



## Flying Imprint: Zero Set-up Time, Little Waste

Something similar to high speed digital printing - but in flexo - is that possible? A “flying imprint” allows to change one or several images and colors without stopping the press.

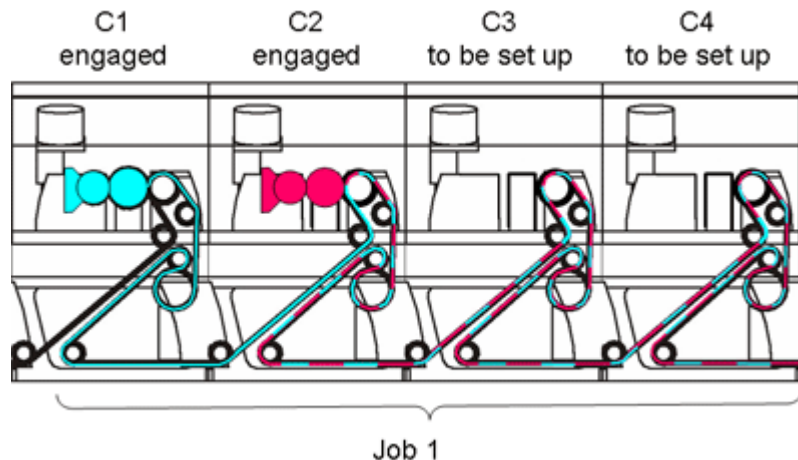
Flying Imprinting means the ability of a printing machine to change a label job with another job while the machine already running (on the fly). With the first job running, and the second job fully set up, the changeover takes place by a push of a button.

Let’s have a look at this characteristic of label press feature. This can just be carried out by means of using all the **advantages of a fully direct drive press like the Gallus RCS 330**. The feature can **save up to 35 Euros per color** which will be changed on-the-fly.

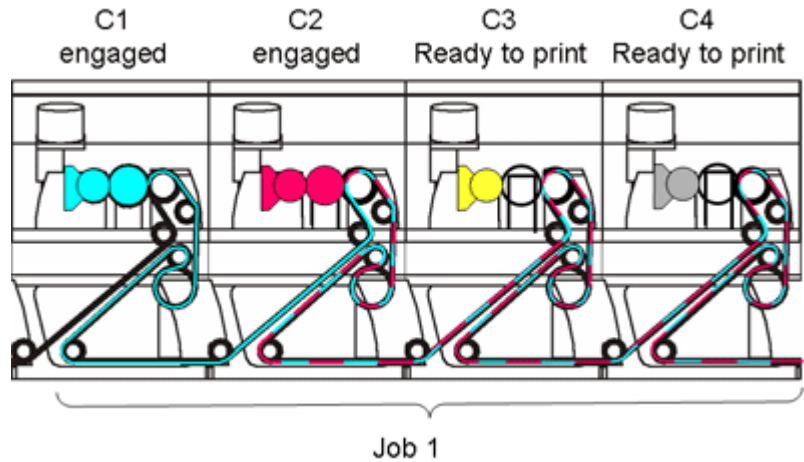
This is a result of the fact that no set-up time is needed and only a very small amount of waste is created. The higher the number of colors the bigger the savings. To enable the “flying imprint” feature the number of additional print units must correspond with the number of colors to be exchanged.

A “flying imprint” is carried out as the following, demonstrated with an exchange of a two color job with another two color job, so called “**2 by 2**”. C stands for color:

