

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