

Reliable 2D data matrix codes without loss in performance



“ALL THE BEST – from STADA, of course.”

For more than 120 years, STADA has taken care of a great good – human health. STADA’s philosophy and mission statement reflects that the care, health and well being of people is at the heart of their work.

STADA Arzneimittel AG is a listed company based in Bad Vilbel, Hessen. The group is Germany’s only independent manufacturer of generics and is represented by around 50 distributors in more than 30 countries worldwide. Branded products like Grippostad®, Ladival® and Hoggar Night® are among the best-selling of their product categories in Germany.

“Here at STADA we need to print high quality 2D data matrix codes at high speeds without loss of performance.”

Dirk Ritzke, Head of Technology at STADA Arzneimittel AG in Bad Vilbel

Deciding facts

- Excellent print quality using **thermal ink jet technology** at conveyor speeds of 60-80 metres per minute
- **No performance loss** when applying the 2D data matrix code
- **Simple system integration** of the thermal ink jet OEM board & control via the Mettler Toledo checkweigher

Product coding to ensure patient safety

In order to ensure traceability of the various pharmaceutical products from production to the point of distribution to patients, each product needs perfect coding.

As thermal ink jet systems have already been used at STADA for a long time to code various products, it was decided to integrate a **G320i** thermal ink jet OEM board into the Mettler Toledo XS2MV checkweigher.

G320i thermal ink jet OEM board provides simple control and system integration

The G-Series **i-Tech** thermal ink jet OEM board by Domino meets all global legislation in pharmaceuticals and healthcare, and has been specifically developed for integration into high-speed systems for serialisation and track & trace applications.

STADA coding requirements

Dirk Ritzke, Head of Technology at STADA Arzneimittel AG in Bad Vilbel, explains why they chose this system: *"Here at STADA we need to print high quality 2D data matrix codes at high speeds without loss of performance."*



The OEM board meets these requirements. It is easy to integrate and simple to control with the user interface of the Mettler Toledo checkweigher system."

The coding data is delivered to the Domino printer through the integrator with the Mettler Toledo checkweigher.

Code grading is of vital importance

Product identification codes are applied to the side of the folding box tab during the packaging process of STADA's pharmaceutical products, after the blister packs have been inserted into the folding box and sealed in the Uhlmann C2305 cartoner.

The Domino **G320i** thermal ink jet OEM board has been integrated into the control cabinet of the downstream Mettler Toledo checkweigher for easy control.

The **G320i** thermal ink jet OEM board is used to apply a 2D data matrix code, which contains the GTIN (Global Trade Item Number), the batch number and

the expiry date of the product. The batch number and expiry date are also applied in plain text to the right of the 2D code.

Once the code has been applied, the 2D data matrix code is scanned using a PCE camera and checked to ensure that the data it contains is accurate.

If the code is correct, the folding box is transported further on the conveyor belt, weighed, bundled in units of 12 and then packaged in an outer carton.





If the 2D code is incorrect, the affected folding box is removed from the production line at this point.

The line was installed in 2009 to meet the labelling requirements of the French CIP 13 format. A crucial aspect of ensuring that the 2D data matrix code scans correctly is the code grading, which is dependent on a number of factors. Dirk Ritzke explains: *“A key aspect of grading is that the folding box being coded is properly guided on the conveyor. In addition, the carton quality and the ink have an impact on grading.”*

“The maximum speeds we run on our belt weigher are 60-80 metres per minute. At this speed we achieve a code grading of between B and C. At lower speeds we achieve a grading of A or B,” says Dirk Ritzke.

Serialisation in accordance with EU Regulation 2016/161 is implemented soon

The Delegated Regulation (EU) No 2016/161 to prevent falsified medicines stipulates that, from 9 February 2019, only prescription medicines that carry a unique serial number on the packaging and a tamper evident seal proving integrity may be brought onto the German market.

With this in mind, STADA is already in the process of developing a new system that is to be equipped with a Domino thermal ink jet system. *“It goes without saying that we will implement the serialisation requirements in future and we plan to use a Domino system for the labelling process,”* concludes Dirk Ritzke.



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