

HelioKlischograph

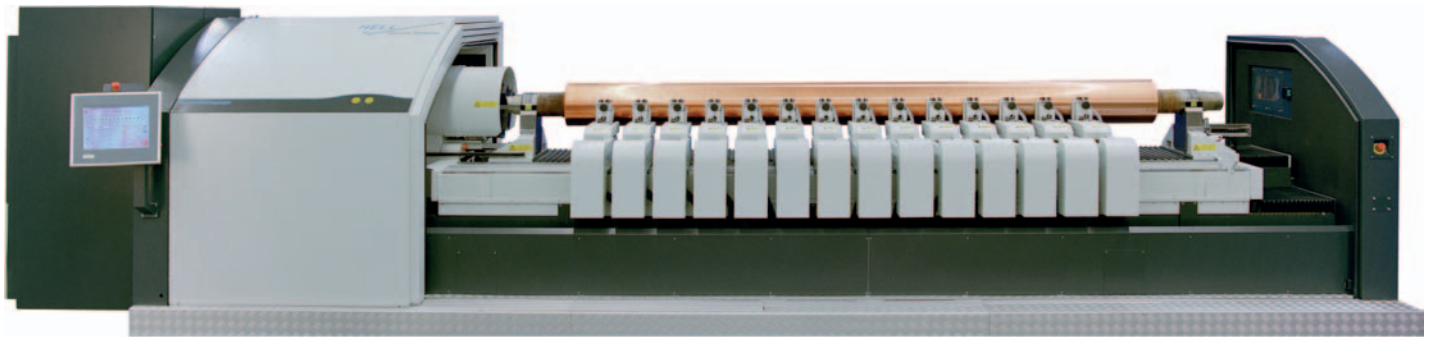
K6



Full automation

Based on innovation. HELL

The K6 – made by professionals for professionals



The K6 is the product of many years of experience, innovation and close work with customers.

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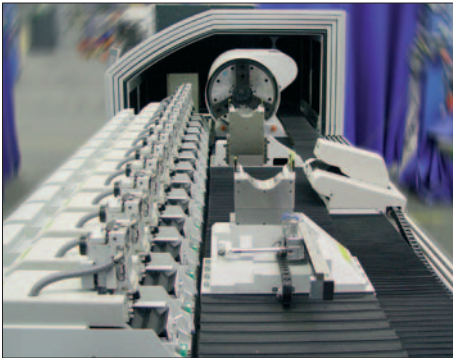
The K6 – Better. Faster. More efficient.

With the Helioklischograph K6, HELL is forging the future of publication gravure. This all-new, fully-automated unit has up to 18 engraving channels and represents the next successful generation in digital cylinder manufacture. With the K6, HELL is focusing consistently on reducing per-cylinder costs, cutting the manufacturing time for a print-ready cylinder and delivering top reliability. All this comes with consistently high quality standards, thereby creating optimum conditions for lasting success in publication gravure.

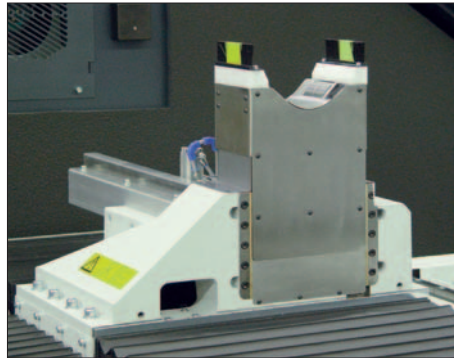
The K6 is the descendant of the K406, which has enjoyed international success. It combines some of its predecessor's outstanding and proven components with a range of new functions. The result is an even higher standard of cutting-edge automation and production control, reaching productivity levels in cylinder manufacturing never seen before.

The K6 not only sets new standards in performance and ease of use – it is also the crowning achievement of today's engraving technology.

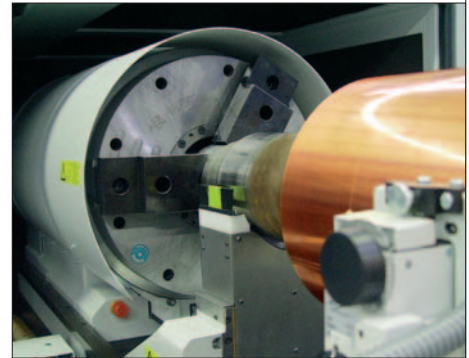
Innovation becomes industry standard



The K6:
Full automation as standard



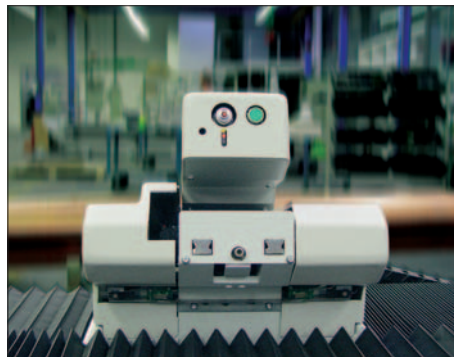
Delightfully simple:
The bearing block automatically adjusts to accommodate any type of cylinder.



