

Horizon

BQ-460SC CF-460V

Quality and Productivity
in Perfect Binding





Features

The BQ-460 perfect binder produces consistently high quality perfect bound books at maximum production speeds of 1,350 cycles per hour. All necessary setups can be performed through a touch-screen panel and easy-access setup mechanical controls.

The BQ-460 can be expanded to a complete perfect binding and trimming system by adding the SL-40 Cooling Conveyor and HT-70 Three-knife Trimmer.

1. A rigid machine frame and heavy duty binding mechanism ensure consistent high quality binding.
2. All machine controls are positioned at the front of the binder, making it easy for the operator to control and monitor all machine operations. One operator can easily manage the entire book production process.
3. A newly developed side gluing device applies the correct amount of glue to the front and back of the book block.
4. Book titles can be positioned on the spine with ease by simply turning the adjusting knob. This insures precise micro-positioning of book titles with minimal effort.
5. The suction cover feeder handles a wide variety of cover stocks. (105 to 300 gsm / 90 to 260 kg).



The BQ-460 perfect binder produces consistently high quality perfect bound books at maximum production speeds of 1,350 cycles per hour. All necessary setups can be performed through a touch-screen panel and easy-access setup mechanical controls.

The BQ-460 can be expanded to a complete perfect binding and trimming system by adding the SL-40 Cooling Conveyor and HT-70 Three-knife Trimmer.



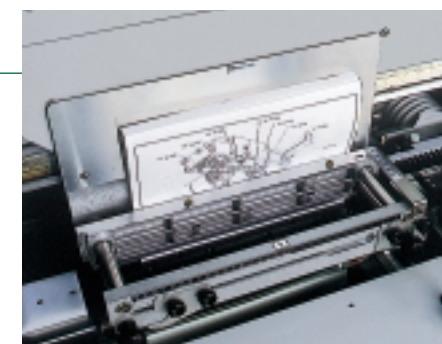
LCD Touch-Screen Panel

Setups are performed through an LCD touch-screen display, which also serves as a trouble monitor to show the location of any faults.



Carriage Clamp

A rigid clamping system holds the book block firmly in position during the milling and nipping process to produce a quality finished book. The binding process starts automatically when the book block is properly presented into the clamp at the feeding position.



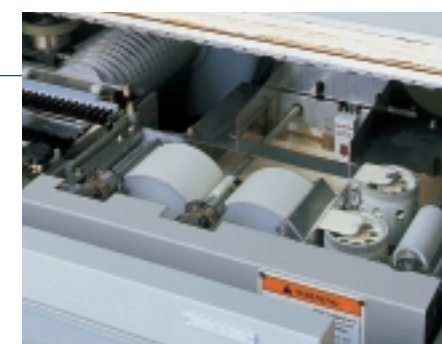
Milling Station

The milling section is comprised of a high-speed milling and roughening blade which mills the spine to prepare it for optimum glue penetration. A simple lever lets you select milling or non-milling modes based on job requirement.



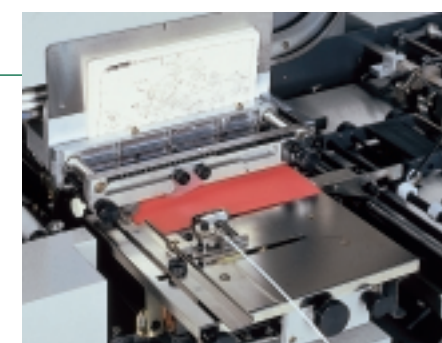
Gluing Station

The first application drum drives glue into the spine while the second application drum forms an optimum glue film on the spine. Horizon's uniquely designed cam mechanism accurately controls the glue cut-off at the head and foot of the book. An advanced side-gluing device applies a thin glue film to the sides of the book block near the spine.



