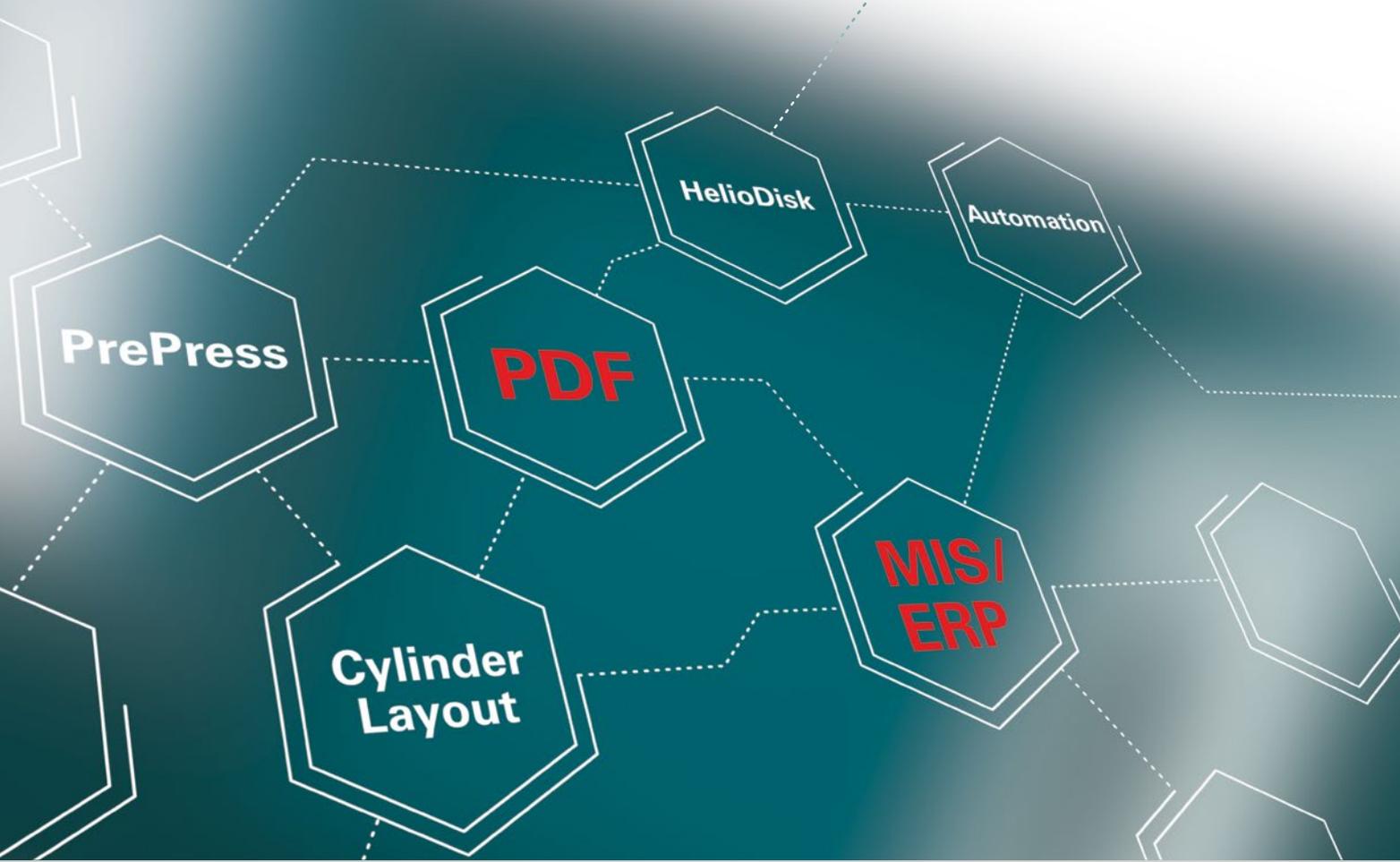


# Digital Workflow

CYLINDER ENGRAVING IN A NETWORKED, PDF-BASED PRODUCTION ENVIRONMENT



HelioKlischograph



# Harnessing the benefits of state-of-the-art information Digitization for successful production

## Management information system / enterprise resource planning

Many midsize and large companies already use MIS/ERP systems to control their workflows. Today's cylinder production is networked using the relevant system, and production data is shared automatically and in a two-way process. Fully automatic cylinder production is already a reality!

