

CASE STUDY

EASTMAN CHEMICAL CHOOSES THE TM-C3400

EASTMAN



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EASTMAN CHEMICALS: ERROR-FREE PROCESSES WITH EPSON

Eastman is an international fine chemicals company that produces a wide range of household products, such as adhesives and paints. It also produces agricultural products and base materials for cosmetics, plastics and much more.

Eastman's headquarters are found in Kingsport, Tennessee, USA, and it has subsidiaries in 100 other countries, employing more than 13,000 people around the world.

As with all companies in the chemical industry, Eastman needs optimum logistics processes in order to build a reliable supply chain and stay competitive. At its Middelburg production site in the Netherlands, where artificial resins are produced and rubber resins are modified, Epson label printers support the prompt processing of incoming goods.

Reliability and safety are of paramount importance

In the production and processing of chemical substances in particular, process reliability needs to be 100 per cent. This starts with the supply and testing of incoming substances, through to internal forwarding within the Eastman plant and ending with delivery of the end products to clients.

Lots of these substances go through a number of test stages and quality controls before they can be processed. In order for batches of incoming substances to be identified and tested, at Eastman labels are used which provide information, for example, about the type, origin and hazardous properties of the substances.

In addition, the labels show clear identification data for the samples which are taken after receipt, meaning that the results of the chemical and physical analyses that are carried out can be displayed in the correct place. In this case, sometimes one to four self-adhesive labels are needed per batch, accompanied by a check list and other delivery documents which are equipped with clear identification features (printed with the same printer in a different format).

Eastman uses the TM-C3400 label printer

Eastman prints its labels using three of Epson's TM-C3400 series label printers. These are inkjet printers for coloured, smudge-proof labels. Being smudge-proof is important in order to ensure that labels do not become illegible during processing.

Eastman Chemical



Key Facts

- Eastman prints its labels using three Epson TM-C3400 series label printers. These are ink-based printers for coloured, smudge-proof labels.
- Around 350 metres of labels are created by each Epson TM-C3400 every year.

"The specific processes at Eastman leave no room for error. We are therefore reliant on a labelling system that reliably and clearly supports both the flow of goods within the plant and also all quality control processes. Epson's printer is ideally suited for us in this respect."

Ando den Engelsman

Quality Specialist

Ando den Engelsman, Quality Specialist at Eastman Chemical in Middelburg, explains: "The specific processes at Eastman leave no room for error. We are therefore reliant on a labelling system that reliably and clearly supports both the flow of goods within the plant and also all quality control processes. Epson's printer is ideally suited for us in this respect."

The Eastman plant in the Netherlands has broken new ground with the Epson systems. Middelburg is now the first plant in the group to install a complete labeling solution that is integrated into the company's logistics chain.

The company's solution consists of the TM-C3400 printer and NiceLabel software, both supplied by ALTEC Industrial Identification. The first printer was installed two years ago, followed by the other two six months later. The label printers replaced an ineffective system, that did not make clear which step of the logistics chain the material was currently undergoing.

The ink in the TM-C3400 series printers produces smudge-proof labels in colour. This is a central quality criteria, because this ensures that labels do not become illegible during processing.



Labels for quality control and document management

One TM-C3400 device is installed in the 'Quality Control Laboratory', one in the technical department and another at the gates of the plant. The first two devices are used to produce high-quality labels for laboratory purposes, while the third device is linked to the SAP system. This means that information can be obtained about the product (name, hazardous properties, product number), unloading point and order information.

Depending on the data, three different labels are usually produced: a CoA label (Certificate of Analysis), which shows the supplier's quality testing; an ADR label (Accord européen relatif au transport international des marchandises Dangereuses par Route) or a hazard label, that allows for customs inspections of the freight in the vehicle; and another label for samples that are taken from a batch.

This means that materials and documents can be easily linked. Around 350 metres of labels are, therefore, created by each TM-C3400 every year.



Specialist for secure labelling

"Epson's TM-C3400 is particularly suitable for challenging and safety-related labelling tasks, such as those required at Eastman," explains Ties Schepers, Senior Key Account Manager Systems Devices Benelux at Epson.

Thanks to the smudge-proof Epson DURABrite Ultra Pigment inks, which are resistant to water and many other liquids, the prints are very durable.

A further security-related advantage of the inkjet, in comparison with the alternative thermal transfer technology, is that thermal transfer ribbons may carry impressions of sensitive data. And, with a print speed of 92mm/second and the integrated automatic paper cutter on the TM-C3400, Eastman produces up to 100 labels in less than three minutes.

"The fact that the label printers also process continuous rolls was another point in favour of Epson. This means that different sized labels can be printed without changing the roll," added Ando den Engelsman.

In daily use, the adhesive power of the labels is also important. For example, spray bottles are labelled in the quality laboratory. These labels must not become detached even under mechanical pressure.

Optimally organised processes

When a vehicle with chemical-based materials arrives at the Middelburg plant, the driver hands the freight papers over to the employee at the gate and these are then recorded in SAP. The system generates an inspection ticket – a test ticket for analysis in the quality laboratory on the basis of the receipt of goods, and an electronic copy is also recorded in another system.

If all data is available, then the necessary labels and the associated checklists are printed out and handed to the driver in a folder. At the unloading point, a material sample is usually taken, labelled and sent to the quality laboratory with the folder. The material can only be unloaded with the approval of the laboratory.

After unloading, the folder is returned to the inspection point, where the checklists are also stored. A supply chain only operates faultlessly if each part is linked to the next. Without clearly legible, coloured inspection labels, batches cannot be clearly identified and errors will creep in.

"The Epson printers are therefore an essential part of our quality process – and they carry out their work reliably," stresses Eastman's quality specialist, Ando.

The installation in the Netherlands has been extremely well received within the Eastman Group. Only recently a facility from Singapore asked for information about the labelling solution in Middelburg.



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