



## Automatic oval textile printing press

### WE PROVIDE A COMPLETE SOLUTION



Many Flash Cure Options



Various Flocking Options



NEW CAROUSEL PRINTER FROM ADELCO



Pro-Cure Dryer



Dual Dryer



Digi-Cure Dryer

### ADELCO SCREEN PROCESS LTD

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\*All specification correct at time of going to press, Adelco reserve the right to change or amend any detail or specification without notice

## Features

**Modular Design:**  
 The matrix oval structure is modular, designed and built in multiple base modules, print heads can be fitted to any station. With a Six station drive and driven module it offers complete flexibility in the configuration of your machine.

**Servo Driven Index:**  
 Servo drive offers powerful, high-speed, smooth and silent indexing.

**Fast, Smooth & Quiet Chainless Rail System**  
 Chainless drive Rail system for longevity and lifetime accuracy.

**Sealed Print Arms:**  
 Purpose Built Extruded Sealed Aluminium Print arms to prevent Ink & Dirt getting in.

**Servo Driven Printheads:**  
 Servo drive prints deliver exceptional speed & control torque even at lower speeds, print head features adjustable screen chase, three way responsive micro registration, quick release squeegee & flood blades, Horizontal Pin Located pneumatic screen clamps, adjustable print/flood stroke, front & rear off contact & leveling adjustment, quick release high lift facility for rapid screen cleaning or flash cure docking, every head fitted with touch panel control for all main printing functions.

**Quick release Horizontal Pneumatic Screen Clamping**  
 With Pin Location Holding System.

**Large Bore Squeegee Cylinders:**  
 Offer much greater Squeegee pressure During Print.

**Quick-Fit Squeegee & Floodblades.**  
 Quick Easy Tool Free adjustment of Squeegees & Floodblades + Multiple angle adjustable Squeegees

**Front AND Rear Tool Free Micro Adjustment**

**Easy Tool Free front & rear Off Contact Adjustment.**

**Advanced PLC Control System and HMI Interface:**  
 Advanced PLC control system with HMI human interface for all operator functions, including Auto start, Auto Finish, sample print, Jog mode, multiple print stroke, print mode selection, manual & automatic modes, pallet delay, cycle count and Full self diagnosis fault Finding.

**High Density Print Mode:**  
 Special Print Cycle Program Designed for optimum High Density Print Results.

**Auto Lift Print Heads:**  
 The Matrix Unique Automatic Lift of Print Heads allows Fast easy access for Screen Cleaning or Changing and Placement of Flash Cures under Print Heads.

### Specifications:

Electrical Requirements	
≤28 stations	> 28 stations
1 phase 220V 2KW + 750W per print head	1 phase 220V 4KW + 750W per print head

**Increased space between Pallets:**  
 For easier access & Prevent Screens drying in From Flash Cures.

**Rigid Pallet Arms:**  
 Rigid pallet arms optimize servo index, supported front & back during print cycle providing zero pallet deflection.

**High Grade Solid Aluminium Quick Release Pallets**  
 High Grade Aluminium Pallets with a Flatness tolerance of < 0.3mm coupled with Quick release system allowing rapid adjustment or changing of pallets.

**Rapid Setup**  
 Set up and register an 8 color print job in under 10mins due to the accuracy of the pre registration system, \*subject to pre-registered screens.

**Lifetime Registration:**  
 Unique Hardened Locators Ensure reliable pin point lifetime registration.

**Build Quality:**  
 Heavy duty Powder Coated Steel Welded Frame. Specially fabricated Rigid Pallet arms, Purpose built Print Arm Extrusions with Automatic Lift Braces all creating a print head & pallet arm system that delivers exceptional print quality.

**Multiple print formats:**  
 Choose from standard print  
 Formats: 45 x 60cm (18" x 23.5"), 50x70cm(20"x28"), and 60x80cm(23.5"x31.5").

**Export Quality Parts**  
 World renowned quality approved parts and In-House CNC machined parts Ensure World wide conformity to strict regulations.

**Warranty:**  
 The Matrix oval is covered by a two year limited warranty\* supported by our growing network support.

\*subject to regular routine maintenance.

