

**Double productivity by *Digilas Full Control* due to 8-beam technology**

By using different laser sources for structuring printing and embossing forms it is possible to extend continuously the fields of application for the Digilas made by Schepers GmbH & Co. KG. Owing to consistent development work at Schepers new technical processes were found and higher productivities were achieved.

This also applies to the field of halftone etching, the direct structuring of embossing cylinders, the anilox engraving and finally also to the field of Flexo LAMS and Flexo 3 D with undercut.

Due to this rapid development in the High-Tech laser field it was necessary to adapt the machine control to the technology in such a way that a machine operation as simply and safe as possible was ensured. Schepers met this challenge and developed a high-performance control for a considerably increased productivity.

The biggest advantage which offers this new control called *Digilas Full Control* is the possibility to engrave simultaneously with 8 beams. Compared to the 4-beam mode, the 8-beam mode cut in half the time for the laser engraving.

In figures this means: an average gravure printing cylinder with a circumference of 750 mm and a face length of 1000 mm can be completely engraved in

15 minutes. If there are areas without printing information of e.g. 50 %, which can be skipped by Super-skip, the engraving time is again reduced to approx. 8 minutes.

A further advantage of the *Digilas Full Control* is its communication interface to automatic process control systems. So in future, it will be possible to include the Digilas into an automatic production line. Of course, the Digilas could also still be used as stand-alone working machine. It will also be no problem to upgrade Digilas systems already in use in the market. The control of all machine functions is effected either directly from the touch screen installed, or alternatively by means of keyboard and mouse. All functions of the machine can be easily operated by clearly arranged, simple pictograms which are almost completely self-explanatory.

In addition, there are various possibilities for an automatic laser power measurement and for an adaptation of different laser sources. Besides many other functions, process control functions as temperature control, suction control or automatic focus distance monitoring are an inherent part of the system. The total control is modularly built and therefore expandable at any time. So individual customer requirements can be taken into consideration and the control can be easily adapted to future performance leaps.

The engraving system processes – independently from the preliminary stages – 1 Bit TIF and 8 Bit TIF Files. Ready-prepared data from the Flexomanager or also from other systems can be directly read into the data processor via Ethernet. By means of the job management the requested production order is set. Before the beginning of the production the job related parameters can be adapted.

It is possible to store these order related data in a parameter management system and to simply call them up again in case of a repeat engraving. *Digilas Full Control* also sets new standards in the field of maximum possible resolutions. Advance resolutions of 0,5 my per cylinder rotation can be realized. The number of possible circumference pixels is far beyond 5 million pixels.

The combination of *Digilas Full Control* with new laser sources offers many new possibilities. Already now, trendsetting technologies can be used for new applications. Areas of application for this new product are e.g. the security printing with high resolution demands, the security embossing as well as the worldwide growth market of “Electronic printing”.

But also for engraving techniques already known, as for example the half-tone etching, the anilox engraving or the direct structuring of embossing rollers, this new control will contribute to the success of the user.

For further information visit our website at: [www.schepers-digilas.de](http://www.schepers-digilas.de)

