# PERFECT BINDING MADE EASY

# DPB-500/500 PUR PERFECT BINDER

- · Quick and easy setup and changeover
- Single operator design for greater productivity
- Automatic book thickness detection for side glue & cover scoring
- Designed specifically for short to medium runs & variable data productions





The high speed and precision engineering of the DPB-500 Perfect Binder makes it the most productive and cost-efficient perfect binder in its class. The fully automatic and single clamp design allows cycling of up to an impressive 525 times per hour.

# **AUTOMATION AND INTEGRATED CONTROLS**

The user-friendly touchscreen control panel simplifies operation and provides many useful features to augment production. An easy-to-use touchscreen monitor allows the operator to quickly adjust, program, and save up to 20 different jobs. Such state-of-the-art automation reduces set-up time and cost and requires minimal operator skills, making the DPB-500 ideal for short run and variable data productions.

# **VERSATILE PERFORMANCE**

Changing from one size to another is as quick and easy as a push of a button. Simply select one of the stored memories, load the book into the clamp, and press the Size Change key to initiate the size change process. The side glue wheels, scoring wheels, and cover positioning guide will automatically move into the desired position, according to the thickness of the loaded book.

# **EXCEPTIONAL COVER FEEDING**

Once the size change is completed, covers can be loaded into the Cover Feed section which has controls that give the operator the ability to make and verify any fine adjustments aligning it with the Nipping section. Equipped with the most technologically-advanced, reliable, and proven vacuum belt feeding system in the industry, the DPB-500 Cover Feed section is incorporated with a sensor to detect miss- and double-feeds and various cover types.

# SIMPLE, DEPENDABLE OPERATION

The DPB-500 is ready for operation once the size change occurs, covers are loaded, and the Cover Feed section is adjusted. The DPB-500 can operate in two modes. The Normal Mode is utilized to bind books of the same thickness; the Variable Mode is designed for jobs requiring the ability to run various book thicknesses, as the scoring and side glue wheels are automatically adjusted. The DPB-500 can bind books of various thicknesses as easily as books of the same thickness by simply loading the clamp and pressing the start button.

With its unique automation, the DPB-500 is ideal for the on demand market because it can accommodate book thicknesses from 0.04" to 2.01" (plus cover thickness) automatically.

# SAFE AND CLEANLY OPERATION

The design of the DPB-500 provides the user with the safest and cleanest working space possible. Interlocked covers guard against the possibility of injuries caused by contact with internal parts. A powerful dust extractor is included to remove paper waste keeping the system clean. A built-in exhaust fan assists in removal of fumes. The book loading area is protected by a safety light curtain.

# PUR

Extending the DPB-500 Perfect Binder range, a PUR version is available making it ideal for perfect bound books printed digitally on coated stocks. The binder applies a strong, yet thin layer of PUR ensuring excellent bound strength and lay flat properties.

Solid construction and state-of-the-art automation make the DPB-500 built to last through all your perfect binding demands.









# DPB-500/500 PUR PERFECT BINDER







#### COVER FEEDER

The operator can make fine adjustments directly from the cover feeder controller without having to access the main control panel.



#### COVER FEEDER SENSOR

The automatic vacuum cover feeder is equipped with sensors to detect miss- and double-



# GLUE POT

The DPB-500 features a large glue tank with two heated glue drums, two side gluing wheels, and a scraper that evens the glue layer. The gluing cut off can also be controlled to avoid glue overflow at the end of the spine.



#### BOOK CARRIAGE

The clamp is automatically and accurately adjusted to the inputted book thickness. The mechanical clamping system secures clamping of the book block for accurate milling and binding on books up to 2.01" thick. The book block information also automatically sets the nipping and hinge scoring station accurately to the size of the book.



#### CONTROL PANEL

The touchscreen control panel allows for quick adjustments and programming.



### **IN-LINE SCORING**

Standard, hinge, and optional wing scoring capabilities allow for versatile applications.



# MILLING STATION

Accurate spine preparation is ensured by a strong mill and two notching tools that can handle cut sheet and signature folded blocks.



Books are stacked vertically to keep book spines neatly square.

# **DELIVERY STATION**



# **PUR HEAD**

Precise pressure control applies a consistent, thin glue layer which provides superior adhesion, lay flat and book qualities. The closed system minimizes cleaning and PUR glue waste associated with a PUR applicator roller system.



# **PUR BULK DISPENING SYSTEM**

The DuraPail five-gallon pail provides continuous running eliminating frequent stops for refill. Only the top layer is heated, protecting the rest of the PUR pail from heat curina.

# SPECIFICATIONS

**DPB-500** 

DPB-500 PUR

# Book Size

Book Block

**Binding Thickness** Size

Paper Type

1 to 51 mm (0.04" to 2.01") + cover thickness 120 mm x 120 mm (4.72" x 4.72") to 360 mm x 320 mm (14.17" x 12.6") Single- and double-folded sheets Fine: 52 to 157 gsm Art/coated: 79 to 157 gsm

# Cover

Feed Method

Size

Paper Curl Paper Type Stack Height Belt suction

120 mm x 250 mm (4.72" x 9.84") to 360 mm x 696 mm (14.17" x 27.4") 5 mm (0.2") or less R60 or more Fine: 81.4 to 302 gsm Art/coated: 104.7 to 302 gsm

70 mm (2.76") Up to 525 cycles per hour (up to 360 productions per hour)\*

Up to 525 cycles per hour (up to 280 productions per hour)\* Up to 4 mm (0.16")

## Milling Roughening Gluing

Thickness

Spine Glue Side Glue Glue Cutting

0.5 to 2.25 mm 0.1 to 0.8 mm (0.02" to 0.09") (0.004" to 0.031") 2 + spine meter roller Slotted blade Roller method Slotted side blades Solenoid-driven Solenoid valves Approximately 30 minutes Approximately 15 minutes

## Warm-up Time Scoring

Number of Scores Depth Adjustment Ream Weight

4 (up to 6 with optional wing) Manual non-stop adjustment 157 gsm or more

Manual non-stop height adjustment
Up to 200 mm (7.87") Nipping Stacker Capacity Noise Emission 90 dB or less 3.2 kw 8A/single-phase Ratings Dimensions (LxWxH) 109.84" x 36.54" x 52.87'

(DuraPail Bulk Dispensing System 46.5" x 49.9" x 21.3") 1,529 lbs. (DuraPail Bulk Dispensing System 750 lbs.) Weight Power Requirements Three-phase 208V, 240V 60Hz Option Wing scoring; DPB-LS Long Stacker; Barcode kits

\* Varies upon book thickness and size.

Production rates are based on optimal operating conditions and may vary depending on stock and environmental conditions.

As part of our continuous product improvement program, specifications are subject to change without notice.



