

**NELA**Punch- and Bending Devices

# **NELAVCP***evolution HS* High-speed Precision and Flexibility

# Fully-automatic register punching and bending device with Video Control Positioning

- For Single and Double wide Offset Printing Plates
- Register punching and bending in two steps
- Shearing function optional if required by press manufacturer
- Optical Alignment with NELA Video Control Positioning
- Bending configuration according to customer's specification
- Speed: up to 400 plate per hour
- Expandable design with many optional features





# **NELA**Punch- and Bending Devices



# **NELAVCP***evolution* **HS** is a fully automatic punching and bending machine for high precision demands and efficient operation.

The NELAVCPevolution HS realizes maximum register accuracy by the systematic use of modern technologies and manufacturing processes. Its flexibility allows the combination with a variety of modern and fast imaging equipment to an economical, high-precision printing plate processing line.

Equipped with the latest NELAVCPNet software, the NELAVCPevolution HS can be flexibly integrated with any automation solution.

### Function

In the NELAVCP evolution HS digital CMOS cameras detect the exposed register marks on the incoming offset plates. By employing state-of-theart image processing and positioning units, the printing plates are brought into a register-true position that corresponds with their type area. Manual register corrections for each plate may be effected via touch screen or keyboard. The printing plates are punched and afterwards moved to a register-true bending position. All plates are finally placed into a customizable stacking station.

# Reliability

All parts of the NELAVCPevolution are developed and designed according to the latest state of technics and technology and manufactured with highest precision. By manufacturing most of the machine parts in house, NELA ensures that all equipment is delivered in proven and reliable NELA quality.

#### **Technical Features**

# 1. Mechanical:

- Speed: up to 400 pph (depending on machine type and configuration)
- Optimized frame stability: designed by using finite elements
- Modern design providing easy access to all maior machine parts
- For singlewide and doublewide offset printing plates
- Video-controlled register punching and bending
- Cleaning and lubrication of punching dies before each punching stroke for long life of punch tools and precise, burr-free punch holes
- Register-true positioning of offset plates by two high resolution digital cameras according to exposed register marks
- The 3-pin registration provides a pre-alignment of the printing plates and a back-up for the vision alignment system
- 3-way alignment controlled by stepper motors
- Integration of plate slitter is possible

#### 2. Elektronics and Software:

- NELAVCPNET intuitive operating software
- Network capable
- PC based workflow



### NELA - Who we are:

The NELA Group with NELA Brüder Neumeister in Germany, NELA USA and NELA Asia forms one of the largest manufacturers of high-quality optical control devices for industrial applications, process control and automation. It serves several markets like the Graphic Arts Industry as well as the Automotive and Medical Industries. NELA's offset print business includes optical in line punch bending machines, both for newspaper and commercial printers, as well as plate automation and transportation systems. With more than 3000 installations around the world, NELA is a market and technology leader. NELA's parts inspection business includes automated optical 100% inspection of rubber seals, plastics, metal, ceramics and sintered mass parts. In this highly diversified market, NELA is among the technology leaders. In our plants in Lahr, Germany, and River Falls, USA, 200 employees manufacture state-of-the-art precision equipment in modern and spacious production facilities.



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- Open platform design allows for easy integration of new applications
- Priority-driven warning system: Errors, warning, information
- NELARemote remote diagnostics

#### 3. Options:

- NELAPQM<sup>+</sup>: Automatic measurement and evaluation of the image quality of printing plates for 100% control during plate production regarding precision of register, and quality of image and development process
- Automatic register correction as well as software-driven Fan-Out-Compensation
- Inkjet Printer
- NELAPageTracking
  Multiple Stackers
- Plate transport systems
- Elevators
- **NELANPS** Plate Sorting Manager
- Barcode Reader
- NELAStatusCenter

# **Our Service is your Advantage**

- Responsive, expert consulting
  Everything from NELA from register bars to fully automatic printing plate processing lines
- Installation drawings and layouts (CAD) according to your requirements
- Modern and reliable pneumatic and electronic components – the worlds leading manufacturers with service centres worldwide are our partners.