Traceability in egg production

Egg coding by Hitachi Ink Jet RX-S Series

Coding of eggs for the marketplace is legally required and stringently controlled. In the EU, for instance, the first digit in the code represents the farming method, the following two letters indicate the EU country in which the egg was produced, and the last seven numbers indicate the producer organisation. This code is applied directly onto the egg, frequently also with additional information, generally to ensure internal traceability in production. Hitachi's RX-S Ink Jet printer systems have now been certified by Moba Group, global leader of egg grading, packaging and processing machines.

RX-S certified printer system

Moba, based at Barneveld in the Netherlands, marketed the first egg-grading machine back in 1947. Today it has more than 500 employees involved in development, production, sales and service in over 60 countries, including sales offices in America, Malaysia, Japan, England and Germany. Moba provides client-**specific total solutions for the egg processing industry** that offer ultra-high performance at the lowest possible cost. Coding systems are essential components of these solutions, and are subject to very specific requirements. Special software and ink, specific serial communications options, a choice of mounting arrangements are key features required by Moba for its machines, as well as print quality and reliability, of course. Only manufacturers of coding systems that

meet these requirements are included in Moba's selection lists.

With its RX-S Ink Jet printer systems, Hitachi Europe has met these high standards and received certification for the egg grading and packing machines for the MOBA Omnia series. The standard version of this range of equipment offers a wide choice of options to meet the special requirements of the egg-processing industry. **Clean printing and good legibility** are especially important in egg coding, particularly for multi-line printing. RX Ink Jet series printer systems are fitted with a special **droplet control system** that offers especially **fine print quality** for **multi-line coding**. The printer systems use the continuous inkjet principle in which ink droplets are formed via a nozzle by means of a piezo-element, and sent at high speed over a charging electrode. Charged droplets then pass between two deflector plates, and are deflected from their original path in proportion to their electrical potential. The droplets that form the printed image in Hitachi's droplet-control

system are charged so that very great differences in charge are always created. This allows for interlacing of the drops between lines,, producing significantly better print quality compared to other methods.

These printer systems are also characterised by their **simple operation** and **efficient use of consumables**. To minimise equipment maintenance downtimes, the printer systems are fitted with filters which make use of a **patented connection system, making it very easy to replace**. The equipment also has a **modular construction** so that if a single component fails, it can be replaced individually.

Print system reliability is a key factor for use in Moba's fully automatic egg grading, packing and processing systems. Although they represent only a small cog in the production sequence, they can engender huge costs if they fail. Hitachi Europe therefore imposes very high standards on the development, manufacture and quality control of its printer systems. On-going monitoring of these processes within the company ensures absolute operational **reliability** for the Ink Jet Print System. This high standard is continuously maintained and refined in a permanent improvement approach.

First Moba systems installed with Hitachi print systems

The first Moba systems with Hitachi Europe's RX-S Ink Jet printer systems went into service early in 2013 in two production units in Spain. The smaller facility has two printer systems coding 30,000 eggs per hour, while the larger unit uses a total of six Hitachi printer systems, and can label **180,000 eggs per hour**.

MOBA

Certificate

Date:	19-9-2012
We,	Moba B.V.
Adres:	Postbus 7 Stationsweg 117 3770 AA Barneveld The Netherlands

hereby declare that following Continuous Inkjet Printer

Brand:	Hitachi
Type:	**RX-SD160W**
Printing capability on eggs	2 lines, 16 characters per line

complies with the communication protocol for printing on eggs of all graders of the Moba Omnia series. It communicates at the background over a serial protocol in order to organize a library via a parallel port real time selections from library text are made with a speed of 30,000 eggs per hour per printer. With this accomplishment the printer is suitable to be used on an installed base of over 1000 egg graders world- wide.

Moba will inform its sales network and put the printer on the list of "approved printers" in its commercial documentation.

Paul Buisman

Product Manager

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