Power coupling:
The main drive block clamps pneumatically onto the cylinder journal.



Top precision:
Automatic axial and radial positioning of engraving supports.



Top quality:
The CellGuard system provides integral control.



Simple to use:
A touchscreen also allows the K6 to be operated manually if required.

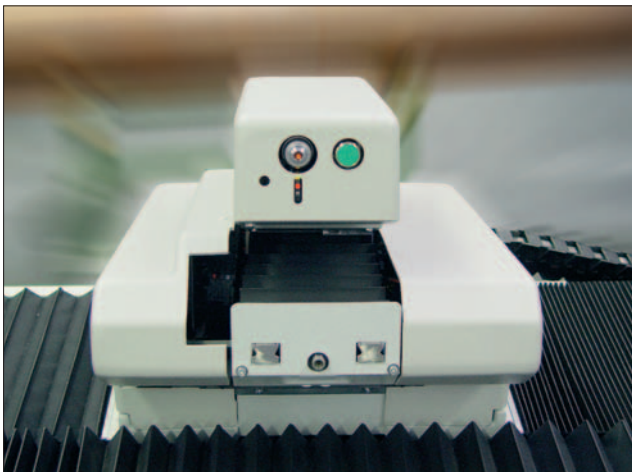
K6: The new name in perfection

The K6 is the product of many years of experience, innovation and close work with customers. In order to keep running costs for the K6 to a minimum, the design team attached particular importance to the use of wear-free materials and the simplest possible solutions. This is particularly evident in the patented copper dust extractor, the adjustable bearing shells on the bearing blocks and the new programmable control system. Another highlight of the K6 is the automatic axial format adjustment of the engraving supports.

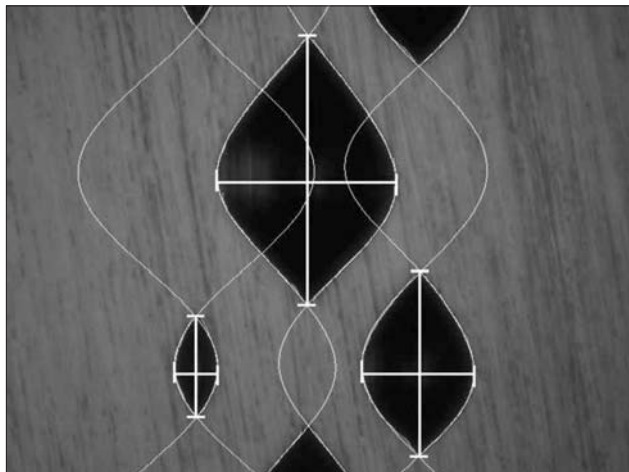
The advantages of the K6 at a glance:

- Complete automation of cylinder engraving
- Enhanced productivity thanks to shorter setup times
- Uses the proven components HelioSprint, CellGuard and GipsyNT
- Perfect quality thanks to automated ribbon balance
- Reduced running costs thanks to low-maintenance hardware
- Full compatibility with existing HelioKlischograph devices

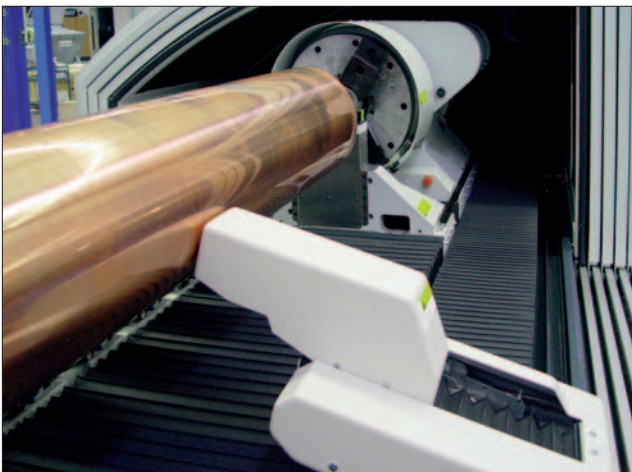
K6 with CellGuard – Top quality



Centralized quality assurance:
CellGuard performs centralized quality assurance for the engraving process.



