



see. control. automate.



NELA Plate On Demand

Pre-press automation solutions for sheet-fed printing

In sheet-fed printing, fast and efficient supply of press-ready plates is a requirement for an on-schedule production of print orders, which have to be processed ever quicker while cost pressure increases. This is where essential time and cost advantages can be achieved through automation of plate production processes. From imager to press without manual handling – NELA Plate On Demand makes sure that always the right plates are provided for the next print job.

NELA Plate on Demand means that exposed printing plates will be sorted in accordance with the production planning and supplied in carts to the printing press.

The first step towards Plate On Demand is automated plate bending, for which we recommend our plate bending systems. The bender can be connected in-line with your Ctp-device and the bent plates are placed without scratching in the cart of a stacker bin. A connection with more than one Ctp-line by way of NELA plate conveyors is also possible.

In the next stages of expansion, printing plates can be sorted according to customer-specific criteria, such as print order, version, or printing press. The stacking station will, therefore, be tailored to your requirements and room situation precisely. With NELA's own sorting software, you can easily assign printing plates to specific sorter carts, for example all plates for a print job, and you can also supervise whether a set of plates is already complete.

The NELA stacking stations have been designed specifically for the requirements of sheet-fed printers and feature carts in which the bent plates can be transported safely and quickly to the press. The negative side effects of manual plate sorting, for example scratching or missing plates at start of print, are eliminated by automatic plate sorting.

NELA also caters to the needs of customers with even the highest automation requirements. With the Indexer, complete plate sets for the next jobs can be stored until start of print. Because each plate is stored horizontally on its individual shelf, there will be absolutely no scratching of plates any more. The fully loaded carts of the Indexer can be rolled to the press, where the plates can be retrieved easily.



NELA Plate On Demand

The concept for more effective production flows



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Plate transport

Plate transport systems for fully automatic transport of unbent or bent printing plates customized for your plate format. The plates will be transported safely, without any damage, to the desired location. Additionally we are offering turning stations, hinged elements for transits as well as transport elements for wall breakthroughs. The transport system will always be adjusted to your individual demand.



Barcode

Barcodes are needed for several applications, e.g. plate sorting, for page tracking or automatic measurement of plate quality with NELA PQM+. Therefore, the required information for the respective application has to be included and exposure on the non-printed area of the printing plate. NELA will provide the barcode reader and install it in the appropriate position.



Register punching and bending systems

We are offering special designed bending systems for sheet-fed printing which perform the claimed bending of the printing machine manufacturer. The treatment of multiple plate formats with same bending angle is possible. On request an additional bending configuration can be integrated. If required, the register punching could be integrated with video control positioning for maximum register precision.



Plate quality management

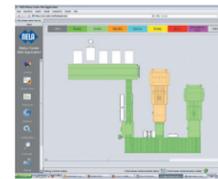
With the NELA PQM+ you are able to measure automatically the quality of your exposed and developed printing plates. A special wedge has to be exposed on the printing plate. NELA will supply you with this wedge. Deviations in quality which would lead to an inferior print result can be detected at an early stage and the relevant printing plates will be sorted out.



Visualization

Production data of current jobs can be controlled and monitored on a large-format screen.

Also the completeness of particular jobs can be displayed. The operator recognizes easily in which cart which printing plates are located and whether the job is complete.



StatusCenter

All activities of the entire line are centrally supervised through the NELA StatusCenter. Modifications and interferences are shown on the console terminal immediately. A steady and fast control of all production components and the entire line by the operator is guaranteed. Interferences and interruptions of production are shown in a clear text on the console terminal.

Of course, the NELA StatusCenter can also be displayed on tablets or smartphones.



Indexer

The NELA indexer is an efficient printing plate storage for pre-sorting and provision of plate groups for the entire print job. Due to the gentle, separate storage there is no damage of the printing plates through scratching. The assembled plate carts are moved to the printing machine where the printing plates can be taken off easily. The transport of the printing plates takes place on a horizontal level.

