



Increased cost-effectiveness and new applications for the Gallus TCS 250 thanks to semi-rotary diecutting

Shrinking print runs, shorter response times and growing competition – all this means that label printers have to keep optimising their production processes and adapting to new circumstances. Gallus has recognised this fact and introduced the new semi-rotary diecutter for the Gallus TCS 250. For the first time, it is now possible to use wet offset printing for very short runs with unprecedented cost-effectiveness.

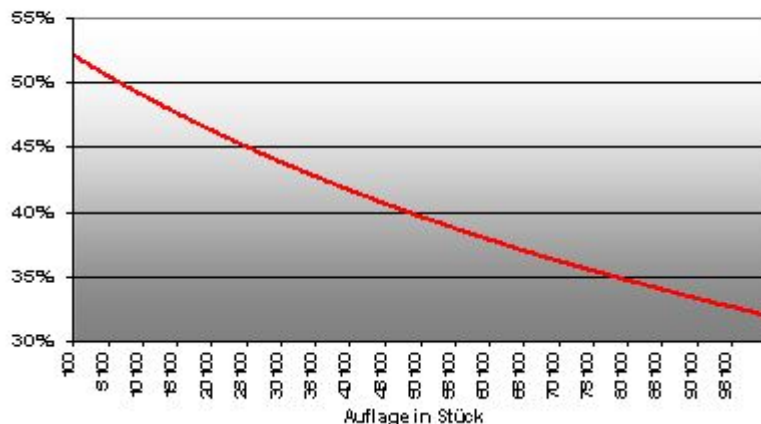
Innovation – the key to success

The Gallus TCS 250 translatory machine system helped pioneer the use of servo technology in label printing. Back in 1995, the Gallus T 250 – the predecessor to the Gallus TCS 250 – was equipped with separate drives throughout and a virtual main shaft. For the first time in label printing, it was thus possible to combine the advantages of servo technology – such as automatic format presetting, register presetting and a foil economy control – with top-quality offset printing. The immediate market success of this revolutionary technology proved we had made the right move. The Gallus TCS 250 is already at the third generation stage and innovative new technologies are being added all the time.

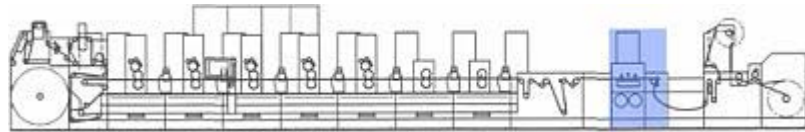
The Gallus TCS 250 was previously mainly used to print wine labels, but it is currently also enjoying considerable success in other market segments. Short and extremely short runs have long been commonplace in wine label printing, a challenge that the Gallus TCS 250 takes in its stride thanks to its innovative technology. A closer look at the cost drivers in this market segment reveals that tool costs, setup times and waste play a particularly significant role.

This is where the Gallus TCS 250 comes into its own. The translatory web movement dispenses with the need for format-dependent printing cylinders and the printing plates are clamped directly in printing cylinders that are not dependent on format using a quick-action clamping system. The straight web path minimises the web length in the press and a number of presetting functions significantly cut setup costs. This created a basis for our targeted further development of the Gallus TCS 250 for even greater cost-effectiveness and more application options.

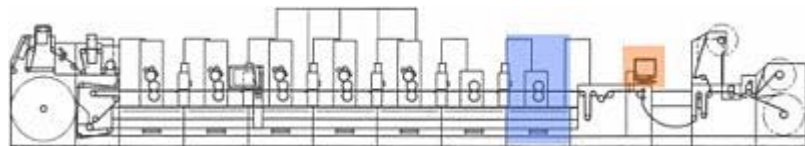
Rüstkosten in Prozent der totalen Produktionskosten



At the end of 2006, Gallus heralded a new era for the Gallus TCS 250 with the introduction of the new, innovative UV drying system that also enables clear-on-clear substrates to be processed. The next stage is semi-rotary diecutting. We decided to dispense with the processing section and integrate a semi-rotary diecutter directly in the printing section.