Next-generation testcut analysis:
The volume is calculated by cell analysis.



Cylinder measurement and plausibility check:
Face recognition for automatic centering of the engraving on the cylinder.



AutoSpacer precision for "Family mode":
CellGuard controls the exact spacing of the stylus tips.

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Automated perfection in engraving

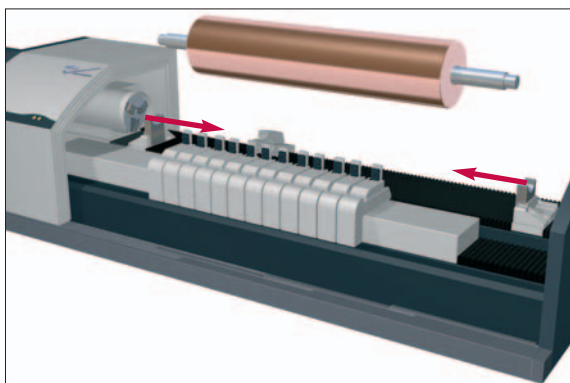
A key role in automated engraving is played by the CellGuard system, which has already proven its worth on the K406. It is also being used in the K6 in a new extension level.

In order to achieve even greater precision, the CellGuard linear drive is now an integral part of the K6 machine bed. Another new feature is automatic quality assurance using the K6 GravureCheck function. This allows the quality levels achieved to be stored in a database, for example, which means top quality and perfect control.

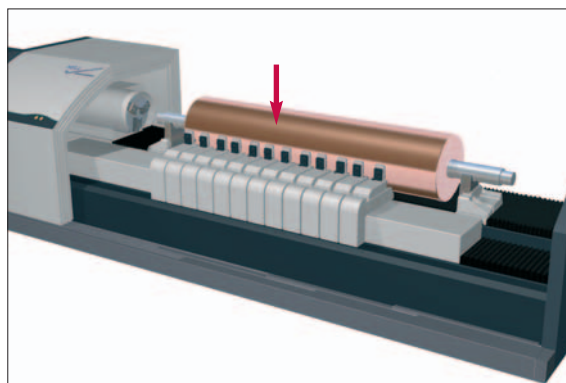
Key factors in automated ribbon balancing on the K6 include:

- Use of a single high-precision camera for all engraving channels
- Next-generation testcut analysis:
A volume is calculated using surface analysis and is automatically aligned by varying cell geometry
- HelioSprint: Long-term stability engraving system with system-specific stored parameters – optimum performance with PISA® stylus

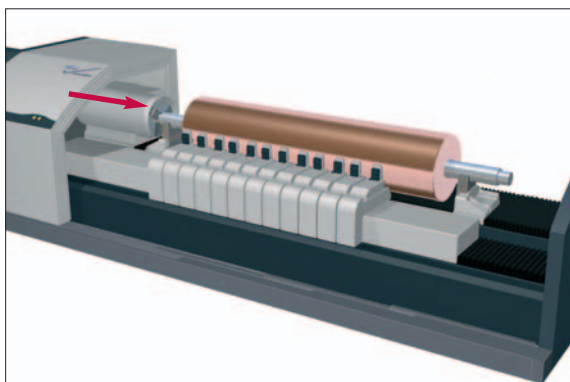
K6: Fully-automated engraving



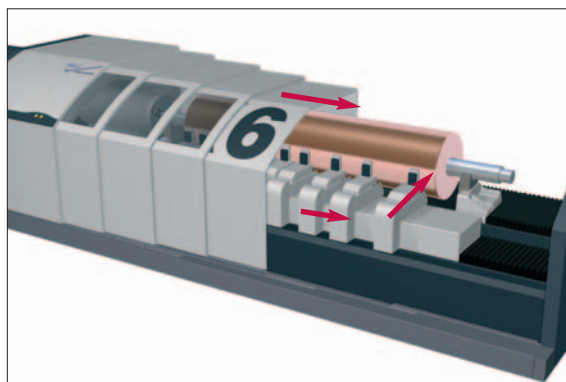
1. The bearing blocks move to a central position and the bearing shells adjust to a ball race diameter.



2. The crane simply places the cylinder onto the precisely positioned bearing blocks.



3. The main drive block moves up to the cylinder axis and clamps it in place using a pneumatic power chuck.



4. The hood closes. The spacing between the engraving system adjusts to the engraving format. The engraving sequence can begin.

