# **ALPHA 8**

## **Oval Automatic Textile Press**





Alpha 8 is M&R's exciting new take on the oval-shaped press. It's modular and expandable—and can be configured for almost any production requirement. Since Alpha 8's oval shape takes up less floor space than comparable carousel presses, it makes more efficient use of available production area. This also allows the Alpha 8 to fit into spots where no carousel press could. Alpha 8 is available in 3 models: Alpha 8 5070, Alpha 8 6080, and Alpha 8 80110. These offer maximum image areas of 50 x 70 cm (20" x 28"), 60 x 84 cm (24" x 33") and 80 x 110 cm (31.5" x 43.5"), respectively. Double-index mode on alternating printheads can produce images up to 99 x 70 cm (39" x 28") on the 5070; 99 x 84 cm (39" x 33") on the 6080; and a phenomenal 150 x 110 cm (59.0" x 43.5") on the 80110. The 8-station Base/Drive Module supports up to 4 printheads, while M&R's Plug & Print<sup>™</sup> modular design provides for expansion—in six-station increments—up to 62 stations on Alpha 8 5070 & 6080, and up to 50 stations on Alpha 8 80110. Alpha 8's digital touch-screen control panel with icon-based labeling can display information and commands in numerous languages, simplifying press operation and training anywhere in the world.

Alpha 8 incorporates a sophisticated servo-drive indexing system that combines extremely high speed with smooth operation and precise control. It also incorporates multiple-indexing capability, which allows virtually unlimited load/unload scenarios. Alpha 8's design allows users to start with as many—or few—printheads as they need, and add more as their needs change. Other than the end stations, there are no restrictions on printhead placement. All other stations can support printheads—and any station can be left open. Alpha 8 even allows

users to change the placement of load/unload stations for maximum efficiency. No textile press is more flexible. The Alpha 8 5070 and 6080 models leave the front of the pallet and the pallet arm assembly free of obstruction, allowing them to easily handle almost any type of item. Hooded sweatshirts, pant legs, cut pieces, T-shirts, and most other types of textiles can be easily loaded and properly located on the Alpha 8, maximizing production and flexibility. Alpha 8 is also an ideal press for M&R's All-Over-Print (AOP) Pallets. AOP Pallets give operators oversize and all-over-print capability, and are available in a range of sizes. Alpha 8's printheads are driven by fast, reliable variable-frequency AC drive motors, and include simple print-stroke adjustment, allowing very high production rates. These printheads also incorporate an elegantly simple method of adjusting off-contact at all four corners of the screen frame quickly and independently all without tools! Alpha 8's high-lift mode simplifies access to the underside of the screen and allows fast, tool-free placement of flash cure units at any station. Alpha 8, with its expandable, changeable configuration; efficient design; and high production speed is the most versatile press on the market today.

Due to their larger print areas, Alpha 8 6080 and 80110 models include a wider print carriage. The 80110 model also includes larger, stronger pallet arms; wider pallet-leveling brackets; front as well as rear registration locking; and a printhead lockdown/pallet-arm support feature for greater stability and enhanced print quality. Alpha 8 80110 excels on cut-piece goods and all-over prints, but easily converts to standard-size T-shirt printing.

www.mrprint.com store.mrprint.com

## **ALPHA 8**

### **STANDARD FEATURES**

#### **CERTIFICATION**

 CE & UL compliant: Built to specifications established by the European Committee for Standardization® (CE) and Underwriters Laboratories® (UL)

#### **CONTROL CENTER**

- Digital microprocessor with self-diagnostics
- Digital touch-screen control panel with icon-based labeling can display information and commands in numerous languages, simplifying press operation and training anywhere in the world
- Independent print-start/print-finish setting automatically activates and stops printheads at the beginning and end of production runs
- Jog-left/jog-right controls
- Multiple (1-9) print stroke capability
- Production speed monitor ensures more accurate job costing
- Test print setting turns individual printheads on/off during test print cycle
- Versatile pedestal-mounted control panel

