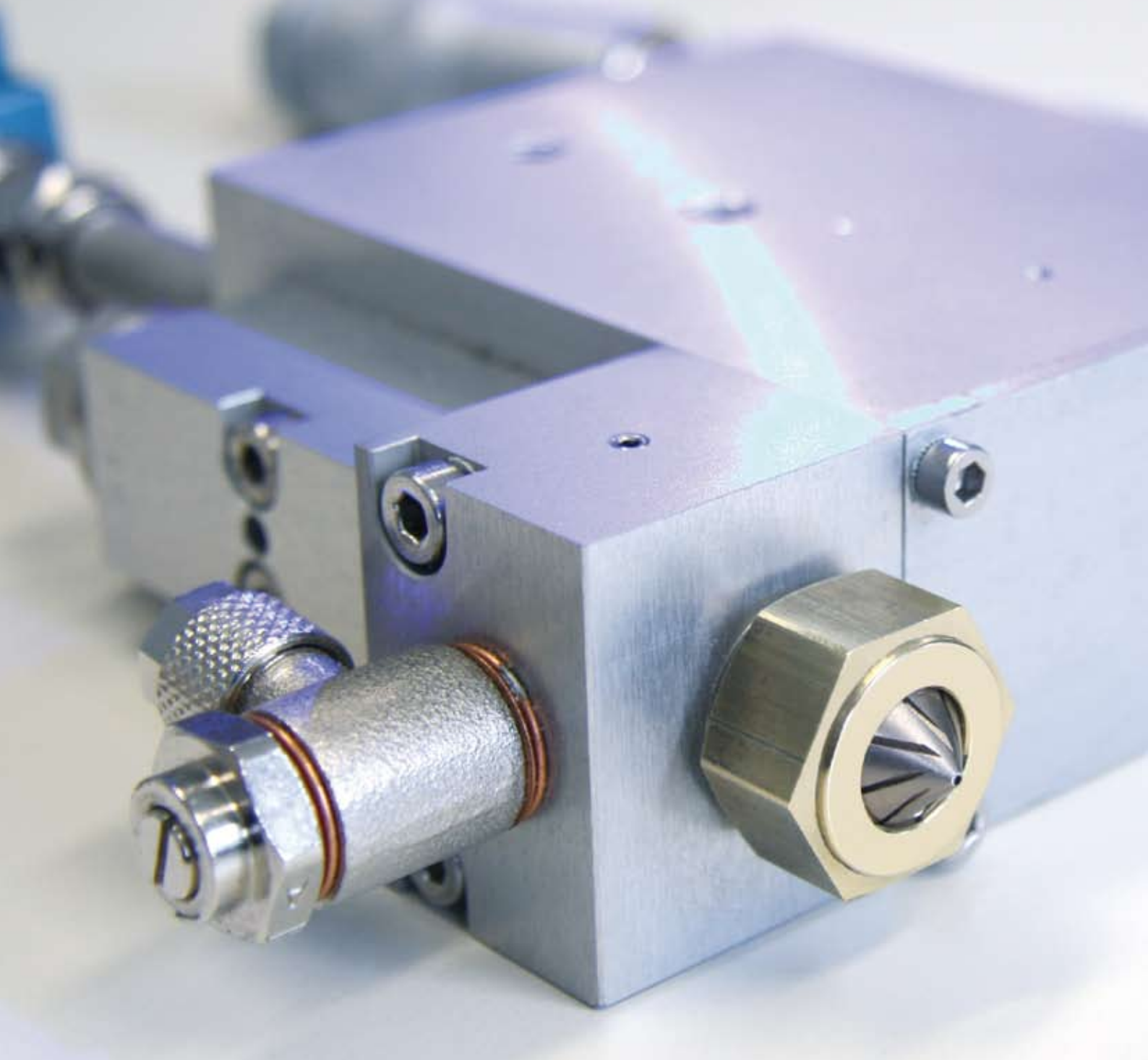


Cascades bet on hot melt for winder

## Gecko start and end gluing that inspires



*Fig. 1: The application unit – the heart of the Gecko.*



**The operators of winders know about the significance of start and end gluing. However, until now some wishes remained unsettled. The new Gecko system from Voith does away with the previous disadvantages. Quality and productivity increase noticeably and, in addition, the costs of consumables can be lowered. The Gecko is the perfect conversion solution for all existing winders.**