**Step 1:** Job1, a two color order (C1 and C2) is printing, two additional print units are ready to set-up for Job 2.

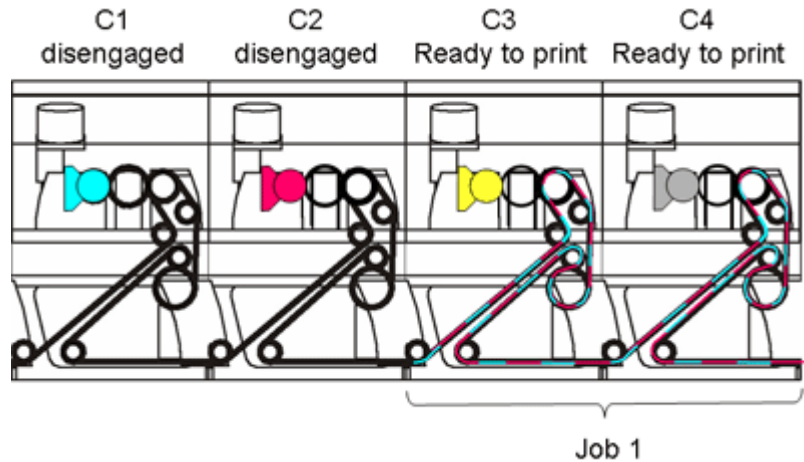


**Step 2:** Two new colors are set-up, ready to print C3 and C4 on the two additional print units.

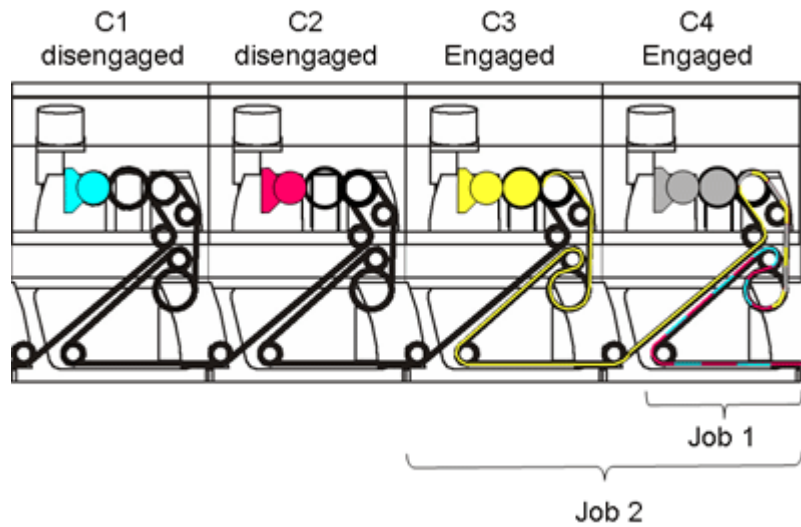


**Step 3:** Crossing the “intersection zone”, the most important step within the flying imprint process. C1 and C2 are not printing anymore (automatically disengaged print cylinders), C3 and C4 are “keen” to start printing at the right register position and the right time.

While the web with Job 1 passes by, print cylinders for C3 and C4 were **accelerated to the actual printing speed and the corresponding register position** independently! This is only possible by using the full direct drive technology.

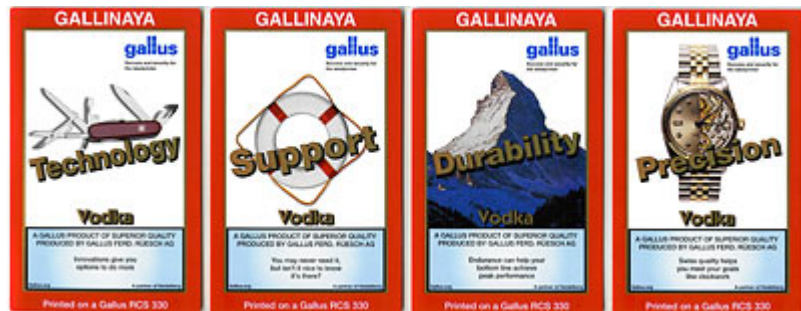


**Step 4:** As soon as the end of Job 1 arrives at the starting position of Job 2, C3 and C4 will be engaged by effecting just a few meters of waste - alike digital printing - but with higher speeds!



**Flying Imprint in practice at Gallus Inc.**

Gallus Inc. impressed various customers, converters and journalists alike with an application of the “Flying Imprint” at their North American Headquarters in Philadelphia, PA during their “Open House -2005” event in June and at their “VIP Invitational Technology Seminar” held earlier in the year in April.



One repeat of the Gallinaya Vodka label (Job 1)

The first job (Gallinaya Vodka label series) has six colors. The second job is changed over to a four-color job “6 by 4” (Flying OJ - orange juice label). This is all accomplished without stopping the press. They demonstrated how to accomplish a make ready for the second job while the first job was still running.



Job 1 and Job 2

In Summary, the Flying OJ Label says it best. Going from Vodka to OJ has never been quicker. The Gallus RCS 330 effectively mixes the two with near zero make

ready time. A press that can squeeze out high productivity, low waste; near zero changeover and top quality is at the pinnacle of automated production systems.



Less Waste - demonstrated at the Gallus Inc Open House