

## DATASHEET

# Agitating & Circulating Ink System (ACIS)

Curable ink jet printing system for high contrast, permanent marking.

Matthews Marking Systems offers a unique large character inkjet printing system developed specifically for uncured rubber, where the ink must withstand the curing process; including tire and tread marking.

This system features a curable rubber marking ink that is fast dry, Hazardous Air Pollutant (HAPs) free, and eliminates transfer or shadowing in the mold.

It also features Matthews exclusive 8000+ maxi-valve printhead technology, the most reliable drop-on-demand system in the industry, providing tremendous reliability, easy maintenance, and dramatically lower ink consumption:

- 6 billion cycles before retuning, outlasting the competition
- Higher operating pressure reduces potential printhead clogging issues
- Impressive print quality and speed capability

### ACIS Technical Specifications

- + Utilities Required:
  - Air: 30 to 40 PSI, 1 SCFM (2.76 bar, 0.47L/Sec.)  
Clean, dry air—an air filter/regulator kit is available as an option
  - Electrical: External Power Supply Input: 100-240 VAC, 50-60 Hz, 2.0A
  - Output: 24 VDC, 3.75A (90W Max.)
- + Cabinet Weight: Approximately 82 lbs. (37.2 kg)
- + Cabinet Dimensions: 25.5"H x 21.25"W x 13.25"D (Approximate; includes door and filler tube cap)
- + Ink Supply Pressure: Factory set for 15 PSI (1 bar)
- + Maximum number of print heads:
  - Maximum 64 Valves, using two 16, or two 32 valve 8000+ Series Printheads
  - Configured for pigmented heptane based ink
- + Ink Reservoir Capacity: 4 liter (135.26 oz.)
- + Output/Input: Print trigger circuit offered to halt print 30 minutes after low ink detected or to send low ink output to PLC

- + Prints real time information, variable text, graphics, barcodes, and 2D codes
- + Improves traceability and limits the potential to incorrectly code products
- + Easily interfaces with PLC or network controls
- + Reduces maintenance required to clean and maintain equipment
- + Performs reliably, even in the harshest environments
- + Eliminates damages to the rubber with no contact



**ACIS Warning Beacon**

- + Green: Normal Running Condition
- + Red: Low Ink Level
- + Flashing Red: Warning that low ink level has not been corrected
- + Yellow: High Ink Level—too much ink has been added; overfill situation

**Inks**

- + Unlike many of our competitors, Matthews formulates and produces the ink used in our inkjet print technology. By choosing Matthews for printers and consumables, you benefit from one supplier, one source, one partner.



PRINTHEAD	LINES OF PRINT	MIN. CHAR. SIZE	MAX. IMAGE SIZE	MAX. SPEED	MAX. PRINT DISTANCE*	OPERATING TEMPERATURE & HUMIDITY
16v	1 - 2	1/4" (6.35 mm)	2 1/2" (63.5 mm)	780 fmp/3.96 mps	1/2" (12.7mm)	41° F - 113° F (5° C - 45° C) Humidity Range: 10% - 85% (non-condensing)
32v	Up to 5	1/4" (6.35 mm)	5" (127 mm)	780 fmp/3.96 mps	1/2" (12.7mm)	

\*Greater print distance can be supported, with reducing print quality.

