



Innovations in rotogravure printing

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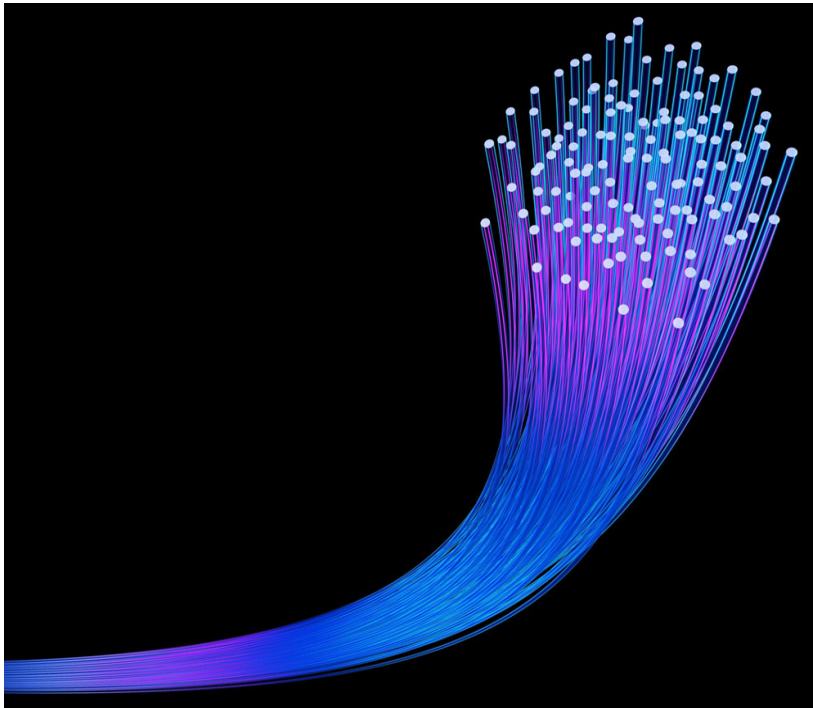
Market Demands for Printers



- Reduction of Productions Costs
- Reduction of Quality Costs
- Short Runs
- High Flexibility



Innovation – Response to Pressure



- Unique Inking System
- Pre-Register Setting EASY SYNC
- Fully Integrated Register Control HELIOCONTROL
- Highly Efficient Drying System
- Wash-up System TURBOCLEAN



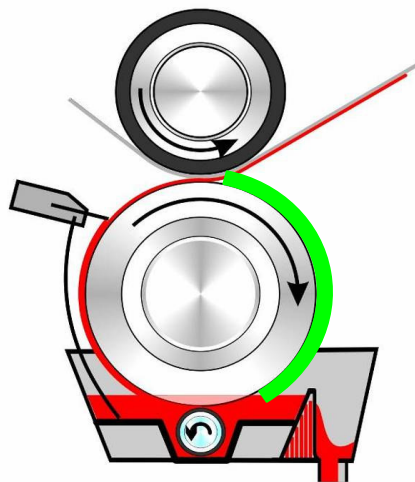
Unique Inking System



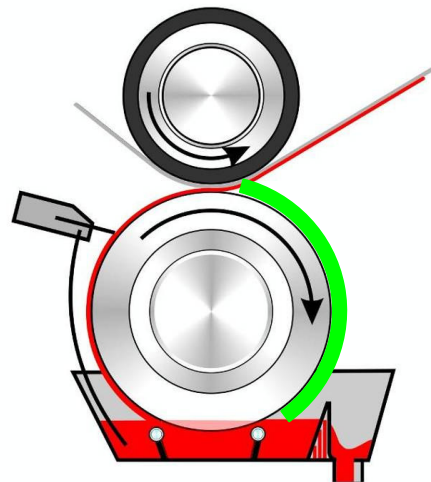
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Comparison inking systems

