

Tecnau presents its Real Book on Demand line
LIBRA 600

It has been developed to assembly in fully automatic environment,
books on demand different one by one in size, number of pages, cover type.



The LIBRA 600 main features include:

- “Books of one”, printed and assembled on demand.
- Variable number of pages.
- Variable footprint.
- One or two paper input (unwinder - merger - cutter).
- Assembling & mixing station (two books can be produced at the same time).
- Binding machine (PUR for book’s spine, Hot Melt for book’s sides).
- Personalized covers system (standard covers or covers with flaps).
- Cooling tower.
- Three-side trimmer.
- Frontal trimmer for books with flaps.
- Output conveyor.

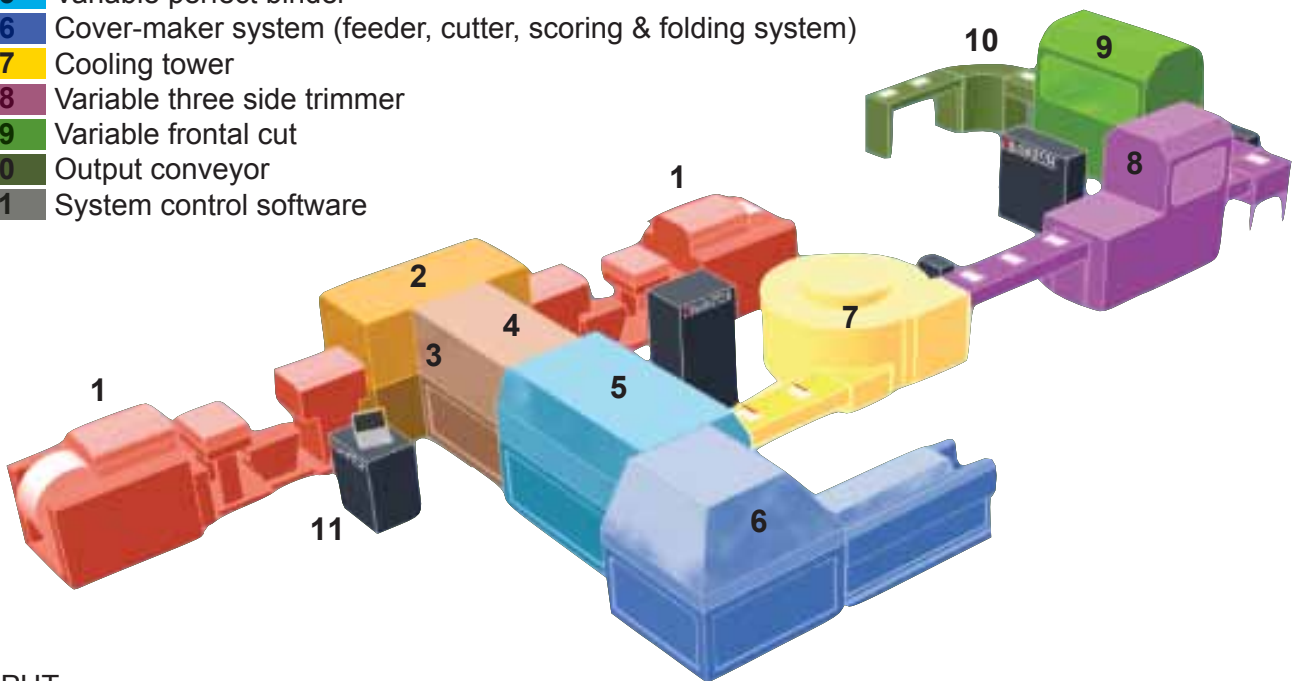


COMPOSITION

LIBRA 600

LIBRA 600 - LINE COMPOSITION

- 1** Dual or single paper input from roll:
- 1a** Unwinder - Merger - Dual Cutter (2-up printing mode)
- 1b** Unwinder - TRIPLA Cutter (3-up printing mode)
- 2** Assembling & mixing station
- 3** Book block manual/automatic input
- 4** Transport with loading robot to binder
- 5** Variable perfect binder
- 6** Cover-maker system (feeder, cutter, scoring & folding system)
- 7** Cooling tower
- 8** Variable three side trimmer
- 9** Variable frontal cut
- 10** Output conveyor
- 11** System control software



INPUT

Paper Input: one or two paper inputs from rolls printed in 2-up or 3-up modes.

Book Block Input: manual or automatic input.

Covers Input: pre-cut printed covers or continuous paper roll.

BOOK COMPOSITION

The rolls are cut in pages at the required length, defining the books length dimension.

There are two methods for book composition:

- two books can be produced at the same time (one book cut by each cutter) - maximum productivity.
- one book is produced in one input line and inserts or photographic color pages are cut in the other input line - maximum graphic quality.

COVER

The covers are fed, scored, appropriately cut and, if required, folded to match the book.

BINDING MACHINE

The cover matches the book block, it is glued with PUR technology on the spine & hot melt on the sides.

COOLING TOWER

The books are cooled on the cooling station for up to 12 minutes.



THREE-SIDE TRIMMER

Books are fed on the automatically adjustable three side trimmer to get the final dimension.

FRONTAL TRIMMER

Book with flaps are processed in the frontal trimmer to cut appropriately the front side.

OUTPUT CONVEYOR

The finished books exit on the output conveyor.

SYSTEM CONTROL

The entire process is controlled via 2D code, printed on all pages and covers. This information drives the system and keeps control of the production's integrity.

A touch screen display allows to start and control the system, select the input line, set up the machines and display errors and alarms. In the PC are stored the records of productivity and error conditions. The line can operate fully automatically or via manual/automatic feeding of already composed book blocks to be bound and finished.

CODIFICATION

Book codification: in the input from roll, each page can have a printed code to ensure the verification of the book composition, the control of the binder (spine position, thickness and length) and the cover matching. In case of book block input, the code can be printed on the last page only and the reading gives information to the binder for the book size and to the cover-maker system for the cover preparation (scoring and side slitting) and the correct book matching.

Cover codification: the code printed on the cover ensures the correct matching with the book block, controls the three-side trimmer and, in case of cover with flaps, the frontal trimmer.

POSSIBLE CONFIGURATIONS FOR DIFFERENT SOLUTIONS

LIBRA 600 TECNAU UNIT / MODULE	e.g. SOLUTIONS			
	A	B	C	D
Dual input paper channel with variable book assy and transport to binder	X			
Single input paper channel with variable book assy and transport to binder		X		
Manual input from pre-assembled book-blocks	X	X	X	
Automatic input from pre-assembled book-blocks				X
PUR binding system with loading robot, cover feeder with cutter, scoring & folding systems	X			
PUR binding system with loading robot and cover feeder with cutter and scoring system		X	X	X
Cooling tower	X	X	X	X
Variable three side trimmer	X	X	X	X
Variable book (with folds) front cutter	X			
System management & integration	X	X	X	X



TECHNICAL SPECIFICATIONS

LIBRA 600

- BOOK SPECIFICATIONS:**
- size: min 130x180 mm
max 297x210 mm
 - thickness: from 3 to 45 mm
 - paper weight: 60 - 120 gsm
 - cover weight: 200 - 300 gsm
- FLOOR PLAN:**
- length: max 19 mt
 - width: max 9 mt
 - height: max 2 mt
- PRODUCTIVITY:**
- up to 600 books per hour (300 pages per book)
- POWER REQUIREMENTS:**
- 400 V
 - three phase