**Additional Options:**  
 Load Delay Footpedal  
 Skip Print Function  
 Independent Squeegee Pressure Control  
 Flash Cure & Communication Port Interfaces  
 Misters (Vapour cloud)  
 Adelco Hybrid Digital Print Head

Air Supply	
Pressure	CFM (per print head)
100PSI / 7bar	3 CFM

### Print Format:

Standard Image Area	Max Frame Size	Max Machine Width	Length
45*60cm(18**24")	64*100cm(27**43")	363cm(143")	Depends on format
50*70cm(20**28")	69*110cm(27**43")	398cm(157")	Depends on format
60*80cm(23.5**31.5")	79*120cm(31**47")	418cm(165")	Depends on format



**Oval formats offer a more efficient use of space**

Takes up less floor space than comparable carousel based machines and enables greater stability with larger print areas. Provides more versatility with multiple flash, cooling and speciality print stations required from the latest, most demanding ecological print solutions.

Versatile print stations with automatic high lift  
**Characteristics**

**Modular & Expandable**

Available in three standard print size formats. The Matrix can be configured for almost any production requirement with an almost infinite No of pallets & print stations.



Ultra rigid pallet arms

**High Production**

High power servo index, fast and independent screen lift lower and smooth, servo driven print heads enable cycle times in excess of 900 prints per hour.

**Strong and Stable Structure**

Unparalleled support of print heads & pallet arms during print cycle for exceptional print quality and repeatability.

**Precision In Motion:**

Pallets are securely locked with Hardened Locators. Indexing to an accuracy of +/- 0.02mm.

**Safety**

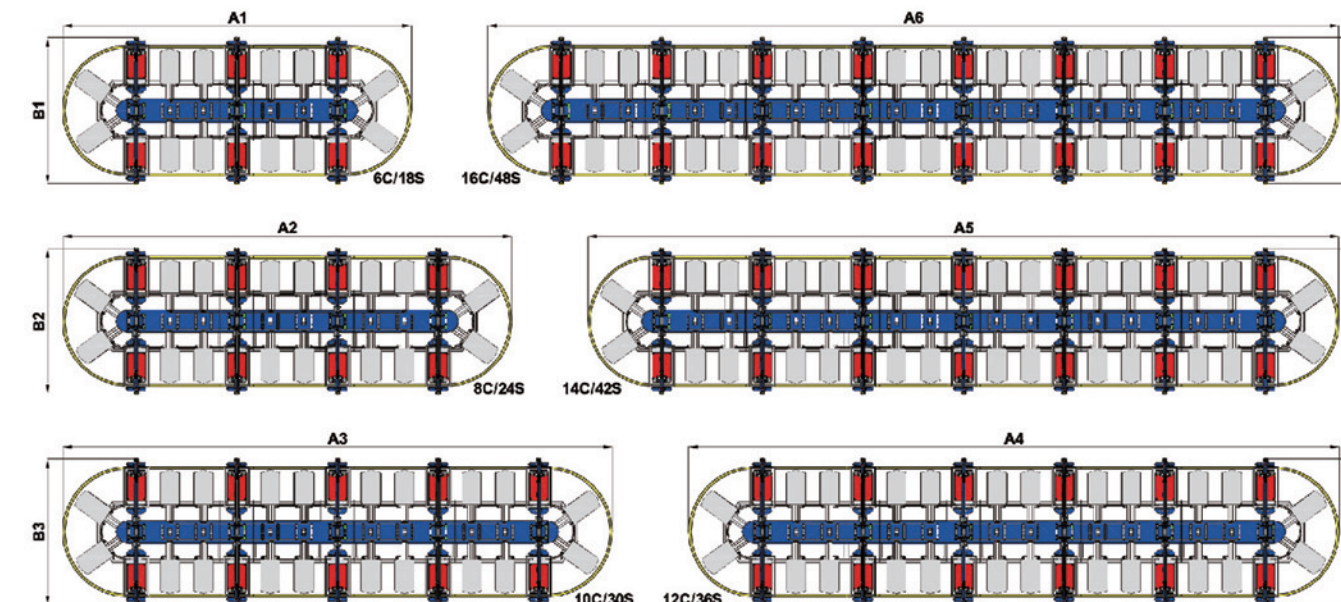
Safety Barriers, Proximity sensors and Safety lasers run the full length of the machine that immediately stop machine if activated. Designed with safety as a priority with worldwide renowned certification.