Nipping Station

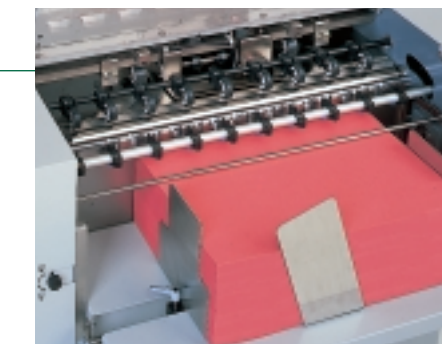
The cover-registering table is mechanically matched to the stopping position of the clamp, so that covers are always accurately positioned onto the book block. A micro positioning knob allows quick and easy positioning of text on the book spine. Positive mechanical force applied to the spine and sides of the book ensure strong, square binds.



Cover Feeder

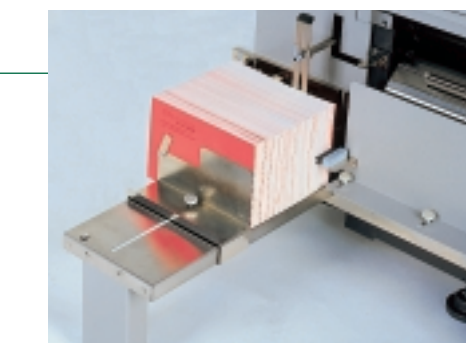
The suction cover feeder is able to handle a wide variety of cover stocks ranging from 105 to 300 gsm / 90 to 260 kg. The feeder detects any misfeeds or double-feeds, and stops the binding process immediately.

The cover feeder is equipped with a scoring unit to provide sharp spine and hinge score for a professional binding finish.



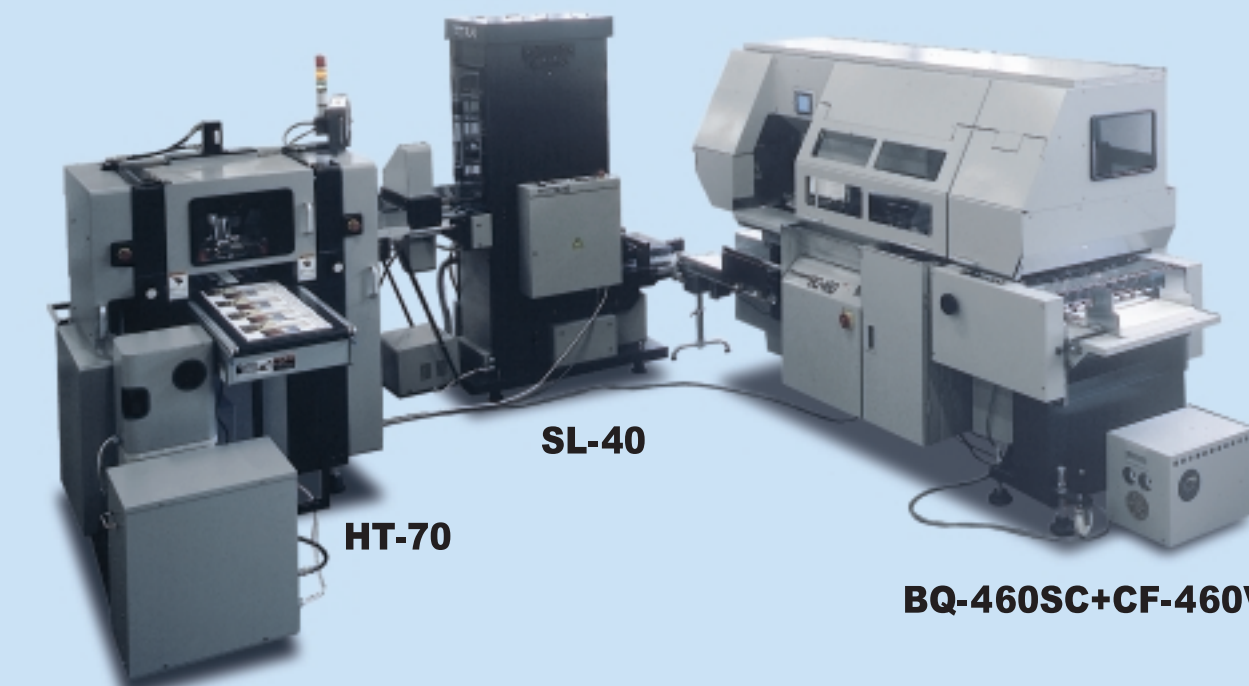
Delivery Section

Finished books are delivered and stacked on a vertical conveyor located below the operator's station. The operator can check the finished book quality while a new book is being placed into the clamp.