#### **DESIGN & CONSTRUCTION**

- 8-Station Base/Drive Module supports up to 4 printheads
- Built of heavy-duty steel and premium components
- Design allows users to change the placement of printheads and load/unload stations for custom configurations
- Expandable in 6-station modules
- Oval shape takes up less floor space than comparable carousel presses
- Printheads and pallet arms provide the stability necessary for exceptional print quality
- Printheads can be added on site as needs change
- Stations (maximum): 62 on Alpha 8 5070 and 6080 and 50 on Alpha 8 80110

#### **INDEX SYSTEM**

- Allows quick adjustment of indexing parameters tailored to various pallet sizes
- Clockwise or counterclockwise rotation
- Multiple-indexing capability allows virtually unlimited load/unload scenarios
- Servo drive offers multi-index capability
- Servo drives combine higher press speeds with exceptional smoothness, consistency, and longevity

#### **OFF-CONTACT**

 Calibrated and tool-free four-corner off-contact settings allow fast and accurate screen leveling

#### **OPTICAL NO-SHIRT DETECTOR**

 Automatically prevents the press from printing on empty pallets (U.S. Patent No. 5,383,400)

#### **PALLET SYSTEM**

- Precise three-point pallet leveling system
- Tool-free quick release pallet locks
- Wider pallet supports provide enhanced stability (Alpha 8 80110)

#### **PALLETS**

A wide range of pallet sizes complements
 Alpha 8's wide-ranging capabilities (Your M&R Representative can help you select the pallet size and type that best fits your needs)

#### **PRINTHEADS**

- Brushless and maintenance-free electricdrive motors deliver smooth print strokes and exceptional control
- Designed to leave the front of the pallet and the pallet arm assembly clear of obstruction, allowing the press to easily handle almost any type of item (Alpha 8 5070 and 6080)
- Independent print and reset buttons on each printhead
- Independent print/flood speed controls on each printhead simplify press setup
- Lockdown feature provides enhanced stability (Alpha 8 80110)
- Printhead high-lift mode simplifies screen loading, unloading, inspection and cleaning
- Wider print carriage enhances print quality (Alpha 8 6080 and 80110)

#### REGISTRATION

- Compatible with numerous registration systems, including M&R's Tri-Loc® & Double Tri-Loc® and Newman Pin-Lock®
- Enhanced front micro-registration adjustments with visual guides
- Locking rear micro-registration
- Unique, innovative pallet registration system offers exceptional accuracy

#### **SCREEN CLAMPS & HOLDERS**

- Adjustable rear screen holders accommodate a wide variety of screen sizes
- Clamping system holds roller frames without special adapters
- Pneumatic screen clamps facilitate rapid screen loading and deliver excellent stability on a wide variety of screens

#### **SQUEEGEE/FLOODBAR**

- Angle and calibrated pressure adjustments are independently set
- Front or rear print carriage stop position allows operator to leave screens clear or flooded (great for water-based inks)
- Independent squeegee & floodbar speed adjustments
- Squeegee air regulator with a pressure gauge on each printhead

#### **STROKE LENGTH ADJUSTMENT**

 Calibrated front & rear stroke length with tool-free adjustment maximizes print speed

#### WARRANTY. SERVICE AND SUPPORT

- 24-hour hotline is staffed 365 days a year
- Access to M&R's Training Center
- Parts & supplies are available online at store.mrprint.com
- Two-year limited warranty

## **OPTIONS**

#### **EXPANSION MODULES**

- Modules can be ordered with as many—or few—printheads as needed
- Plug & Print™ modular design provides for virtually limitless expansion in six-station increments

#### **FOOT PEDAL CONTROL**

- Allows indexing of the press using a foot pedal
- Skip-Shirt foot pedal feature allows operators to avoid printing empty pallets

#### **PALLETS**

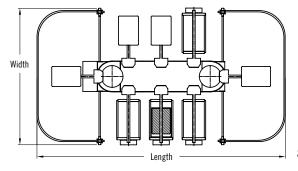
- M&R offers a wide range of sizes and styles
- M&R's All-Over-Print (AOP) Pallets give operators oversize and all-over-print capability, and are available in a range of sizes