 = area where ink may dry up

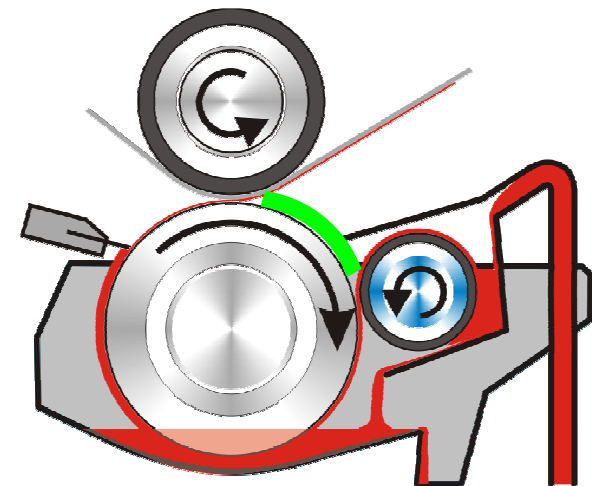


„Inking“ roller at
6 o'clock position



Streaming bar
in the ink pan

W&H patented design



Driven inking roller at
3 o'clock position



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Driven inking roller

- Minimized area where the ink may dry up
- Excellent ink exchange in the cells
- Perfect filling of cells, especially with half tones and gradations



with driven inking roller



without driven inking roller



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Easy-Sync

automatic pre-register



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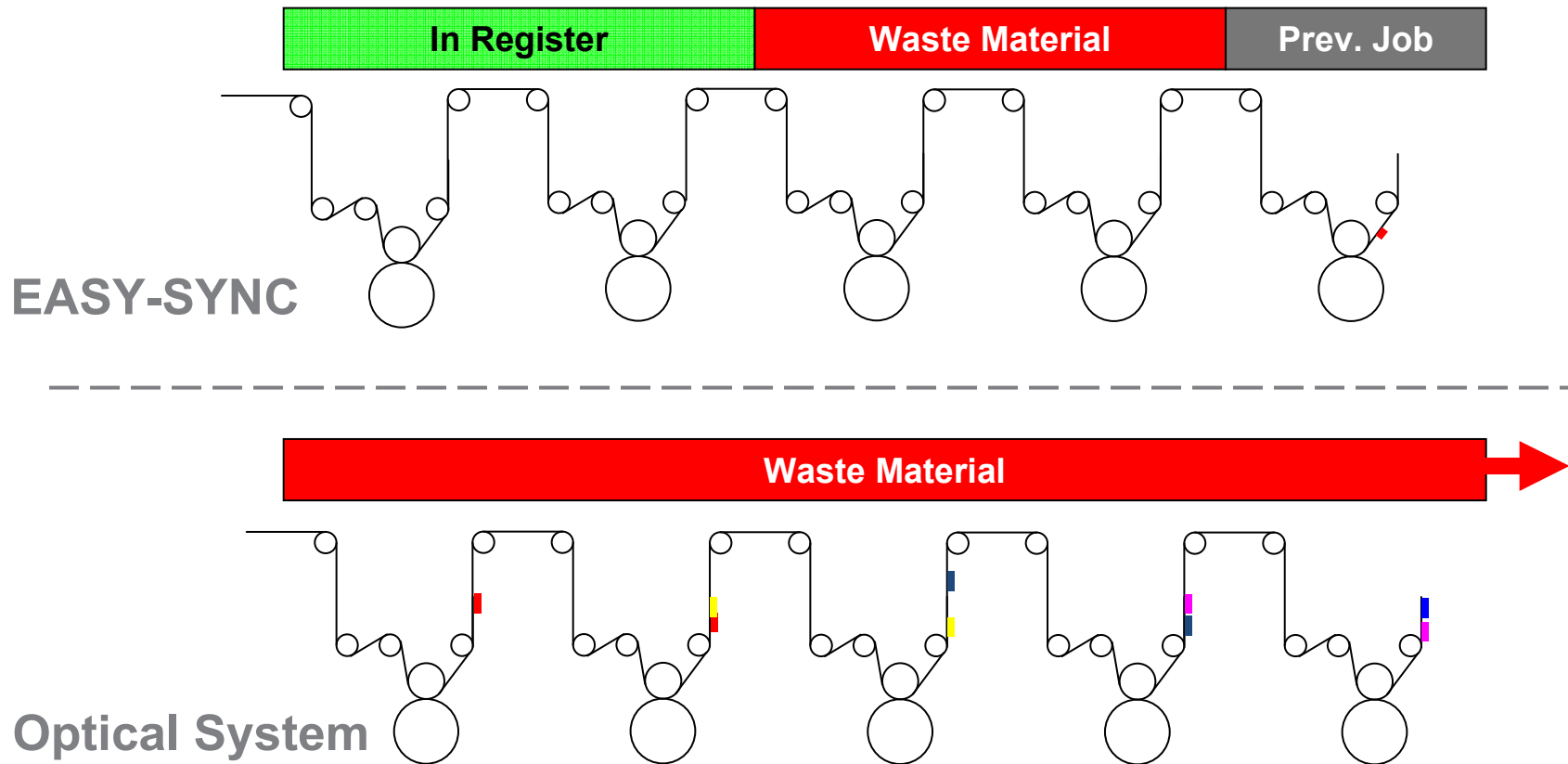
EASY-SYNC pre-register