In-line Binding System

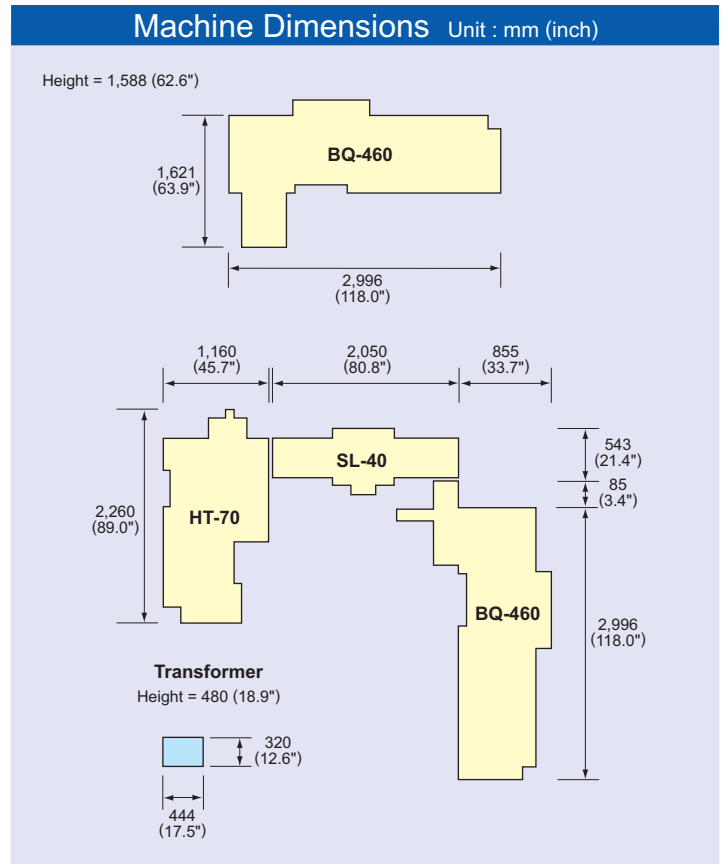
The BQ-460 can be expanded to a complete perfect binding and trimming system by adding the SL-40 Cooling Conveyor and HT-70 Three-knife Trimmer. Horizon's uniquely designed SL-40 minimizes the space required for an in-line system. The quality-engineered HT-70 delivers sharp, square three-side trimming for perfectly finished books.



BQ-460SC/CF-460V Major Specifications	
Binding Mode	Binding with milling, Binding without milling
Number of Clamps	4
Book Block Size (Top-Bottom x Fore-edge)	Max. 320 x 320 mm (12.59" x 12.59") Min. 110 x 145 mm (4.34" x 5.71")
Binding Thickness	1 to 55 mm (0.04" to 2.16")
Cover Size (Top-Bottom x Fore-edge)	Max. 320 x 650 mm (12.59" x 25.59") Min. 145 x 260 (230) mm (5.71" x 10.24" (9.06")) *230 mm (9.06") requires small size spring.
Cover Weight Range	Normal Paper 82 gsm (22 lbs.) or up Coated Paper 105 to 302 gsm (27 to 78 lbs.)
Cover Pile Height	Max. 200 mm (7.87") (CF-460V)
Production Speed	Max. 1,350 cycles/hr. 3-Phase 200 V, 50 / 60 Hz
Voltage / Frequency	3-Phase 220 V, 50 / 60 Hz 3-Phase 400 V, 50 / 60 Hz
Rated Current	220 V, 50 Hz, 23.3 A / 60 Hz, 27.2 A 400 V, 50 Hz, 9.8 A / 60 Hz, 11.8 A
Power Consumption	200 V, 50 Hz, 4.0 kW / 60 Hz, 4.4 kW 220 V, 50 Hz, 4.1 kW / 60 Hz, 6.0 kW 400 V, 50 Hz, 5.6 kW / 60 Hz, 6.7 kW
Heat Output	9,650 kJ (2,310 kcal)
Motors	2.2 kW x 1 / 0.75 kW x 1 / 0.4 kW x 1 / 0.2 kW x 1 90 W x 1 / 40 W x 1 / 25 W x 1
Heater	2.4 kW x 1
Machine Dimensions	2,996(W) x 1,621(D) x 1,588(H) mm (118.0" x 63.9" x 62.6")
Machine Weight	1,500 kg (3,308 lbs.)