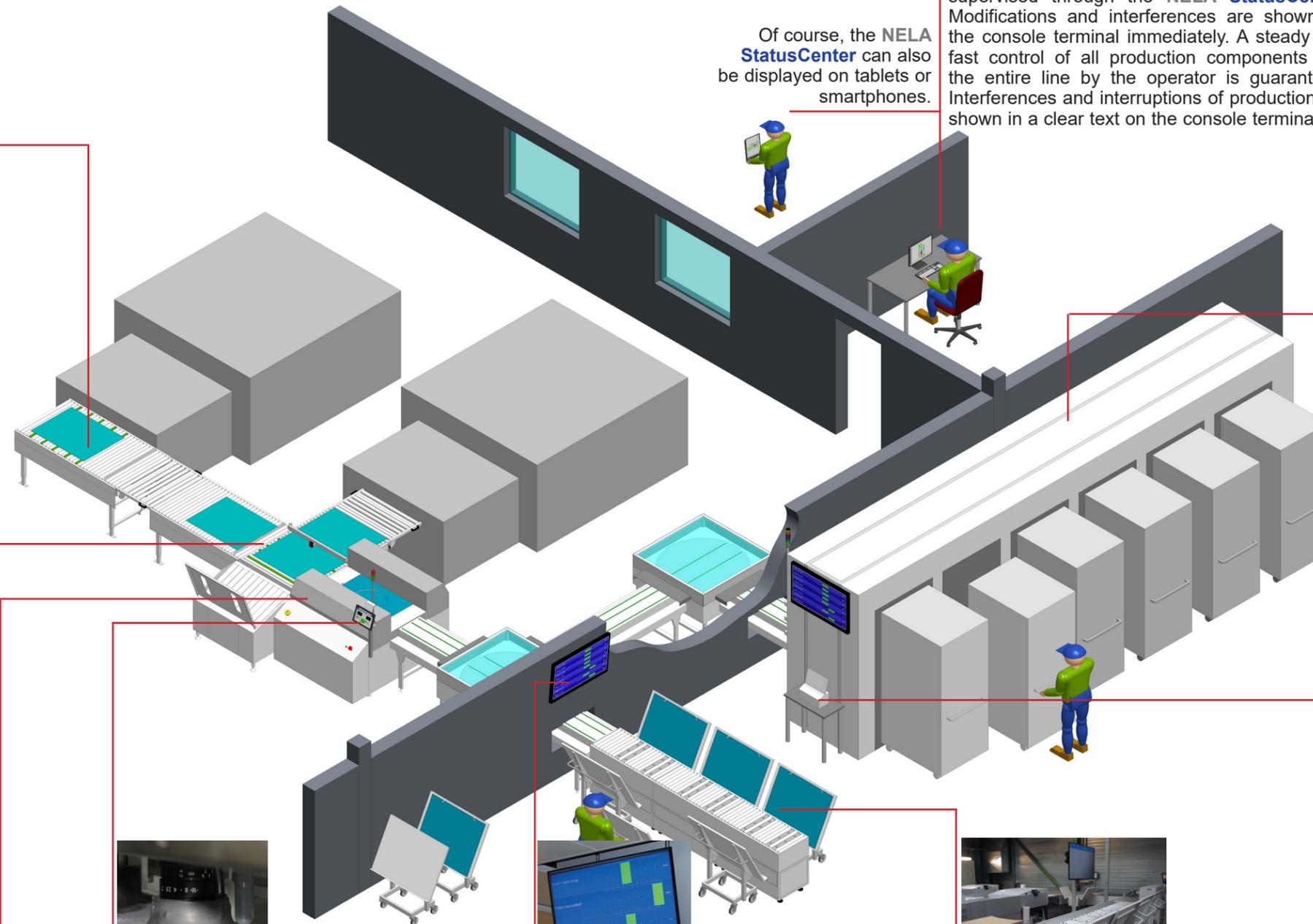


Sorting

Printing plates can be placed in the stacking station according to various customized criteria. Frequently used sorting criteria are e.g. format, printing job or printing machine. With the NELA sorting software recurring sorting samples can be recorded and new samples can be specified. Each stacking station is equipped with one plate cart for a quick and gentle transport of your printing plates.

Printer

Working sheets which list the content of a full loaded plate cart can be printed. The operators can allocate the cart to a particular job or printing machine with the help of the printed sheets.





Intelligent plate sorting with **NELAPSC Plate Sorting Commercial**

If you sort your offset printing plates according to print job, printing press, or other criteria, **NELAPSC** is the perfect solution for you. The software is available in different versions and can be adapted to your individual needs.

NELA PSC

allows you to assign a plate cart, i.e. stacker bin to one specific press. It can also be defined how many plates maximum can be placed into this cart. When complete, the cart must be detached and an empty one can be docked for the next production. For automated plate sorting with **NELAPSC** the information that is needed for the sorting has to be encoded in a bar code which must be imaged on the non-printing area of the plate. As soon as the barcode has been scanned, the software knows based on the barcode information into which stacker bin or plate cart the plate must be placed. When you are using the same sorting criteria for specific recurring productions, the software allows you to store patterns.

NELA Cascading of plates

Depending on the configuration of your stacker system, it is also possible to create several stacks of plates within one plate cart. A second information item from the barcode determines which plates go into which stack. This allows, for example, that plates for several versions of an order can be placed separately into the same cart.

NELA PSCsmart extended functions

NELA Completeness check

When you can include information in the barcode on how many plates are needed for one order, then the software provides information whether an order is already complete in the cart, or how many plates are missing.

NELA Visualization

To find individual plates or orders easily and quickly, the current stacker bin assignment is shown on a large screen that can be mounted above the stacker.

Plate automation with **NELA – competence and know-how bundled under one roof**

As a company with a high degree of vertical integration, NELA bundles all necessary resources to see a project through from start to finish. From the first consultation to the development of hardware and software and the final assembly, at NELA we have everything under one roof. Our global service team supports the customer during installation and all the subsequent years of production. Each department relies on a high technical expertise and is perfectly integrated into the overall planning, production and service processes.

