## Smart binding from another star

The Antaro is unique! Depending on the focus of your business, the Antaro is available as a digital version with six clamps, as a conventional version with twelve clamps or as a hybrid version ready for products from both worlds, again with twelve clamps. In the digital six-clamp version, the Antaro is ready to handle thickness variability from book to book of 20 mm with an unprecedented maximum performance of up to 2000 cycles / hour. It is the ideal perfect binder for printing plants as well as print finishing specialists that use digital printing or are engaged in conventional printing modes. Be it for medium, short or ultrashort runs, right down to runs of one copy, the Antaro is an all-rounder for high-quality results. Photo books, personalized catalogs or high-quality brochures can be produced cost-effectively thanks to ultra-short setup and production times, which are indispensable for short and one-copy runs. This allows you to produce high-quality books within a short period of time, with the very first book having first-class quality. With this binder, you are really ready for the future!
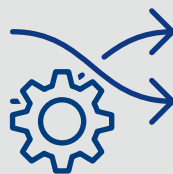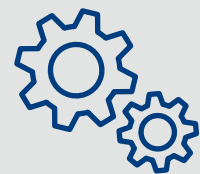

HIGHLIGHTS
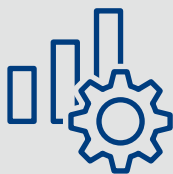
Productivity
Fastest, most productive and innovative perfect binder on the market with up to 2000 / 4000 cycles/h thanks to the unique thickness range

Full-flexibility
Ideal perfect binder – for Digital and Offset printed products in top quality

Efficient and smart
Touchless workflow – ready for the smart factory

Your **strong partner.**

MÜLLER MARTINI

TECHNICAL DATA

Machine Mechanical speed*	In the digital Book-of-One version	Up to	2 000 cycles/h
	In the conventional version	Up to	4 000 cycles/h
Clamps	Number		6 for Book-of-One-machine
			12 for conventional / hybrid version
Book block size			
	Height	min.	120 mm (4 ¾")
		max.	380 mm (14 ¹⁵⁄₁₆")
	Width	min.	100 mm (3 ¹⁵⁄₁₆")
		max.	320 mm (12 ⁵⁄₈")
	Thickness	min.	1,5 mm (0 ¹⁄₁₆")
		max.	60 mm (2 ³⁄₈")
Grammage			
	Body paper	min.	60 gsm
		max.	170 gsm
Cover size			
	Height	min.	100 mm (3 ¹⁵⁄₁₆")
		max.	390 mm (15 ³⁄₈")
	Width	min.	202 mm (7 ¹⁵⁄₁₆")
		max.	710 mm (27 ¹⁵⁄₁₆")
Grammage			
	Cover paper	min.	80 gsm
		max.	350 gsm
Spine preparation station			
	Milling depth	min.	0 mm (0")
		max.	4 mm (0 ³⁄₁₆")
Vertical cover feeder			
	Pile height	max.	180 mm (7 ¹⁄₁₆") (depending on material)
	Scoring		2 or 4 times scoring

* The maximum possible net output depends on several parameters. The characteristics of the paper being processed – such as the paper texture, the grammage, the folding quality, the electrostatic behavior and the size – affect product processing as do environmental factors, the expertise of the machine operator, etc.
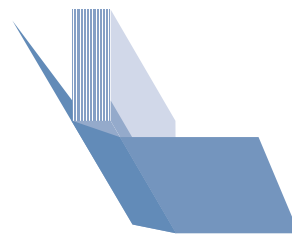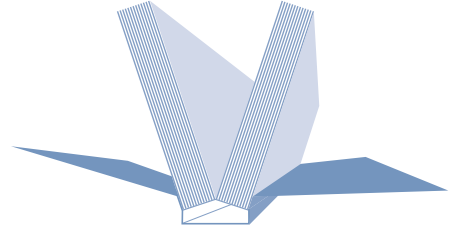
PRODUCTS
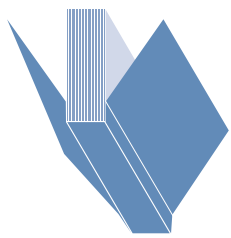
Softcover
book
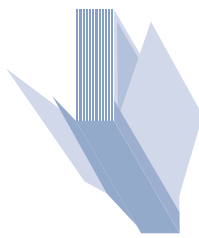
Hardcover
book block