HT-70 Major Specifications	
Untrimmed Book Size	Max. 330 x 330 mm (12.99" x 12.99") Min. 148 x 105 mm (5.83" x 4.14")
Trimmed Book Size	Max. 300 x 300 mm (11.81" x 11.81") Min. 142 x 100 mm (5.60" x 3.94")
Trim Thickness	Max. 50.8 mm (2")
Standard Size Trimmed by Standard Accessory	A4T / A4Y / A5T / A5Y / A6T / B5T / B5Y / B6T (T : Portrait Y : Landscape)
Clamp and Pressure	Hydraulically Operated Steplessly variable adjustment within the range from 1.5 to 9.8 kN (150 to 1,000 kgf)
Production Speed	Max. 1,000 cycles/hr. (A4T)
Table Height	865 mm (34")
Voltage / Frequency	3-Phase 200 V, 50 / 60 Hz 3-Phase 220 / 240 V, 60 Hz 3-Phase 380 / 400 / 415 V, 50 Hz
Rated Current	200 V, 50 Hz, 8.9 A / 60 Hz, 8.5 A 220 V, 60 Hz, 9.7 A / 240 V, 60 Hz, 7.0 A 380 V, 50 Hz, 6.3 A / 400 V, 50 Hz, 6.0 A / 415 V, 50 Hz, 6.0 A
Power Consumption	220 V, 60 Hz, 2.85 kW / 240 V, 60 Hz, 2.19 kW 380 / 400 / 415 V, 50 Hz, 3.3 kW
Heat Output	3,190 kJ (760 kcal)
Motors	1.5 kW x 1 / 0.75 kW x 2 / 60 W x 1 / 25 W x 1
Machine Dimensions	1,160(W) x 2,260(D) x 1,600(H) mm (45.7" x 89.0" x 63.0")
Machine Weight	Main Body : 1,530 kg (3,373 lbs.) Compressor : 53 kg (117 lbs.)

SL-40 Major Specifications	
Book Size	Max. 235 x 318 mm (9.25" x 12.51") Min. 148 x 210 mm (5.83" x 8.27")
Delivering Speed	1 book/bin, 700/hr. 2 books/bin, 1,200/hr. 3 books/bin, 1,500/hr.
Bin Pile Height	3 mm to 50 mm (0.12" to 1.96")
Bin Numbers	18 (14 bins are used for cooling.)
Cooling Time	2 minutes (When 3 books are piled on one bin.)
Power Consumption	200 V, 50 Hz, 640 W 200 V, 60 Hz, 740 W
Motors	200 W x 2 / 40 W x 3 / 25 W x 1 / 15 W x 2
Machine Weight	386 kg (851.1 lbs.)



BQ-460SC/CF-460V Options

- Safety Beam (Factory Option)**
 Area sensor at clamper section for greater operator safety.
- Pre-Melt Tank (PM-08)**
 An optional 8 liter pre-melt tank is available to provide a constant supply of glue. This relieves the operator from having to resupply glue during operation, and it insures that all adhesive is maintained at the same temperature to produce consistently high quality books.
 
- Weekly Timer (T-450)**
 Automatic power ON timer to warm up melt tank for quick start in the morning.



Manufactured by Taiyo Seiki Co., Ltd.

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

Distributed by



HORIZON INTERNATIONAL, INC.

510 Kuze Ooyabu-cho, Minami-ku, Kyoto, 601-8206, Japan Phone : +81-(0)75-934-6700, Fax : +81-(0)75-934-6708, www.horizon.co.jp