





Systematic gluing and monitoring of folding cartons. Precision in practice.

# Folding carton gluing systems by Baumer hhs Perfect products for your customer

#### Gluing for folding cartons

Folding carton gluing machines process carton blanks from die cut sheets and fold them into a finished product. In the case of cartons for branded articles or pharmaceutical packaging, the folding cartons are subsequently erected and filled in automatic packing machines. Frequently cartons are folded in various location on the machine before the glue is applied.

#### Use of hot melt glue

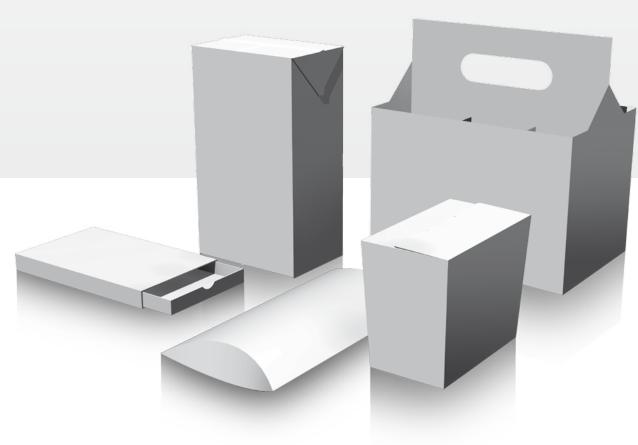
Hot melt glue is characterised by its particularly fast curing and its ability to also adhere to impermeable material such as foils. In special designs it is also used together with dispersion glue. In this way the point of adhesion is rapidly made, so that two glued surfaces do not shift or even open before the cold glue has cured.

#### Use of cold glue

Cold or dispersion glue is used because it is inexpensive and simple to process. It is characterised by the long-term stability of the point of adhesion. The robust, high-performance glue application heads by Baumer hhs guarantee the greatest possible production reliability with minimum maintenance. The application quantity can be adapted to suit the product and the machine speed at any time. The minutest quantities of glue are applied in dot mode.

#### Securing the product quality

Optional monitoring systems by Baumer hhs examine each passing product for predefined criteria. Code readers identify the packaging in order to avoid mix-ups; glue sensors check the correct application of the glue before closure. Defective products can be ejected without stopping the machine.



#### No limits to product variety

Whatever products you would like to realise: The folding carton gluing systems by Baumer hhs offer production reliability for even the most complicated products — at maximum machine speed.

# Folding carton gluing systems by Baumer hhs The right solution in every case

#### Processing without waste

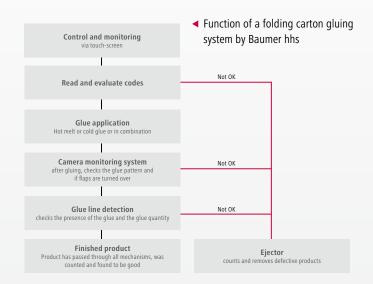
The Baumer hhs system allows gluing with millimetre precision at any speed without making contact with the carton. The closed system minimises cleaning and setup times and reduces waste during production.

#### Job change at the push of a button

To this end a modular system is used, consisting of a high-pressure glue delivery, fast-switching and wear-free electromagnetic application heads for cold and hot melt glue as well as user-friendly controllers. You can control numerous functions centrally or on several screens and change jobs at the push of a button.

#### Extendable at any time with the addition of modules

Each system is extendable by adding further modules. Undergluing systems with several nozzles as well as individually programmable multiple application heads are available. Systems for code reading, label and glue line monitoring as well as data logging, data export and the ejection of defective products ensure that the end customer receives error-free products.

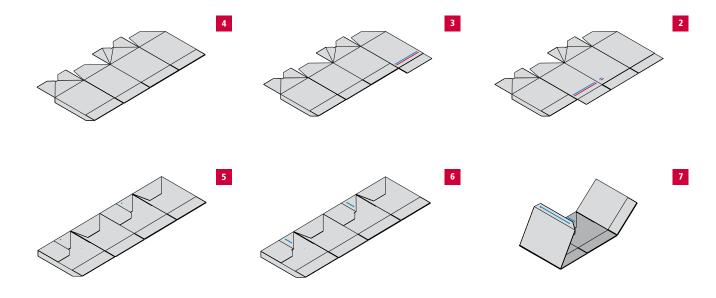


# 1 Control and monitoring

#### Securing product quality with Xtend<sup>3</sup>

#### Intuitive operation of all control and monitoring functions

The revolutionary Xtend³ line is a modular system for the control of glue application and for quality assurance. All control and monitoring functions are operated intuitively via a central touch-screen. The comprehensive process visualisation, the logical safety philosophy and the universal modular design ensure flexible adaptation to the most modern processing machines and offer maximum reliability and quality of production.