#### **SLEEVE TRAYS**

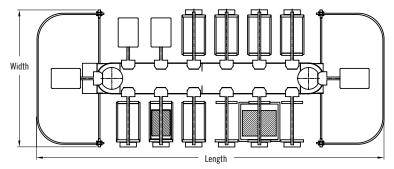
 Under-pallet trays designed to gather/protect long-sleeves during indexing



## **DIMENSIONS**

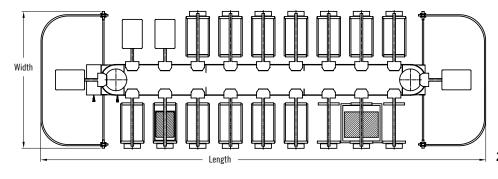


8 Stations

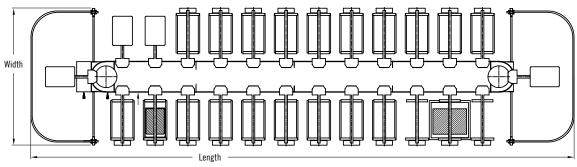


OVERALL SIZE (Length x Width)	Alpha 8 5070	Alpha 8 6080	Alpha 8 80110
8 Stations	658 x 384 cm	683 x 409 cm	927 x 516 cm
(Base/Drive Module)	(259" x 151")	(269" x 161")	(365" x 203")
14 Stations	932 x 384 cm	958 x 409 cm	1339 x 516 cm
(Base + 1 Expansion Module)	(367" x 151")	(377" x 161")	(527" x 203")
20 Stations	1207 x 384 cm	1232 x 409 cm	1750 x 516 cm
(Base + 2 Expansion Modules)	(475" x 151")	(485" x 161")	(689" x 203")
26 Stations	1481 x 384 cm	1506 x 409 cm	2162 x 516 cm
(Base + 3 Expansion Modules)	(583" x 151")	(593" x 161")	(851" x 203")
32 Stations	1755 x 384 cm	1781 x 409 cm	2573 x 516 cm
(Base + 4 Expansion Modules)	(691" x 151")	(701" x 161")	(1013" x 203")
38 Stations	2029 x 384 cm	2055 x 409 cm	2985 x 516 cm
(Base + 5 Expansion Modules)	(799" x 151")	(809" x 161")	(1175" x 203")
44 Stations	2304 x 384 cm	2329 x 409 cm	3396 x 516 cm
(Base + 6 Expansion Modules)	(907" x 151")	(917" x 161")	(1337" x 203")
50 Stations	2578 x 384 cm	2604 x 409 cm	3807 x 516 cm
(Base + 7 Expansion Modules)	(1015" x 151")	(1025" x 161")	(1499" x 203")
56 Stations	2852 x 384 cm	2878 x 409 cm	_
(Base + 8 Expansion Modules)	(1123" x 151")	(1133" x 161")	
62 Stations	3127 x 384 cm	3152 x 409 cm	_
(Base + 9 Expansion Modules)	(1231" x 151")	(1241" x 161")	

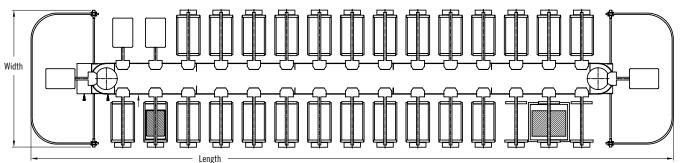
14 Stations



**20 Stations** 



**26 Stations** 



## **ALPHA 8**

### PRODUCT DETAILS



Printhead high-lift mode simplifies screen loading, unloading, inspection and cleaning.



Users can start with as many printheads as they need, and add more as their needs change.



Digital touch-screen control panel with icon-based labeling can display information and commands in numerous languages, simplifying press operation and training anywhere in the world.

