

NELA Automation in Pre-press

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.

NELAPSC

allows you to assign a plate trolley, i.e. stacker bin to one specific press. It can also be defined how many plates maximum can be placed into this trolley. When complete, the trolley must be detached and an empty one can be docked for the next production. For automated plate sorting wit **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 trolley the plate must be placed. When you are using the same sorting criteria for specific recurring productions, the software allows you to store patterns.

NELACascading of plates

Depending on the configuration of your stacker system, it is also possible to create several stacks of plates within one plate trolley. 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 trolley.

NELAPSC*smart* extended functions

NELACompleteness check

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

NELAVisualization

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

NELATrolleyTracking

With Trolley Tracking, all plate trolleys of your sorter receive a unique code and can be identified even when they are not connected to the sorter. This is very helpful when press-ready plate sets are waiting in a trolley next to the sorter to be brought to the press. Staff will always know where which plate set is and there will be no more wrong plate sets at the wrong press.

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.



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 plan and supplied in trolleys to the printing press.

The first step towards Plate On Demand is automated plate punching and bending. The register punching and bending system will be connected in-line with your Ctp-device and the bent plates are placed without scratching in the trolley of a

As a next step, printing plates can be sorted according to customer-specific criteria, such as print job, version, or printing

The press-ready plates are transported safely and quickly to the press in the trolleys. The negative side effects of manual plate sorting, for example scratching or missing plates at start of print, are eliminated by automatic plate sorting.

For highest automation requirements – the NELA Indexer. 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 trolleys of the Indexer are rolled to the press, where the plates can be retrieved easily.





NELA Plate On Demand



Handshake between Prepress and Press – The concept for more efficient production flows



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 adapted to your individual demand.



Barcode

Barcodes are needed for several applications, e.g. plate sorting, page tracking or automatic measurement of plate quality with **NELAPQM**⁺. The required information for each application has to be included in the barcode, which is exposed on the non-printing area of the printing plate. NELA will provide the barcode reader and install it in the appropriate position.



Register punching and bending systems

Plate quality management

be detected at an early stage.

With the NELAPQM+ you are able to

measure automatically the quality of your

exposed and developed printing plates. A

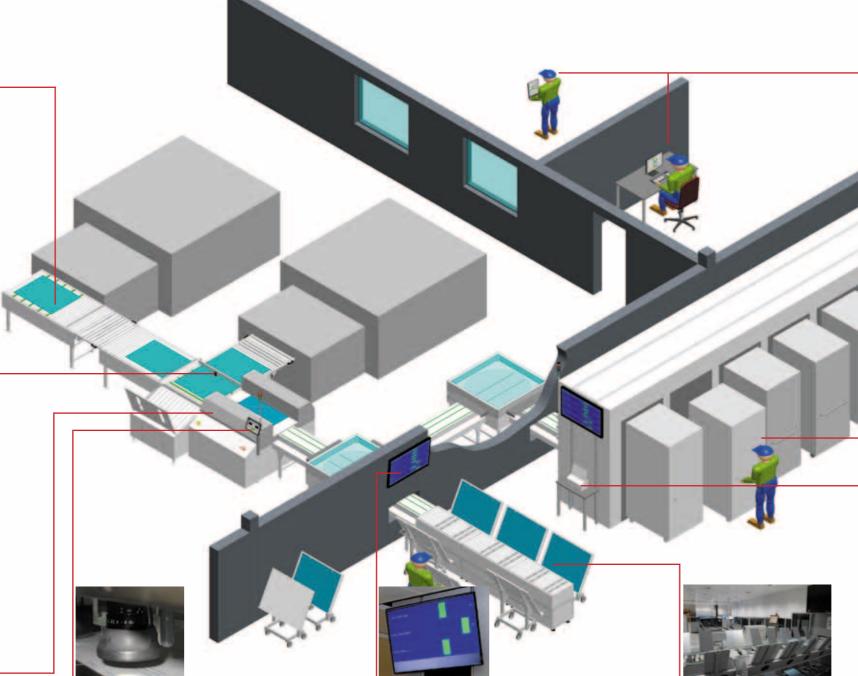
special wedge has to be exposed on the

printing plate. NELA will supply you with

this wedge. Deviations in quality which

would lead to an inferior print result can

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 can be integrated with video control positioning for maximum register precision.



StatusCenterAll activities of

All activities of the entire line are centrally supervised through the **NELAStatusCenter**. 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 **NELAStatusCenter** 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 sets for entire print jobs. Thanks to the horizontal storage there is no damage of the printing plates through scratching. The assembled plate trolleys are moved to the printing machine where the printing plates can unloaded easily.

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

Visualization Sorting

Production data of current jobs can be con-Printing plates can be placed in the stacking station according to various customized trolled and monitored on a large-format screen. Also the completeness of particular criteria. Frequently used sorting criteria are format, printing job or printing machine. jobs can be displayed. The operator recognizes easily in which trolley which printing With the NELA sorting software, recurring plates are located and whether the job is sorting samples can be recorded and new samples can be specified. Each stacking complete. station is equipped with one plate trolley for a guick and gentle transport of your

printing plates.