# Glue application systems

#### Hot melt glue application

#### Wear-free and service-friendly

Extremely fast switching, wear-free and service friendly dot and line application heads in combination with the digital sensor for the recognition of even the smallest of dot applications.



#### Cold glue application

#### Non-contact and ultra-fast

The new generation of the non-contact, ultrafast and wear-free glue application heads in combination with digital sensors for the recognition and verification of the glue application.

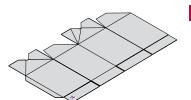








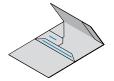
Pumps and hot melt devices also exchange messages and commands with the controller



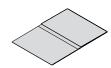
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#### ◆ Crash lock carton with hot melt and cold glue

With process running in two directions, the production of this crash lock carton with strengthened edges requires an application head for hot melt glue (red) and one for cold glue (blue) as shown in steps 1 to 4. Steps 5 to 9 show the product rotated by 90 degrees and the base fold is glued from above using two cold glue application heads and from underneath for the glue flap using a disc application system. If necessary, before final closure you can monitor every glue line, whether hot or cold, using sensors or a camera.



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# Additional modules for quality assurance

#### Camera monitoring systems

# Camera technology with integrated verification

Ideal for complex products. Can perform the tasks such as monitoring of glue pattern, hot foil embossing, safety labels, labels or inserts.







#### Read and evaluate codes

#### Specialised sensor technology

Whether for colour, Pharma, EAN or Data-Matrix codes — to name but a few. Specialised sensors recognise codes, compare them with a master and in this way guarantee maximum reliability and quality assurance.





#### Glue line detection unit

#### Quantitative glue pattern monitoring

For checking the application of the glue to the glue flap. Checking the presence and also the quantity of glue. They are used in order to evaluate the result from glue wheel application systems.





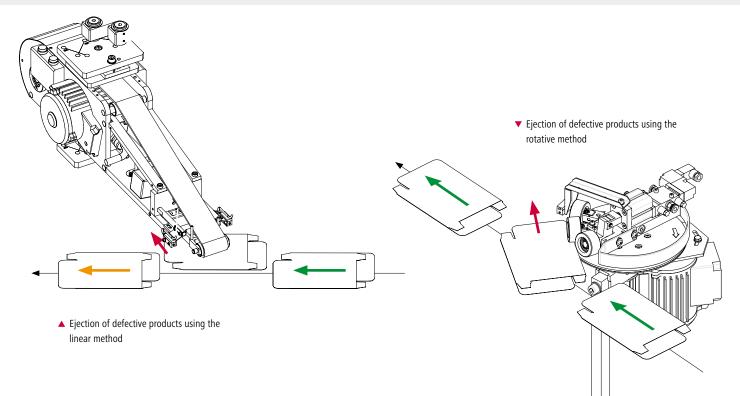
#### Ejection of defective products

#### Fail safe!

Automatic product tracking and reliable ejection with the linear ejector or using the rotative method.







# Data logging, acquisition and evaluation



#### **Production statistics**

The completely new possibilities of the entire Production Data Acquisition system offer data exchange with higher-level software systems.

The Baumer hhs system can transmit a detailed production data report to the manufacturing software via a network. The data are also available for use in database solutions for production data acquisition (PDA).

#### **Production log**

The system stores all events and offers the option to save pictures of each product for documentation or the creation of a production log. Thus you have proof in hand for your customer.

#### Everyone talks about development and innovation - Baumer hhs puts them into practice

The manufacturing process for the production of folding cartons is becoming technically more and more elaborate and placing ever higher demands on quality assurance systems. A modern, powerful system that can cope with the highest technical requirements of fast-running and fully automated machines is available in the modular Xtend<sup>3</sup> system.

It is our desire to realise production solutions in the future as well, beyond existing requirements. Technological advantages coupled with reliability secure the success that you need. Modular structure and individual solutions guarantee the meaningful

extension of your value creation chain for now and in the future.

Baumer hhs places its motivated team of experienced specialists are at your disposal, which will provide you with reliable, expert advice on all questions regarding glue application and quality assurance.

We at Baumer hhs consider precision, as a manufacturing principle, and superior service to be the bases of your success. With this in mind, our worldwide sales and service network of expert contact partners are at your disposal. We can develop complete glue application

systems or extend existing systems to suit your individual requirements.

- Future orientated and economic

  If you need us, we will be there as quickly as possible. Additionally you can reach our service team via a telephone-hotline.
- Everything from one source
  We offer you complete solutions for your production.
- We train your team
  We offer certified training courses for your technicians and operators.

Baumer hhs offers an extensive range of glue application and quality assurance systems. For more information see www.baumerhhs.com

