

**Horizon**

# BQ-270

**Superior Quality  
from the First Book.**



## Features

- All necessary set-up information is input on the icon-based touch screen and complete system set-up is automatic in less than one minute. The BQ-270 automatically sets-up for book block dimensions, glue application as well as cover feeding, positioning, and scoring. Precision stepper motor control ensures accurate set-up for critical register of the scoring and positioning of text on the spine.
- The maximum cycle speed is 500 cycles/hr.
- Accurate cover scoring adjustments are performed automatically, ensuring consistent micro positioning of text on the book spine and clean, crisp spine corners.
- The technology leader in rotary vacuum feed collator systems, Horizon employs the same technique for reliable and consistent feeding of a wide variety of cover stocks. Up to 70 mm (2.7") of cover stock can be loaded into the top-feed cover station.
- Books from 1 mm (0.04") up to 50 mm (2") thickness can be produced on the BQ-270.
- The gluing section features two application rollers and true side-gluing for reliable application and superior binding strength.
- The nipping station is as rigid and strong as those found on Horizon's larger systems, providing the positive mechanical force required for strong, square binds.

**The automated BQ-270 provides simple operation, automated set-up, and superior quality from first book to last, without the need for a skilled operator.**

### LCD Touch-screen



A simple, icon-based touch screen provides for quick and easy set-up of the binder with full automation. Up to 20 different complete jobs can be programmed into memory for instant job recall.

### Carriage Clamp



The book clamp opening is automatically and accurately adjusted to the input book thickness. The mechanical clamping system provides positive clamping of the book block for accurate milling and binding even on books as thick as 2".

### Cover Feeder



The advanced rotary vacuum feed system insures fast, smooth feeding of various stock types. Even sensitive stock and digitally imaged covers are fed without any damage to the sheet.

### Vertical Stack Delivery



The finished books are delivered to a vertical stacker located just below the book loading station. This allows a single operator to easily check the quality of completed books while continuing production.

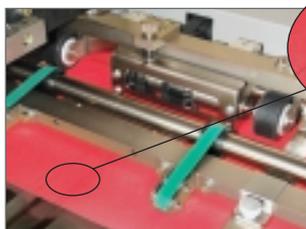
**The BQ-270 is the first single-clamp binder to automatically set-up for cover scoring. Book titles are accurately positioned on the spine, and "hinge scoring" preserves the integrity of the spine.**

### Cover Feed Table

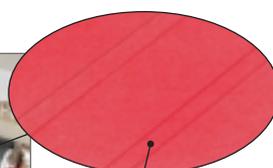


Up to 70 mm (2.7") of cover stock can be loaded into the top-feed cover station which is positioned to accommodate in-line scoring.

### Scoring



The scoring position can be automatically set-up through the LCD touch-screen. Scoring depth is easily adjusted to accommodate a wide range of cover stocks and thickness. This insures a professional bind with sharp, square spine corners.



Accurate Scoring

### Cover Registration



The stepper motor controlled cover register system ensures cover to book block positioning and accurate registration for corner bleeds and spine text registration. The pressure of the cover transport belts can be adjusted through the LCD touch-screen for various sheet types.

**Finally, a heavy-duty fully-automated perfect binder for superior-quality short-run book production - the new Horizon BQ-270.**

**This state-of-the-art binder combines complete system automation, user-friendly operation, in-line cover scoring, and production speeds up to 500 cycles per hour.**



**Even though the BQ-270 is a single-clamp compact binder, it produces square accurate spines. The quality of bind on the BQ-270 is equal to that provided by more expensive multiple-clamp binding systems.**

#### **Milling and Roughening**



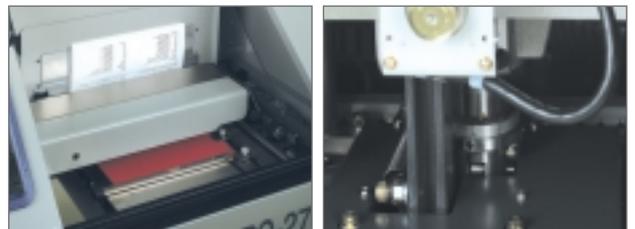
The rotary milling and roughening blades mill off up to 3 mm (0.12") from the book spine for optimum glue penetration and adherence. For safe operation, the milling brake stops the blade rotation immediately if any covers are opened.