## Prepress systems

Finalizing the packaging design to produce a printable original calls for high-performance editors. To avoid incomplete conversions, these editors work directly in the standard exchange format, i.e. PDF. Engraving-specific functions such as "Step & Repeat" and "TIFF Export" enhance the power of these highly productive systems.

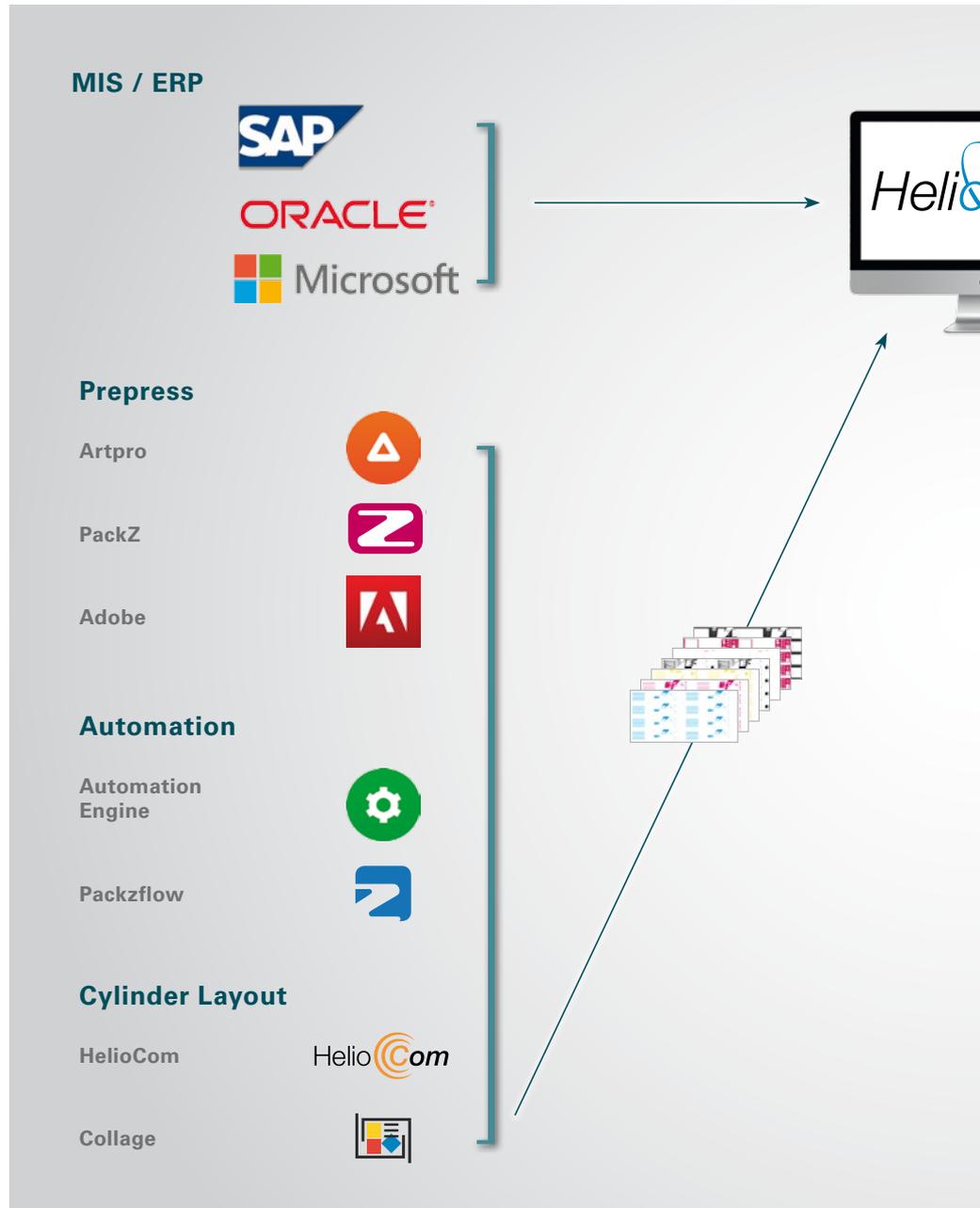
## Workflow automation

Many prepress operations are characterized by repetition. Automation reduces the need for operator intervention, cuts error rates, and accelerates processes. Modern prepress systems integrate the editors into workflow systems, even going as far as creating repeats and layouts on a fully automatic basis.