Start and end gluing is an important step within the winding process. If the gluing process does not proceed optimally, bothersome production interruptions and badly glued spots are the results. The former lowers the productivity of the winder and the latter causes problems in subsequent processing such as packing and transporting of the finished rolls.

**Basis**

Until now, you could fall back on two alternative methods for start and end gluing. Either cold glue is applied to the paper web or adhesive strips are attached. These hitherto known methods often do not satisfactorily perform the task of gluing.

With cold gluing, the elaborate cleaning of the applicator nozzles and tray, the dispensing of dripping water into the slitter section or into the maintenance area and incorrectly adhering cold glue hamper the smooth production flow. Once the gluing process is interrupted, it can no longer be properly completed. In that case, the process must be carried out by hand. Unplanned machine standstills and additional personnel expenses are the result. If adhesive strips are used, complications can result due to cutter and surface dust, along with the high costs for consumables and the time-intensive changeover process.

**Our solution**

The new “Gecko” start and end gluing is the first choice when it’s a matter of replacing existing gluing equipment. The new hot melt system not only does away with the difficulties during the production process described above but also guarantees a durable and resilient adhesion.

Voith’s Gecko has a strong and reliable hold – just like its little green namesake. But in contrast to the living version, the system works in contactless fashion. With several applicator nozzles, it sprays hot melt precisely onto the paper or board web from below.

In collaboration with eight adhesive manufacturers, 30 adhesives were examined on the way to the best possible gluing result. The Power Tack M700 adhesive, which is particularly distinguished by its adhesive strength and cure time, was developed especially for use with the Gecko.

**Field report: Cascades**

After development of the new start and end gluing, a customer was quickly found who wanted to test the Gecko under production conditions. Voith found a competent partner in

**Infobox**

**Advantages of the new hot melt system Gecko:**

- High process reliability
- Suitable for all paper grades
- Strong and long lasting adhesion
- No limitations in gluing-, web-, and set change speeds
- Easy maintenance
- Low operating costs with low glue consumption
- Circulation principle avoids clotting or hardening of the glue
- Approved for indirect contact in food processing