## **SPECIFICATIONS**

	Alpha 8 5070 Base/Drive Module	Alpha 8 5070 Expansion Modules	Alpha 8 6080 Base/Drive Module	Alpha 8 6080 Expansion Modules	Alpha 8 80110 Base/Drive Module	Alpha 8 80110 Expansion Modules
Air @ 6,9 bar (100 psi) <sup>2</sup>	53 I/min (1.87 cfm)	53 I/min (1.87 cfm)	53 l/min (1.87 cfm)	53 I/min (1.87 cfm)	75 I/min (2.64 cfm)	75 l/min (2.64 cfm)
Electrical Requirements <sup>1, 2, 5</sup>	208/230 V, 3 ph, 24 A, 50/60 Hz, 5 kW 400 V, 3 ph, 15 A, 50/60 Hz, 5 kW	208/230 V, 3 ph, 0.01 A, 50/60 Hz, 0.002 kW 400 V, 3 ph, 0.006 A, 50/60 Hz, 0.002 kW	208/230 V, 3 ph, 24 A, 50/60 Hz, 5 kW 400 V, 3 ph, 15 A, 50/60 Hz, 5 kW	208/230 V, 3 ph, 0.01 A, 50/60 Hz, 0.002 kW 400 V, 3 ph, 0.006 A, 50/60 Hz, 0.002 kW	208/230 V, 3 ph, 48 A, 50/60 Hz, 10 kW 400 V, 3 ph, 30 A, 50/60 Hz, 10 kW	208/230 V, 3 ph, 0.01 A, 50/60 Hz, 0.002 kW 400 V, 3 ph, 0.006 A, 50/60 Hz, 0.002 kW
Electrical Requirements (Second Servo) <sup>1, 2, 5</sup>	_	208/230 V, 3 ph, 25 A, 50/60 Hz, 5 kW 400 V, 3 ph, 14 A, 50/60 Hz, 5 kW	_	208/230 V, 3 ph, 25 A, 50/60 Hz, 5 kW 400 V, 3 ph, 14 A, 50/60 Hz, 5kW	_	208/230 V, 3 ph, 25 A, 50/60 Hz, 5 kW 400 V, 3 ph, 14 A, 50/60 Hz, 5 kW 208/230 V, 3 ph, 32 A, 50/60 Hz, 7 kW 400 V, 3 ph, 17 A, 50/60 Hz, 7 kW
Maximum Frame Size (Alternating Printheads) <sup>4</sup>	114 x 109 cm (45" x 43")	114 x 109 cm (45" x 43")	134 x 121 cm (53" x 48")	134 x 121 cm (53" x 48")	170 x 152 cm (67" x 60")	170 x 152 cm (67" x 60")
Maximum Image Area (Alternating Printheads) <sup>4</sup>	99 x 70 cm (39" x 28")	99 x 70 cm (39" x 28")	99 x 84 cm (39" x 33")	99 x 84 cm (39" x 33")	150 x 110 cm (59" x 43.5")	150 x 110 cm (59" x 43.5")
Maximum Standard Frame Size	66 x 109 cm (26" x 43")	66 x 109 cm (26" x 43")	79 x 121 cm (31" x 48")	79 x 121 cm (31" x 48")	107 x 152 cm (42" x 60")	107 x 152 cm (42" x 60")
Maximum Standard Image Area	50 x 70 cm (20" x 28")	50 x 70 cm (20" x 28")	60 x 84 cm (24" x 33")	60 x 84 cm (24" x 33")	80 x 110 cm (31.5" x 43.5")	80 x 110 cm (31.5" x 43.5")
Overall Size (L x W)	599 x 384 cm (236" x 151")	274 x 384 cm (108" x 151")	624 x 409 cm (246" x 161")	274 x 409 cm (108" x 161")	970 x 492 cm (382" x 194")	411 x 492 cm (162" x 194")
Printheads Supported (Maximum)	4	6	4	6	4	6
Printheads: Air @ 6,9 bar (100 psi) <sup>2</sup>	55 I/min (1.94 cfm)	55 I/min (1.94 cfm)	55 I/min (1.94 cfm)	55 I/min (1.94 cfm)	39 I/min (1.37 cfm)	39 I/min (1.37 cfm)
Printheads: Electrical Requirements <sup>1, 2</sup>	208/230 V, 3 ph, 2 A, 50/60 Hz, 0.37 kW 400 V, 3 ph, 1.15 A, 50/60 Hz, 0.37 kW	208/230 V, 3 ph, 2 A, 50/60 Hz, 0.37 kW 400 V, 3 ph, 1.15 A, 50/60 Hz, 0.37 kW	208/230 V, 3 ph, 2 A, 50/60 Hz, 0.37 kW 400 V, 3 ph, 1.15 A, 50/60 Hz, 0.37 kW	208/230 V, 3 ph, 2 A, 50/60 Hz, 0.37 kW 400 V, 3 ph, 1.15 A, 50/60 Hz, 0.37 kW	208/230 V, 3 ph, 2 A, 50/60 Hz, 0.37 kW 400 V, 3 ph, 1.15 A, 50/60 Hz, 0.37 kW	208/230 V, 3 ph, 2 A, 50/60 Hz, 0.37 kW 400 V, 3 ph, 1.15 A, 50/60 Hz, 0.37 kW
Shipping Weight	909 kg (2000 lb)	682 kg (1500 lb)	950 kg (2100 lb)	727 kg (1600 lb)	1227 kg (2700 lb)	921 kg (2100 lb)
Standard Pallet Size <sup>3</sup>	_	_	_	_	_	_
Stations	8	6	8	6	8	6
Stations (Maximum)	8	54	8	54	8	42