**Chainless pallet indexing system**

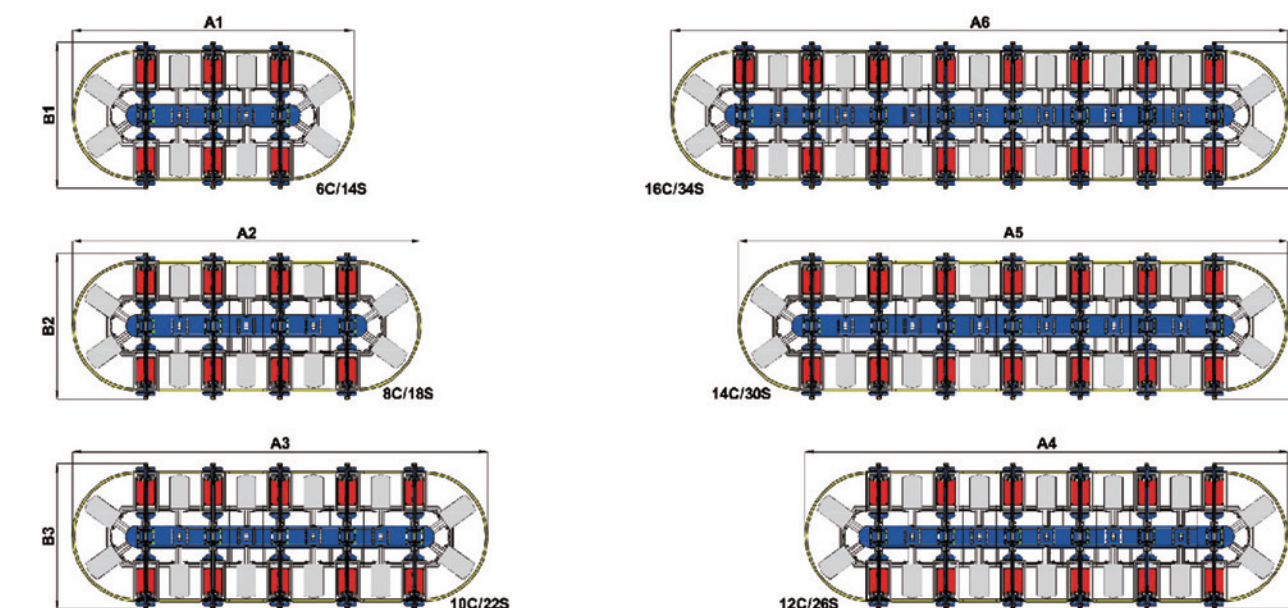


Flash cures fit in any position including under print heads

Larger models available up to 66 stations



MODEL	PRINT-FLASH-COOL FORMAT											
	6C/18S		8C/24S		10C/30S		12C/36S		14C/42S		16C/48S	
	A1	B1	A2	B2	A3	B3	A4	B4	A5	B5	A6	B6
MTX 4560	8.68M	3.63M	11.12M	3.63M	13.55M	3.63M	15.99M	3.63M	18.43M	3.63M	20.87M	3.63M
MTX 5070	9.48M	3.98M	12.23M	3.98M	14.97M	3.98M	17.71M	3.98M	20.45M	3.98M	23.19M	3.98M
MTX 6080	9.68M	4.18M	12.43M	4.18M	15.17M	4.18M	17.91M	4.18M	20.65M	4.18M	23.39M	4.18M



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	A1	B1	A2	B2	A3	B3	A4	B4	A5	B5	A6	B6
MTX 4560	7.05M	3.63M	8.68M	3.63M	10.30M	3.63M	11.93M	3.63M	13.55M	3.63M	15.18M	3.63M
MTX 5070	7.66M	3.98M	9.48M	3.98M	11.31M	3.98M	13.14M	3.98M	14.97M	3.98M	16.80M	3.98M
MTX 6080	7.86M	4.18M	9.68M	4.18M	11.51M	4.18M	13.34M	4.18M	15.17M	4.18M	17.00M	4.18M

**Smooth, Quiet operation:**

The Matrix has a Unique Rail and drive system quality that ensures almost Silent operation creating a Quiet print shop environment.



Adelco's High Speed Digital Hybrid Printer Option