

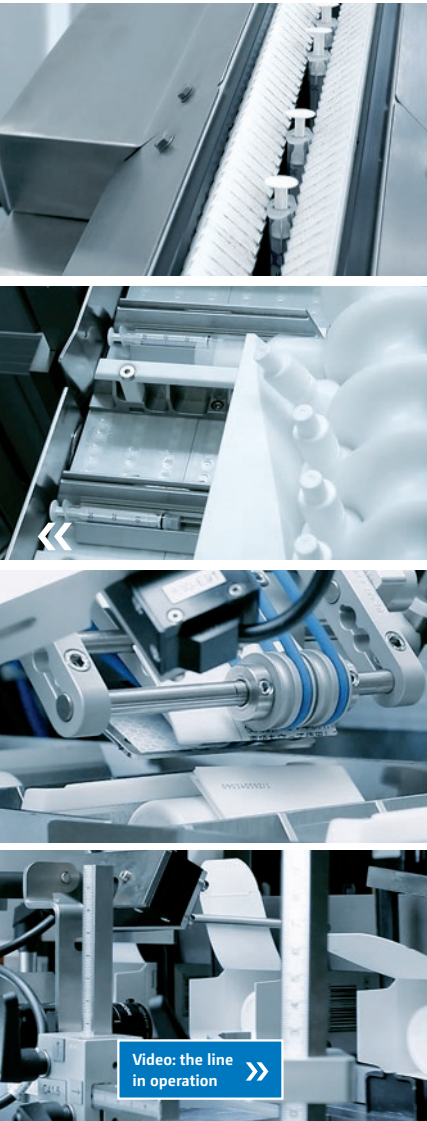


# As different as dogs and cats

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**Administering medication with a dosing syringe to a beloved pet is no easy task. Consequently, it is all the more important to have the rightsized syringe: small for small animals, big for big ones. Precisely the challenge faced by Uhlmann. Various sized dosage syringes, bottles, product information, and cartons needed to be handled in a continuous packaging process, one that is productive and completely reliable despite 17 different configurations.**

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Video: the line in operation >>



Project Manager Thomas Spieß and his colleagues developed the customized solution for the packaging of a variety of dosage syringes, bottles, and leaflets in cartons with integrated inspection cameras for product monitoring.

**What had previously been handled on two secondary packaging lines was to run on a single line: 17 different configurations comprising dosage syringes, bottles with liquid medicine or tablets, booklets, and cartons. All in alternating batches with several fast changeovers per day and, to attain a high output capacity, operating in two shifts. Furthermore, the customer's exacting product inspection specifications demanded maximum reliability.**

When Anna Herter, Uhlmann Sales Manager for Mexico, discussed the order with colleagues in Laupheim one thing became clear: a challenge! It was just the right project for the specialists who transform individual customer specifications into perfectly tailored line configurations. Project Manager Thomas Spieß and his team knew full well that they needed to work intensively on the combined syringe presorting unit, syringe feeder, bottle feeder, and Cartoner C 2155 to meet the specifications for a flexible, productive packaging process.

Located in Mexico City, the animal health division of the customer – one of the 20 leading pharmaceutical manufacturers

worldwide – operates the most modern production facilities for veterinary medicine in Latin America. Over 100 products are developed and manufactured there for the local market and for export to around 20 countries. The strictest international quality standards apply.

“ The job specification sounded easy: package everything on one machine. Precisely that was the challenge ... one that we gladly took on. ”

**Thomas Spieß, Project Manager**

**Roundtable – at Uhlmann headquarters and online**

The first step brought the project team together with the technical departments at Uhlmann to plan the machine configuration and the required format sets. Parallel to this, Thomas Spieß communicated via phone and Skype with the customer and the closely involved Uhlmann representative in Mexico to coordinate the features



“ **Key issue: reliability!**  
**Throughout the process, inspection,  
and machine operation ...**

Project Manager Thomas Spieß comments on the widely varying aspects fully and competently covered by Uhlmann when it comes to pharmaceutical reliability and safety.

« **Mr. Spieß, you devised a tailored packaging process on a secondary packaging line for veterinary medicine. Where do reliability and safety come in?**

On the one hand, through the individual components. Characteristic of the Cartoner C 2155 and third-party components, such as the the syringe presorting unit, is the tried-and-tested pharmaceutically compliant quality. On the other hand, we have the necessary experience from numerous projects to transform the customer's requirements into a consistently reliable and safe process.