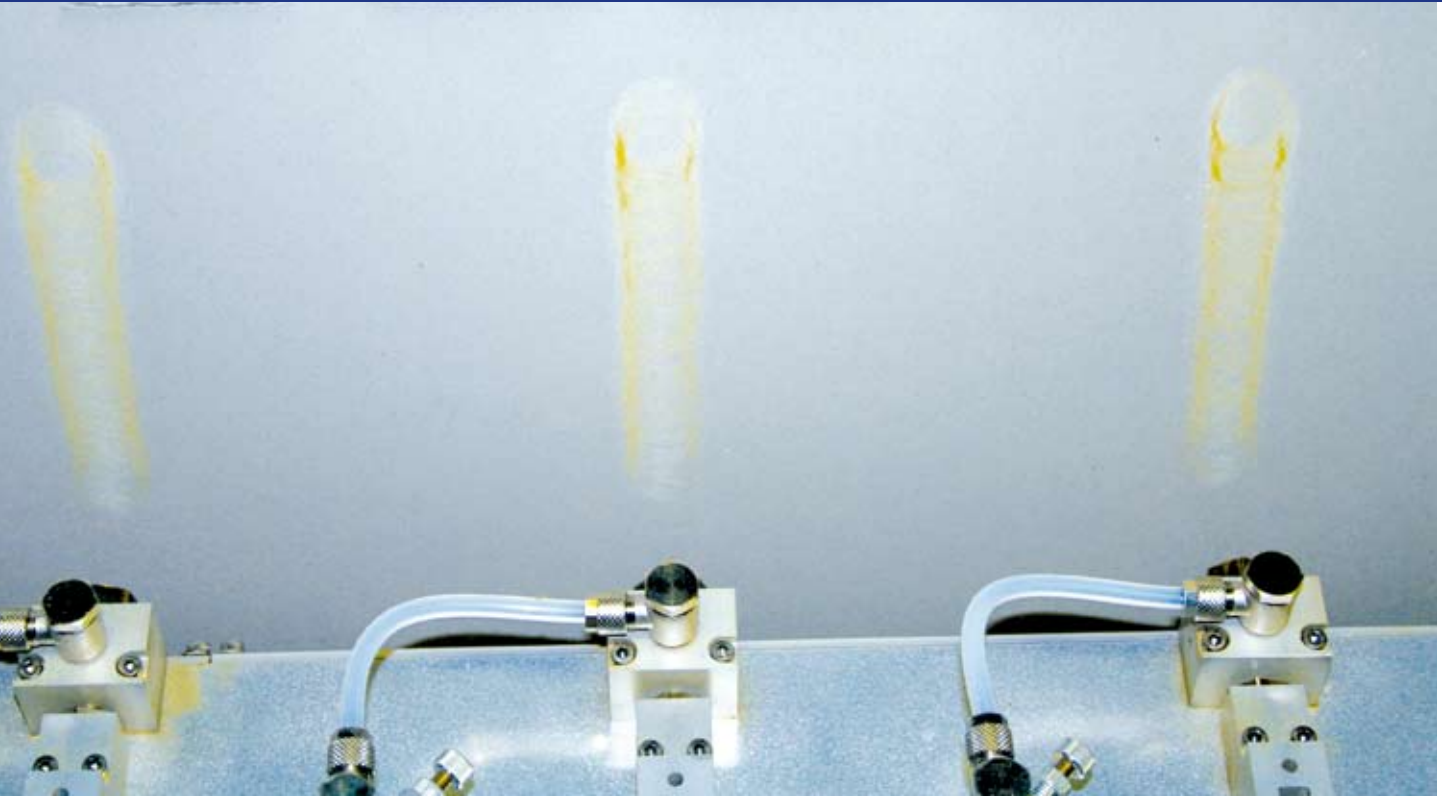


Fig. 2: Sizing using spin-spray process.

Cascades at Arnsberg, Germany, where coated folding box board between 180 and 450 g/m<sup>2</sup> is produced.

The challenge for every retrofitting and every subsequent installation in an existing system is to carry out the task in the shortest possible time. Best of all, during a planned standstill.

After two days of on-site preparatory work, commissioning took place in Arnsberg within only six hours in November 2006. This lightning-fast conversion is possible since the Gecko is set-up and completely tested before delivery. The Gecko has been working now for more than two years without malfunction or maintenance worth mentioning.

The goals of the conversion sought by Cascades

- reduction in the high running costs of consumables (adhesive strips)
- reliable start and end gluing of the rolls
- reduction of dead times for the winder (increase in productivity) were all achieved to the full satisfaction of the customer.

Since November 2006, the hot melt system was successfully put into operation on four other winders in Europe.

**Contact**



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**Customer Comment**



**Manfred Stemmer,**  
Managing Director,  
Cascades Arnsberg  
GmbH

“We were the first ones who retrofitted a winder onto the new roll start and end gluing system from Voith Paper. The collaboration was excellent. Despite a tight schedule, all deadlines were met by Voith “to the minute.” When we had questions, there was always a contact person available who promptly gave exhaustive information. After several months running time, one can say that it was a smooth project without start-up problems. To end with a play on words: “Voith’s start and end gluing – perfect from start to finish!”