Flex
brochures

Lay flat brochures
Swiss

Lay flat brochures
Otabind

ASIR DATA / BARCODE DATA

The following parameters can be encrypted in the barcode	Supported barcode type
Product-ID	1D Barcodes (Code 128)
Book block thickness	2D Barcodes (DataMatrix and QR Code)
Book block width	
Book block height	
Product mode	

CONFIGURATIONS AND OPTIONS

Configurations	Digital with six clamps
	Conventional / Hybrid with twelve clamps*
	Stand alone or inline depending on version: • Digital hand feed or inline with digital infeed and downstream with a customer specific cooling line into the InfiniTrim three knife trimmer • Conventional* with gathering machine and downstream with a customer specific cooling line into the Granit three knife trimmer • Hybrid* as a mix of digital and conventional
Optional features	Interface for inline digital book block building system (e.g. SigmaLine Compact)*
	Interface for inline conventional drum gathering machine
	Thickness measuring device
	Format size measuring device for conventional application*
	Barcode matching between content and cover
	Hotmelt roller system, interchangeable via trolley
	PUR roller system, interchangeable via trolley*
	PUR nozzle system, interchangeable via trolley*
	Glue application control for PUR nozzle system*
	Several premelters
	Cross feed mull station*
	Cover feeder with integrated buffer wheel for safe one-to-one cover-content matching
* Will follow in a later phase	Various Hardcover capabilities like interchangeable side gluing discs or interchangeable side pressing bars*

LAYOUT
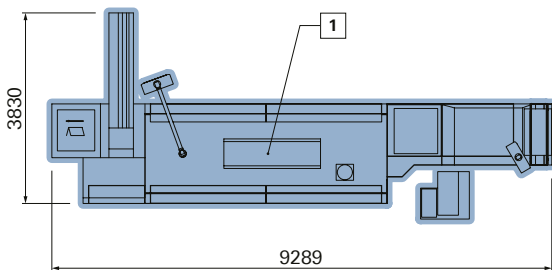
1 Perfect binder Antaro
2 Cooling tower
3 Linear conveyor wide
4 Curved conveyor 180°
5 Timing conveyor
6 Horizontal diverter
7 Touch screen
8 Align conveyor
9 Timing conveyor 3WP
10 Three knife trimmer
11 Waste suction
12 Standard delivery belt
13 Roller table stationary
14 Control cabinet for conveyor belt
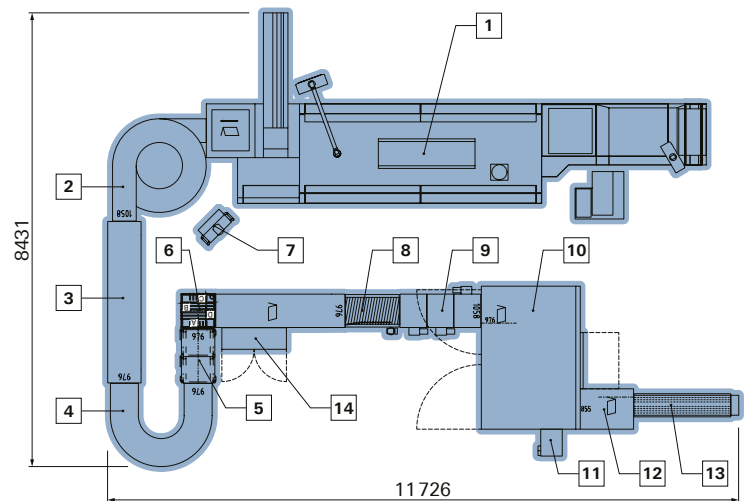
UTILITY REQUIREMENTS