K6 – Perfect cylinder positioning first time

The K6 can be integrated into a fully-automated production line with extreme ease. Its symmetrical design and open cylinder bearing reduce the requirements on a crane system to an absolute minimum. The bearing blocks are automatically positioned to the different cylinder lengths. The main drive block is moved up to the cylinder journal by a motor, and the pneumatic power chuck ensures a secure frictional connection with the integrated direct drive. This outstanding feature delivers complete synchrony, and has been

designed with future requirements in mind. Another new feature on the K6 is fast, fully-automatic engraving format changing. In conjunction with the CellGuard AutoSpacer adjustment function, this achieves perfect precision. This allows the K6 to be used in **Helio "Family mode"**. Naturally, radial positioning of the engraving systems onto the cylinder is motorized.

The HELL Publication System – A perfect team line-up.

PRODUCTION MANAGER

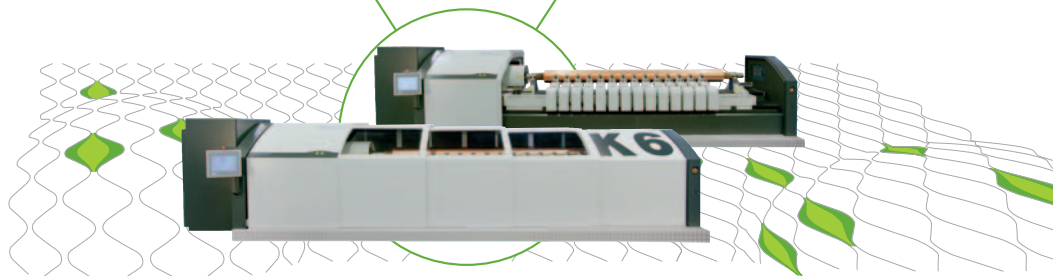


Integrated HelioPlan, HelioForm and FormProof functionality – to create job tickets.

HELL MULTISERVER



Automatic workflows – superfast standardization for engraving.



The GipsyNT system integrated into the K6 allows last-minute changes right up to the start of the engraving process.

A one-stop shop: Perfectly tuned components for engraving.

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The K6 in the HELL Publication System – Unbeatable speed and flexibility.

The HELL MultiServer, ProductionManager and K6-integrated GipsyNT system are your guarantees of a perfect engraving workflow.

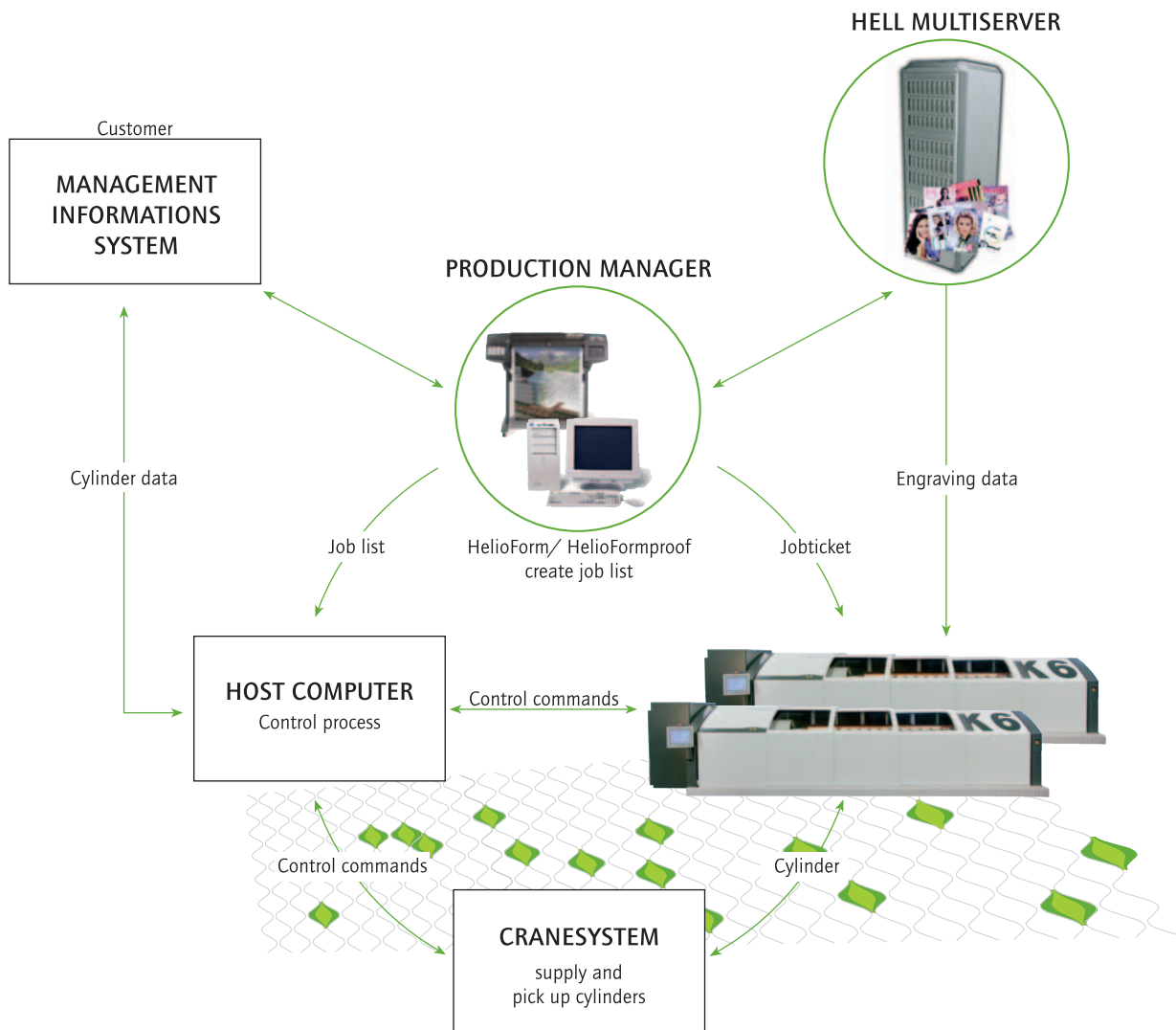
Automated workflows without compromise:

The HELL MultiServer can import and process all popular data formats in record time. The software offers full functionality which has been specially adapted for gravure printing.

With its open interface to customer-specific PPS (Production Planning Systems), the **ProductionManager** supports transparent and automated form production. The resulting job tickets can also be checked by external customers as PDF soft proofs or checked over the Internet as remote proofs.

Only when engraving begins does **GipsyNT** request the job ticket from the ProductionManager and obtains the individual pages from the MultiServer. This allows the HELL Publication System to offer the unique flexibility of updating individual pages right up to the point when engraving begins.

K6 - Integration into a fully-automated production line.



The design of the K6 allows it to be integrated into production lines and to receive engraving data with ease within the HELL Publication System.

However, the entire system is only completed by the addition of variable and open interfaces for process control purposes.

Here too, the HELL ProductionManager plays a central role. It provides a process control computer with all the engraving jobs. The computer then coordinates the crane system and the K6. Every K6 also has an interface for control and status signals.

Engraving on the K6 is therefore fully process-controlled and does not require any operator input!

The K6 is a true power player in terms of quality, performance, cost-effectiveness and flexibility.

It is setting new international standards in publication engraving, both as a one-touch-automated unit and as a process-controlled fully-automated system. In either case, it's the right, investment for the future.

Technical Details

Standard scope of delivery:

- K6 basic unit complete with equipment carrier and programmable control
- Noise protection and safety hood
- Automatic axial and radial positioning of engraving systems
- 2 motorized bearing blocks incl. adjustable bearing shells
- CellGuard system
- K6 control PC with touchscreen
- K6 control and diagnostic software incl. modem
- Process control computer interface
- Standard Status Signal Interface for crane systems

Option:

- Number of engraving channels, each with:
 - Digital engraving amplifier
 - Axial and radial motorized engraving support
 - HelioSprint engraving head
 - PISA® stylus
- Customer-specific interface solution for crane / process control systems
- Keyway sensor
- Cylinder oil system
- SprintEasy

Technical data:

Basic unit incl. hood (W x L x H): 2,15 x 7,02 x 1,8 m

Weight: 11000 kg

Cylinder mounting:

Bearing blocks with open ball bearings for different customer-specific ball race diameters.

Cylinder mounting:

Power chuck, clamping onto cylinder shaft, clamping area 10 mm, customer-specific clamping jaws for shaft diameter.

Electronics cabinet (W x L x H): 1,1 x 0,94 x 1,8 m

Power connection: 3P-N-PE, 400V, 50-60HZ

Current consumption: 10 kVA

Compressed air: 7 bar – water and oil-free

Environmental conditions:

Temperature range: +18 - +25°C

Temperature gradient: 2°/h

Relative air humidity: 45 - 85% non-condensing