- 1 If incoming voltage differs from the voltage(s) listed in this brochure, calculate amperage accordingly. Other electrical configurations are available: Contact The M&R Companies for details
- To compute total air requirements, multiply the Expansion Module requirement by the number of Expansion Modules; multiply the Printhead requirement by the total number of printheads on the press; and add the results to the Base/Drive Module air requirement. To compute total electrical requirements, multiply the Expansion Module amperage and kilowatt requirements by the number of Expansion Modules; multiply the Printhead requirements by the total number of printheads on the press; and add the results to the Base/Drive Module requirements. If the press requires a second Servo, add the appropriate amperage and kilowatt requirements under Electrical Requirements (Second Servo)
- There is no standard pallet size because of Alpha 8's wide-ranging capabilities (Your M&R Representative can help you select the pallet size and type that best fits your needs)
- Maximum image area with rear screen holder removed on alternating print heads: Alpha 8 5070 109 x 70 cm (43" x 28"), Alpha 8 6080 134 x 121 cm (53" x 48")

  Maximum image area with rear screen holder removed on alternating print heads: Alpha 8 5070 109 x 70 cm (43" x 28"), Alpha 8 6080 109 x 84 cm (43" x 33")
- A second servo is used on 5070 and 6080 models with 38 or more stations and on 80110 models with 26 or more stations; second servo electrical specs for 80110 models with 6-32 stations is shown at the top of the cell; second servo electrical specs for 80110 models with 38-50 stations is shown at the bottom of the cell



The M&R Companies 1N372 Main Street, Glen Ellyn, Illinois 60137-3576 USA USA: 800-736-6431 / 630-858-6101 / Fax: 630-858-6134 • Outside USA: +1-847-967-4461 / Fax: +1-847-967-0417

M&R Printing Equipment, Inc. and its subsidiaries (hereinafter M&R), believe the information in this advertisement to be accurate at publication, though it does not purport to list all manufacturing and specification variations, nor does it assume illability resulting from incompleteness or inaccuracy. MRR reserves the right to change specifications without notice. MRR expressly disclaims any lability for damages specifications without notice. MRR expressly disclaims any lability for damages specifications without notice. MRR expressly disclaims any lability for damages specifications without notice. MRR expressly disclaims any lability for damages and the properties of the