- Affix sticky tape - start machine
- Sticky tape passes through the printing stations
- Fully automatic register pre-setting



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EASY SYNC pre-register



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EASY-SYNC pre-register

Conclusion:	W&H EASY-SYNC	Optical System
• Waste material, web length:	0.8	1.8
• Use of existing cylinders:	yes	no
• Additional print marks:	not needed	needed
• Use for invisible marks:	yes	no



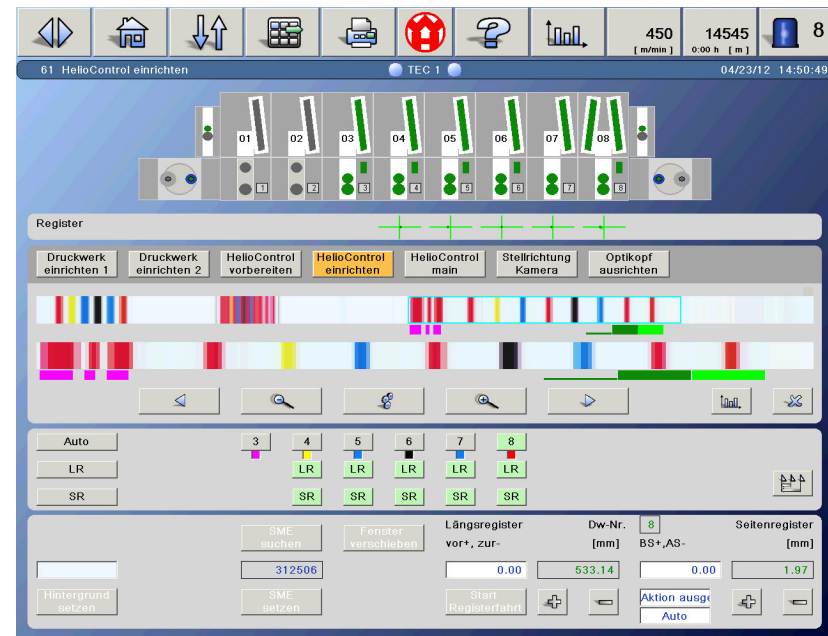
HELIOCONTROL – integrated register control system



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HELIOCONTROL Drive & Register Management

- Machine “knows“ the substrate details (thickness, width, material type) and all its properties.
→ Automatic controller adjustment
- Storage of all recipe data in the machine order memory
→ Easy operation



High-performance drying system

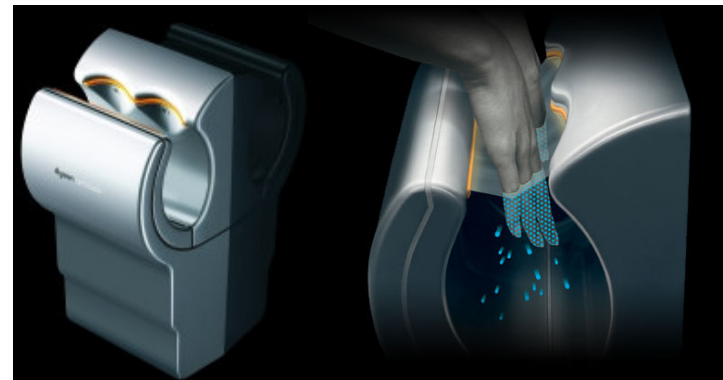


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Drying System

Factors on drying efficiency:

- Temperature
→ high energy consumption
- Time
→ low speeds and/or long web paths
- Turbulence
(high air velocity)
→ high efficiency



TURBOCLEAN

automatic wash-up-system



HELIOSTAR S TURBOCLEAN

Automatic Wash-up System

Integration of TURBOCLEAN

- field-proven system for highest reliability
- easy operation and maintenance



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