# EP 48 V Bookbinding Application System



Hot melt adhesive application system opens new horizons in bookbinding: higher quality adhesive bonding and more production reliable with increased productivity.



Nordson developed this closed hot melt application system with the EP 48 V application head especially for adhesive bonding with polyurethane (PUR) adhesives. This system presents an excellent alternative to the traditional, open wheel application method and offers substantial advantages to product quality, efficiency and production reliability.

The EP 48 V applies adhesive directly to the spine of the book. Better wetting of the paper fibers ensures good adhesion with high pull values and improved lay-flat properties.

The positive adhesive application pressure and clean cutoff enable production speeds of up to 18,000 books per hour.

With exact spine preparation a coating thickness of 0.3 mm / 0.01 in. can easily be reproduced. Other savings result from using a tank system, which unlike a drum system, does not leave waste adhesive.

Depending on customer needs a tank system or bulk system can be used. Using a tank system allows continuous melting and does not waste adhesive. Using a bulk system provides optimum PUR conditioning for intermittent use. The closed system ensures the adhesive is protected and prevents premature curing. Bubble formation and adhesive foaming does not occur as with wheel applicators. The extensive effort required to clean traditional open systems is virtually eliminated by EP 48 V heads.

The application width can be quickly and gradually adjusted on the head to adapt to various inner book widths. Edge guides also prevent mushroom-shaped deformation of the inner book and prevent glue from seeping between the pages. When the width of the inner book deviates substantially, the application head swivels out and the system is automatically switched off.

The EP 48 V bookbinding application head is part of a complete Nordson system. Normally this system can be integrated into the design and control of adhesive bonding with little effort. Integration occurs via a trolley that can be optimally adapted to the specific type of bookbinding machine.\*

\* When retrofitting, it should be ascertained whether the bookbinder fulfills the requirements in regard to wear and spine processing.

### **Features and Benefits**

- Closed system for clean adhesive application and minimum cleaning effort.
- Intermittent application with special modules with suction stem function for excellent adhesive cutoff enables production speeds up to 15,000 books per hour.
- Positive adhesive application pressure directly onto spine for good adhesion.
- Optimum process control for reproducible product quality and adhesive savings.
- Gradually adjustable application width for spines up to 60 mm / 2.4 in.
- ChemCoat<sup>®</sup> non-stick coating makes cleaning easy.
- Integrated light barrier for recognizing book length.
- Easy adjustment of head with fine adjustment feature.
- Heated adhesive filter.
- Complete system from one supplier.

ChemCoat is a registered trademark of Impreglon GmbH.





Top view: Edge guide with slot opening.

### **Specifications**

Operating temperature 1) Processable adhesive viscosity Application width Heating time Operating voltage Power consumption (heater) Temperature sensor Operating pressure Weight Dimensions (L x W x H) Degree of protection

Hand wheel for simple width adjustment.

> max. 180 °C / 356 °F max. 30 000 mPas / cps 1 - 60 mm / 0.04 - 2.4 in.  $< 30 \min$ 230 VAC body 960 W, filter block 600 W Ni 120 max. 4 MPa / 40 bar / 580 psi approx. 25.4 kg / 56 lb 370 x 450 x 200 mm / 14.5 x 17.7 x 7.9 in. IP 50



Bottom view: Sniff-back module, controle module and pressure regulator.

1) Adhesive manufacturer's processing instructions should be observed.

## For more information, talk with your Nordson representative or contact your Nordson regional office.

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