#### **Glue Application**



Dual application rollers and side gluing rollers ensure superior glue application to the spine for quality binding. The amount of glue applied is automatically set-up and can be fine-tuned. The glue temperature can be regulated within the range from 120 to 180°C, depending on the type of glue.

#### **Nipping**



A strong, rigid nipping mechanism ensures the same high quality binding as found on larger industrial book binders. Three different nipping modes can be selected from the LCD touch-screen: binding with milling, binding without milling, or padding. The nipping height is also simple and easy to adjust.

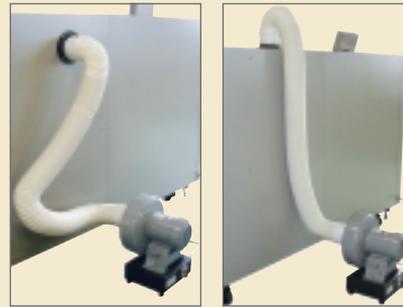
### BQ-270 Major Specifications

Binding Mode	Binding with milling, Binding without milling and Padding		
Number of Clamp	1		
Book Block Size (Top-Bottom x Fore-edge)	Max. 320 x 320 mm (12.5" x 12.5")		
	Min. 135 x 105 mm (5.4" x 4.2")		
Book Thickness	1 to 50 mm (0.04" to 2.00")		
Cover Size (Top-Bottom x Fore-edge)	Max. 320 x 660 mm (12.5" x 25.9")	Rear Side 110-310mm (4.33"-12.2")	Rear Side 120-350mm (4.72"-13.78")
	Min. 135 x 230 mm (5.4" x 9.1")		
Cover Weight Range	82 gsm to 302 gsm		
Cover Pile Height	Max. 70 mm (2.7")		
Warm up Time	40 min.		
Glue Temperature	120 to 180°C (248 to 356 degrees Fahrenheit)		
Max. Milling Depth	3 mm (0.12")		
Cycle Speed	Max. 500 cycles/hr.		
Voltage / Frequency	3-Phase 200 / 220 / 230 / 240 / 400 V, 50 / 60 Hz		
Rated Current	3-Phase 200 V	50 Hz	10 A (Max. 15 A)
		60 Hz	9.4 A (Max. 15 A)
	3-Phase 220 / 230 / 240 V	50 Hz	9.7 A (Max. 12.8 A)
		60 Hz	8.5 A (Max. 12.8 A)
	3-Phase 400 V	50 Hz	5.6 A (Max. 9 A)
		60 Hz	5.1 A (Max. 6.4 A)
Power Consumption	3-Phase 200 V	50 Hz	2.7 kW
		60 Hz	2.9 kW
	3-Phase 220 / 230 / 240 V	50 Hz	2.9 kW
		60 Hz	2.78 kW
	3-Phase 400 V	50 Hz	3.1 kW
		60 Hz	3.16 kW
Heat Output	7,870 kJ (1,880 kcal)		
Machine Dimensions	2,300(W) x 860(D) x 1,250(H) mm (90.6" x 33.9" x 49.3")		
Machine Weight	900 kg (1,984.5 lbs.)		

### BQ-270 Options

■ **Smoke Extractor: VS-270**

Extracts fumes of hot melt glue.



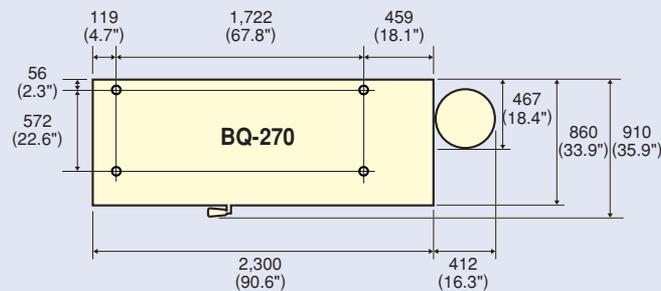
■ **Weekly Timer: T-270**

Automatic power ON timer to warm up melt tank for quick start in the morning.



### Machine Dimensions Unit : mm (inch)

Height : 1,250 (49.3") ○... Leveling Bolt Set Position



Manufactured by  
Taiyo Seiki Co., Ltd.

The machine design and specifications are subject to change without any notice.

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