Gallus TCS 250 with conventional, synchronised processing section (blue = flatbed diecutter)



Gallus TCS 250 with semi-rotary diecutter and web monitoring (blue = semi-rotary diecutter, orange = web video)

Semi-rotary diecutter

The core part of the semi-rotary diecutter is a magnetic cylinder like the one used in fully-rotary processing. Equipped with diecutting depth and diagonal register adjusters, the diecutting head sits on a standard base unit in the printing section. This enabled the operating philosophy and functions such as register control and register presetting to be taken over seamlessly from the basic unit.

This combination with tried-and tested technology now enables the semi-rotary diecutter to be positioned at any location in the printing section. The very compact combined printing and processing section ensures maximum register accuracy and minimises waste. The web length between two modules is exactly 1 metre, which means that the web length in the printing section is less than 10 metres for a seven-colour job with diecutting.



Semi-rotary diecutter features:

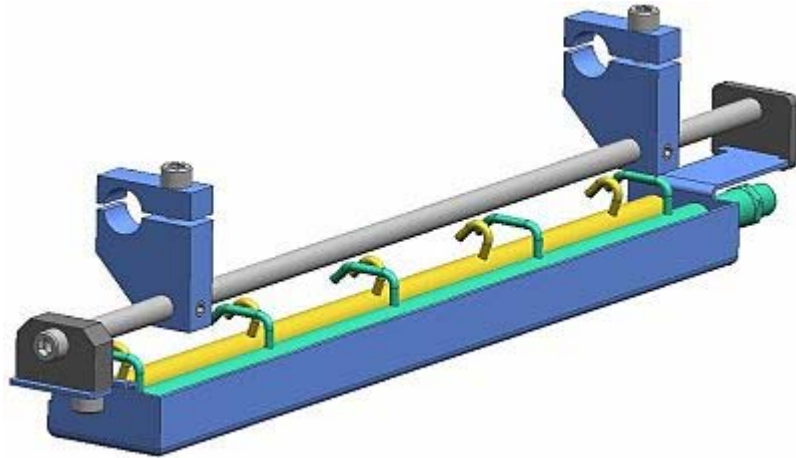
- Use of commercially available magnetic cutting plates. Thanks to the semi-rotary diecutting process, the maximum total cutting length of the diecutting forme is no longer limited, thereby facilitating the manufacture of very small labels.
- Easier processing of plastic substrates. The cutting force is smaller and the diecutting depth adjustment enables optimal matching to the

- substrate thickness.
- Improved diecutting quality. Using semi-rotary diecutting means that cutting takes place along a line rather than over the entire surface as with flatbed diecutting.
 - Minimal setup times. The combined printing and processing section and the register presetting minimise setup times and startup waste.

The new modularity of the Gallus TCS 250

The Gallus TCS 250 can be used in an unlimited number of different combinations. The standard processing section with flatbed diecutter and relief embosser is still available and can even be used in conjunction with a semi-rotary diecutter. The loop bay has also been retained. When combined with a dual-spindle winder and the semi-rotary diecutter, it makes a significant contribution to cost-effective label production.

A completely new item in the Gallus TCS 250 range is an optional web video that can be equipped with a motorised or manual camera slide as required.



We have also redesigned the automatic washing unit and completely revised the washing nozzles and squeegee system. The double head of the washing nozzles now allows fully automatic washing of the roller frame with cleaning fluid and subsequent rinsing with wetting medium. This rinsing speeds up subsequent re-inking of the inking unit.

Future means change! The modular design of the Gallus TCS 250 enables it to adapt extremely effectively to changing circumstances.

With the new semi-rotary diecutter and UV drying system, the Gallus TCS 250 is ideally equipped for printing pharmaceutical labels. This market segment features short runs, the printing of Pantone colours, screen printing and coating – with no compromise when it comes to print quality. If the cost-effectiveness of label production is not to suffer as a result, a Gallus TCS 250 is the answer.

David Baumann
Product Manager
david.baumann@gallus.ch