Signed, sealed, delivered



Road sign manufacture has changed a great deal over the past decade. Today, advanced technology is enabling increased productivity, less wastage and of course, better results

Words | Markus Ryberg, Reklamidé, Sweden

Over the past decade more than 150 road sign manufacturers have increased their productivity more than 100% by upgrading their production line to the latest in flatbed applicator technology. Today, more than 2,400 commercial sign manufacturers are using this technology in their production.

The RollsRoller is a patented lamination and mounting system that was invented and developed by the Swedish sign manufacturer. Reklamidé.

Implementation of electronic cuttable overlay film (ECOF) for road sign manufacturing began in Sweden in 1999. This implementation was the start for Swedish sign manufacturers not just to use ECOF but also to introduce the new production method that Reklamidé's system allowed.

Due to the fact that the ECOF film is very thin and can be hard to handle and apply, at first the road sign manufacturers had a negative attitude to this new production

method. The thin film left them with lots of waste and the need for extra manpower in the production process – although the benefits of using only white reflective sheeting and the coloured overlay film were something everyone wanted. However, all the negative features caused by converting to ECOF could be erased by using the RollsRoller flatbed applicator technology.

The system minimises waste and produces perfectly flat application without



Sign maker Blinkfyrar has digitalised its entire production process – and kept its RollsRollers

bubbles and creases. Each single operator can produce 30m² of guide signs per day when handling, weeding and mounting is included.

In 1999, Plast & Plåt Vägmärken was the first road sign manufacturer to invest in one of these applicators. After a few early adoptors such as this, many more road sign manufacturers followed – first in Sweden, then throughout the rest of Scandinavia a few years later. Most companies started with one system then gradually added more units. Today, the majority of people producing road signs by applying pressuresensitive film have their own: the system has effectively become a workstation for all personnel.

Ann Ljungström, production manager, Plast & Plåt Vägmärken, says: "We used to apply signs by hand, and that puts a great strain on the body – especially when you are producing large signs. Today, all our employees have their own RollsRoller. It significantly reduces the strain on their bodies, the productivity is a lot higher and the results are better. We also invested in a large RollsRoller with two beams. This means that when we make smaller signs, two people can work at that table at the same time. The system is also very flexible. We do not only make road signs, but all sorts of signs, and we always have use for the tables. It is definitely our best investment?

Today you can find between two and seven units at each road sign manufacturer and as many as 23 at the biggest manufacturer. The 19 largest road sign manufacturers in Scandinavia have 75 units in total.

Introduction of digital printers doubles productivity

New technology is now starting to replace the ECOF technique. More and more road sign manufacturers are moving towards directly printing onto reflective sheeting.

Instead of cutting in the ECOF film, the design is now printed directly onto the reflective film. An overlay laminate is then

applied before cutting the designs into shape in a flatbed cutter. After cutting, the operator applies the print to the sign panels by using the RollsRoller. This new technology means the operator can easily apply the sheeting, very precisely, on panels up to 10m long. The operator can now apply the whole printed roll width of the reflective sheet on a number of panels in one operation, only having to trim the edges after application. Once again, one operator doubles their capacity. With the introduction of digital printing combined with the RollsRoller, a single operator can produce 60m² of road signs per day.

Jonas Forsvall, managing director, Blinkfyrar, observes: "We now have an entirely digitalised production of road signs. This is our third generation of technologies with a printer, a laminator and a cutting machine. When it comes to application, we have kept our RollsRollers. They complete the new technology in an excellent way and that is where we see the great time savings. We save a large amount of time and have more than doubled our capacity."

Worldwide development

Use of these flatbed applicators in the road sign industry is now spreading throughout the world. You can now find them in Europe, North America, Australia, Africa and Asia. The technology represents a paradigm shift in the road sign manufacturing process. Reklamidé describes this as 'making road signs the Scandinavian way' and advises you to 'let signs be made easy'.



At manufacturing plants across Scandinavia, operators all have their own tables