## Cylinder layout

Prepress systems for packaging reproduction generally already offer high-performance functions for creating cylinder layouts and exporting TIFF engraving data. As a result, no further specialist software is usually needed.

HelioCom is a dedicated workstation for creating cylinder layouts. It was devel-



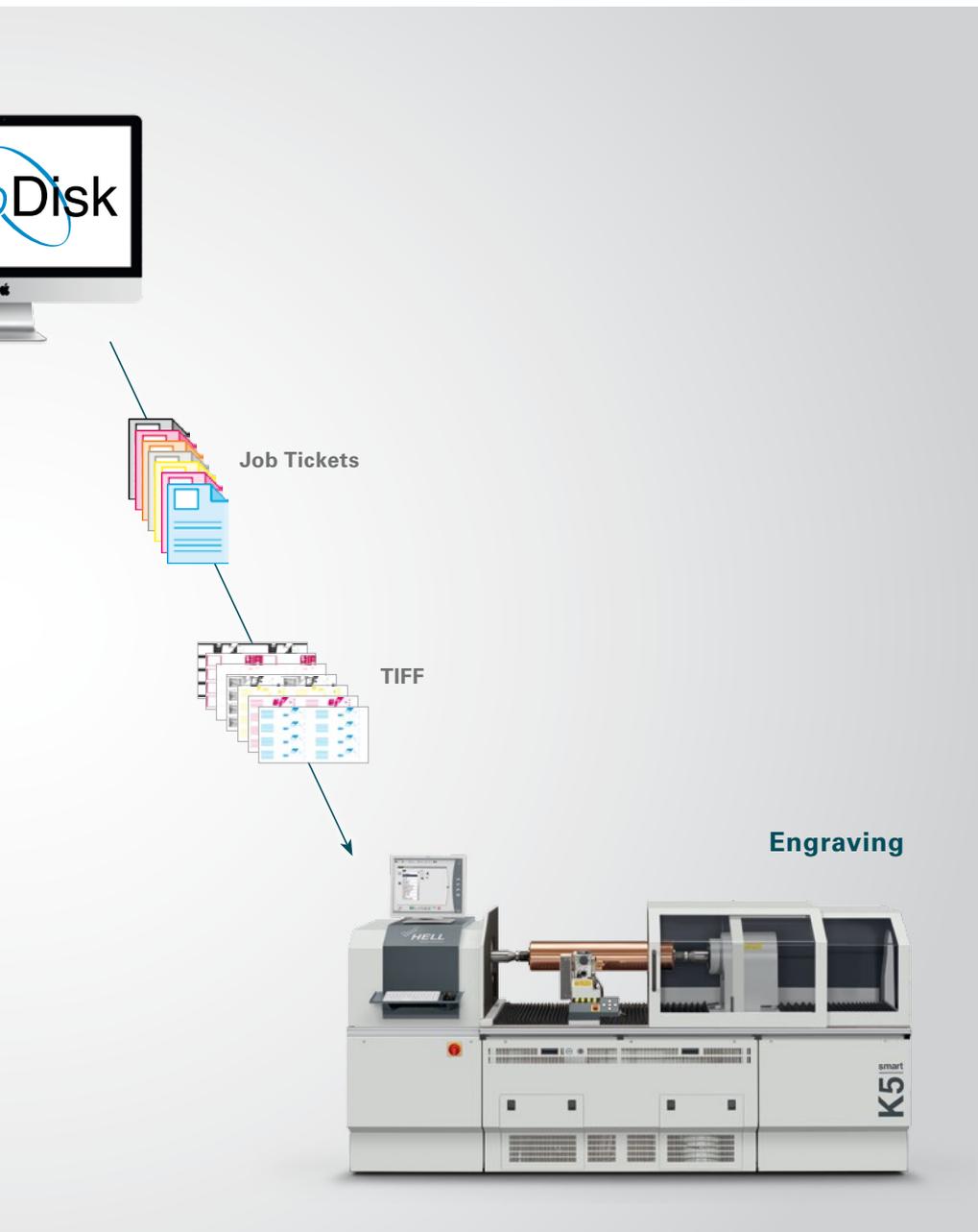
oped jointly by HELL and Esko, the leading manufacturer of prepress solutions for packaging. With over 500 units installed worldwide, HelioCom is the standard in the engraving industry.

