



F. HOFFMANN LA ROCHE AG

PACTIVELY COMBATING PRODUCT PIRACY

F. Hoffmann – La Roche AG realises the serialisation of medical products using OPAL LABELMANAGEMENT™ and OPAL's Mobile Solutions Framework (OMS) and, at the same time, ensures the global standardisation of labelling. The scanners and printers required for the process come from Honeywell.

TESTIMONIAL



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AT A GLANCE

Company

- ▶ F. Hoffmann – La Roche AG
- ▶ Founding 1896
- ▶ 94.000 employees (worldwide)

Branch

- ▶ Pharmaceuticals
- ▶ Research

COMPANY

F. Hoffmann – La Roche AG – Portrait

F. Hoffmann – La Roche AG is a pharma company headquartered in Basel with global operations and manufacturer of reagents and equipment for diagnostics. Founded in 1896 by Fritz Hoffmann-La Roche, it is the third largest pharmaceutical company in the world. Roche currently focuses its research on the areas of oncology, virology and transplantation in particular. In the ranking of the world's top 20 companies by expenditure for research and development, Roche took fifth place in 2015 (after Microsoft and ahead of Google).

Roche has a global workforce of more than 94,000 employees and generated revenues of SFr 50.6 billion in 2016.



CASE STUDY

Actively combating product piracy

Baking powder, sawdust and coloured water – these and other ingredients are regrettably repeatedly detected in counterfeit drugs which meanwhile account for a quite considerable share of the pharmaceutical market. Irrespective of the health hazards for patients, manufacturers and countries lose revenues in the billions from this fraud every year.

In this context, there are global efforts to ensure that all drugs are provided with forgery-proof packaging. Korea, Turkey, Brazil, the US, China and the EU have all passed various laws which will take effect within the next three years, with Korea which led the way on 1 July 2016. The EU Falsified Medicines Directive (FMD) will enter into force in 2019.

Mobile authenticity check

The greatest challenge for pharmaceutical companies consists of the serialisation of products at unit level required by all governments. Each individual unit sold must have its own unique and randomised serial number which is stored together with the product data on an official database. When labelling the item, the label is printed with an up to 20 digit number in the form of a GS1 bar code (2D) which also features the Global Trading Item Number, GTIN for short, the expiry date and the batch number.

A check can be run at any stage in the delivery chain on whether the item in question is a legitimate retail unit through scanning the bar code with a mobile terminal. The mobile terminal contacts the central database via the Internet, checks the authenticity of the serial number and



reads the stored product information. The user can then immediately verify the authenticity of the product on the mobile terminal's screen.



PRAXISBERICHT

Extremely complex task

Serialisation is an extremely complex task for pharma companies with global operations which requires various hardware and software systems to communicate with each other. No wonder that F. Hoffmann – La Roche AG tackled the topic at an early stage and decided on a central solution for all global production locations. During the process of implementation, the layout of product labels was also to be optimised and standardised at F. Hoffmann – La Roche AG. This was just one reason why AutoID system integrator OPAL Associates AG was one of the suppliers of the overall solution.

»Before Roche had around 150 different labels managed on a decentralised basis at our production locations in Switzerland, Germany, Brazil and the US,« explained Philipp Glockner, head of CoE Project Stream

at F. Hoffmann – La Roche AG. The number of layouts, he said, was reduced by 90 percent without disrupting production with the aid of the central OPAL LABELMANAGEMENT™ of OPAL Associates AG. The step in achieving this goal necessitated the consolidation of the master data of several thousand products offered from various data sources. »I found that my contacts at OPAL Associates AG were extremely flexible and competent in performing this task,« said the IT



Seamless Tracking

The OPAL LABELMANAGEMENT™ solution at F. Hoffmann – La Roche AG communicates directly with Laetus' Secure Track & Trace System (S-TTS). S-TTS supports the seamless tracking of each individual retail unit on the packaging line. As a leading system, S-TTS takes over managing the serial numbers and uses a camera to oversee that packages are correctly printed. OPAL LABELMANAGEMENT™ ensures the correct labelling in accordance with the requirements of the specific product and country. Along with the serialisation of the relevant data in the form of a bar code, other product information is printed in a uniform design.

OPAL LABELMANAGEMENT™ lettering is delivered optionally in Arabic, Chinese, Cyrillic or any other alphabet, which is indispensable for a global player such as F. Hoffmann-La Roche AG. The printing is done by Honeywell high-performance PX4i s printers.

»The printers are very robust and powerful and, above all, very compact, so that we were able to integrate them perfectly into the tightly configured packaging lines,« Philipp Glockner explains. With a print speed of up to 300 millimetres per second, the devices, that consist completely made of metal, print up to 400 labels a minute which are then positioned by an applicator on the units to be dispatched.



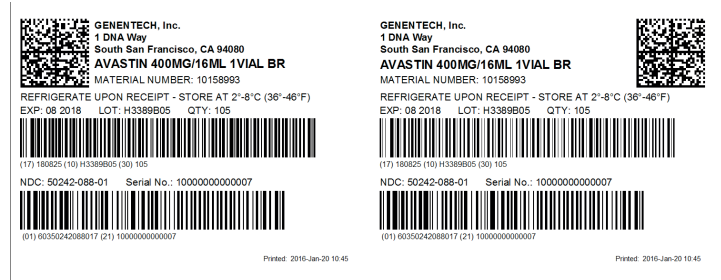
CASE STUDY

Unprecedented challenge

Illegible or incorrectly labelled retail units are immediately detected by the camera and integrated into the S-TTS and subsequently automatically winnowed out, but not without having marked the respective serial number and invalid in the database. So that the status of operation as well as data can be controlled at any time the physical machinery level had to be connected up to the control software.

»The communication between S-TTS, OPAL LABELMANAGEMENT™, the machine control and the monitoring system presented us with an unprecedented challenge,« says Philipp Glockner who has already equipped more than 40 packaging lines with S-TTS and OPAL LABELMANAGEMENT™, including the Seagull Scientific's BarTender labelling & software for various products. The tracking of the serial numbers applied not only to production but also to the entire logistics chain. After

all, a lot can happen on the journey between production and consumer: Fully loaded pallets are partly split up in the distribution centres, boxes torn open, samples are taken and individual label damaged. In order to ensure tracking at parcel level, F. Hoffmann – La Roche AG needed a mobile solution which can communicate with S-TTS from other locations at any time.



Defined specifications

This is where OPAL Associates AG's Mobile Solutions Framework (OMS) came in. OMS is an open platform for mobile AutoID applications which run on all common mobile devices. At F. Hoffmann-La Roche AG, the mobile solution is connected to Laetus' TTW (Track & Trace Warehouse) system and OPAL LABELMANAGEMENT™, allowing defective labels to be printed again in logistics as well, and new labels to be generated.

The easily comprehensible user interface takes employees through specified set of actions, the results of which are immediately reported to TTW and booked there. »Once production has been left, each change can be meticulously documented and, if necessary, corrected,« Philipp Glockner explains.

The logistics of F. Hoffmann-La Roche AG also uses OMS on the mobile terminals of the Honeywell CN70 and CK71 series. »As far as the mobile terminal are concerned, we are very happy with what we currently have,« says Philipp Glockner who is particularly impressed by the simple operation of the mobile terminals and their quick scan engines.