Electrical	**Voltage**	400 V AC+PE (no neutral conductor required)
	All other network types needs transformer	
	Frequency	50 Hz
	Fuse level	Current 87 A, back-up fuse 100 A
Pneumatical	**Machine's working pressure**	6 bar; ISO 8573-1:2010 7/4/4
	Air consumption	20 Nm³/h (free from oil and water)
	Connection diameter inside	12.5 mm / 0.49 inch
	Connection diameter outside	18.5 mm / 0. 73 inch
Dimensions and weights	**Length × width × height (incl. cover buffer wheel)**	9.289 × 3.547 × 1.900 mm / 148.86 × 66.02 × 62.20 inch
	Weight basic machine	7.000 kg
	Subject to dimensional, construction and equipment changes	

AMBIENT CONDITIONS

Temperature	Ambient temperature	Condition	Temperature range
	Operation*		+ 5 to + 35 [°C]
	Storage I transport	Long-term Short-term < 24 [h]	- 25 to + 55 [°C] - 25 to + 70 [°C]
	Suggested operating range		+18 to + 23 [°C]
Air Humidity	**Relative Humidity**	**Condition**	**Humidity Range**
	Non-condensing	max + 35 [°C]	max 50%
	Higher relative humidity is acceptable only at lower temperatures	For example, at 20 [°C]	max 90%
	Suggested operating range		40 to 50%

* Production environment must be air-conditioned and needs correct temperature and air humidity range. Cooling equipment is required for temperatures of + 35 [°C] and higher.

DIGITAL WORKFLOW FINISHING 4.0

Connex

Networking processes, connecting systems, connecting systems, showing production states, integrating machines in business processes – the Connex workflow solution is the answer to new requirements in a Smart Factory. Utilizing a modular system of standard modules allows highly customized applications, optimized for individual purpose.

Connex **Info Cloud**

Connex Info Cloud enables you to produce your print products even more (cost)efficiently, to analyze your production in a targeted manner, to identify optimization potential for your production, and to increase your planning reliability. Because it is important to know which order is currently being produced where, how much has been produced and what the idle times, setup times or stop times look like.

Connex **LineControl**

Shorter job run lengths and an increasing number of jobs necessitate electronic support of the classic slip sheet. Connex LineControl interconnects production equipment with higher-level systems via standard interfaces and enables automatic presetting of the machines based on digital Job tickets. Minimizing manual data input saves time and reduces sources of errors, what significantly increases overall production performance.
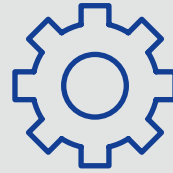
ᴹᴹSERVICES

ᴹᴹSTARTUP

- Project management – comprehensive consultation for all needs
- Installation and commissioning – for a high level of process reliability
- Machine relocations

ᴹᴹSUPPORT

- Telephone support – 24/7 access to our technical hotline and spare parts
- Repair service – carried out professionally
- Remote services – efficient online troubleshooting

ᴹᴹPARTS

- Spare parts – high availability at your local service center and quick access to all Muller Martini spare parts in the plants

ᴹᴹINSPECT

- Inspection – comprehensive analysis and extensive function testing
- Maintenance – regular, proactive maintenance pays off

ᴹᴹIMPROVE

- Training – professional training at the Muller Martini training centers
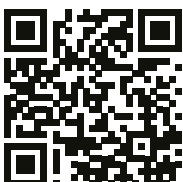- Production support – consultation on efficiency-enhancing programs

ᴹᴹUPTODATE

- Updates – long-lasting efficiency and productivity
- Retrofits and extensions – to keep you competitive

ᴹᴹSELECT

- Customized service contracts – efficient life cycle management to ensure the high reliability and uptime of your equipment

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