Collage is also a workstation for creating cylinder layouts. Its strengths come into play in a mixed environment of OHIO and HELL engraving machines.

## HelioDisk

HelioDisk is the gateway to cylinder engraving. In conventional engraving, this is

# and communications technology



where jobs are prepared. Engraving machines are controlled by digital job folders – job tickets.

In networked engraving, HelioDisk is simply a program in the background that creates job tickets automatically. Job data is provided by the MIS/ERP software.

HelioDisk greatly improves production reliability. The logging and archiving of job parameters means that all jobs can be reproduced at any time. Last-minute changes can still be made right up to the start of engraving.



## PDF

The “Portable Document Format” (PDF) is the standard exchange format in the graphic arts industry. As the successor to the page description language PostScript, PDFs can include text, images, graphics, fonts, color information, and screening data. PDFs also meet the needs of the graphic arts industry for optimum layout fidelity and platform-independent reproduction.

PDFs are only suitable for further editing to a very limited extent. This is immediately apparent from the greatly restricted range of functions for the standard PDF editing tool “Adobe Acrobat”.

Specialized, high-performance PDF editors have been developed for the prepress stage in packaging printing. These solutions overcome the editing limitations of PDFs. Even masks, transparencies, and blend modes are easy to handle.

PDFs have thus become a genuine industry standard in the prepress stage for packaging.

## **Based on Innovation. HELL**

HELL solutions satisfy the toughest demands in terms of print quality, cylinder service life and printing speeds. Printing forms engraved using HELL equipment benefit from simplified color matching, minimal start-up waste and optimum engraving results with high print densities, soft vignettes, brilliant contones and razor-sharp lines.

Your local HELL representative will be happy to provide further information and personal advice on our products and services at any time. For contact addresses and additional product information, see our website [www.hell-gravure-systems.com](http://www.hell-gravure-systems.com).

Subject to design modifications. Errors excepted.

### **Job tickets**

Job tickets are digital job folders that enable maximum flexibility, productivity, and transparency in the digital workflow. The output method (vibration engraving, hybrid engraving, XtremeEngraving, or direct laser engraving) does not therefore need to be decided on until just before engraving.

Changes can be made to engraving jobs while they are still on the output device without having to return them to the job preparation stage. Repeat jobs can be reproduced very easily.

### **Calculating engraving time**

HelioDisk uses information about areas that are not to be engraved and the engraving parameters to precalculate the engraving time.

### **Calculating ink consumption**

HelioDisk uses information about the ink coverage level and the engraving parameters to precalculate a gravure cylinder's theoretical pick-up volume. If a print-specific characteristic curve is specified, HelioDisk can also precalculate the actual ink consumption in the production run.

### **Documentation**

All production-related data such as engraving parameters, camera images, and results of engraving checks are saved in the job ticket and can be recovered as a cylinder certificate, file or printout.

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#### **HELL Gravure Systems GmbH & Co. KG**

Philipp-Reis-Weg 5  
24148 Kiel, Germany

Tel. +49 431 2377 0  
Fax +49 431 2377 1235

[info@hell-gravure-systems.com](mailto:info@hell-gravure-systems.com)  
[www.hell-gravure-systems.com](http://www.hell-gravure-systems.com)

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