**Nevertheless, camera inspection takes place at various stages of the process?**

For a variety of reasons. Complete certainty that all and only the correct items are in the pack is essential. Of course, traceability is mandatory – the cue here is Track & Trace by Uhlmann.

**What about confident handling of the new line by operators and setters?**

Obviously, there is always some uncertainty with a new line. The language barrier was an additional aspect, as the English of the operators was not excellent. When it came to instruction in the course of commissioning, we decided against a purely theoretical part for that reason and carried out hands-on training. We demonstrated format changeovers and parameter changes, for example, directly on the machine. This was well received by the operators and setters. Support received from a local technician from Fette Mexico was also very helpful, as he translated everything into Spanish.

of the machine. The formats were defined in detail during a visit to Mexico. The internal commissioning of the technical departments followed: mechanical and electrical engineering, format design, and machine and HMI programming.

» **The trick – a simple click  
for fast changeovers**

**Pre-FAT.** Once the machine was assembled, the customer visited Laupheim to inspect the status. The team responsible for special functions presented the tailored solutions for syringe feeding, format changeovers on the product chain, and product inspection.

**Fast changeovers.** The Cartoner C 2155 line processes 11 different bottle sizes, 2 booklets, 11 carton formats, and 6 sizes of dosage syringes with volumes ranging from 1 to 15 ml. The key criterion governing the customer's specifications was fast



“ The customer is very happy with the solution based on the C 2155. Our specialists put together a coherent integral package.

Anne Herter, Uhlmann Sales Manager for Mexico

and straightforward changeovers to ensure productive packaging of this broad product spectrum.

The combination of a syringe presorting unit from another manufacturer and a modified Uhlmann syringe feeding system was selected to start the process. The presorting unit guides the loose dosing syringes upward via a plate conveyor. Once separated, they move along a conveyor rail to the Uhlmann feeder. No format parts are required for the efficient and fast presorting.

The suspended syringes are divided between three lanes, picked up by vacuum grippers, and placed in the product chain

of the C 2155. To ensure the safe transport of the loosely inserted syringes and reduce changeover times – also when changing to new bottle formats – prisms are clicked into the product chain in variable positions. While standard cell dividers are tightly screwed into place, and need to be unfastened/refastened using tools, the prisms are clicked into place by hand. As a result, a format changeover takes about 15 minutes less time. In view of several changeovers per day, and on the basis of two-shift operation, this adds up to a significant saving!

**Inspection plus double check.** The fixed position of the products in the product chain means that a camera can monitor product presence directly prior to loading

**Exemplary proficiency in customized packaging systems**

Tailored solution for the highly flexible packaging of various sizes of dosage syringes, bottles, booklets, and cartons.

Directly linked:

- Syringe presorting unit
- Syringe feeder
- Bottle feeder
- Cartoner C 2155
- VisioRead inspection system for product integrity and code verification



into the carton. An additional sensor also verifies that the pack leaflet/booklet is present as the loader moves forward. If no warning signal is given when the product loader retracts, all items are in the carton.

As the products to be packaged incline to slide out of the carton on account of their shape and the pulsating movement of the machine, the experts designed a special mechanism for carton closure. The right flap is tucked in during the first cycle and constantly held in position until the left flap is tucked in.

All's well. After the FAT in Laupheim and installation, commissioning, and SAT

**Pack correctly filled?  
Camera inspection and  
sensor double check.**

in Mexico City, the line is operating as planned. Or, as Thomas Spieß puts it: "We haven't been contacted, not by the customer nor by our local services partner, Fette Compacting Mexico. A very good sign, as a rule."



close-up online

**Issued by:**  
Uhlmann Pac-Systeme GmbH & Co. KG

**Chief editor:**  
Marion Neubrand,  
Phone: +49 7392 702-8648,  
neubrand.m@uhlmann.de

**Concept and realization:**  
Volker Laucher Grafik Design, Stuttgart

**Text:**  
Marisa Arzt, Stuttgart

**Translation:**  
Rosemary Sack, Stuttgart

**Photos:**  
dreiM, Munderkingen (p. 2, 5);  
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