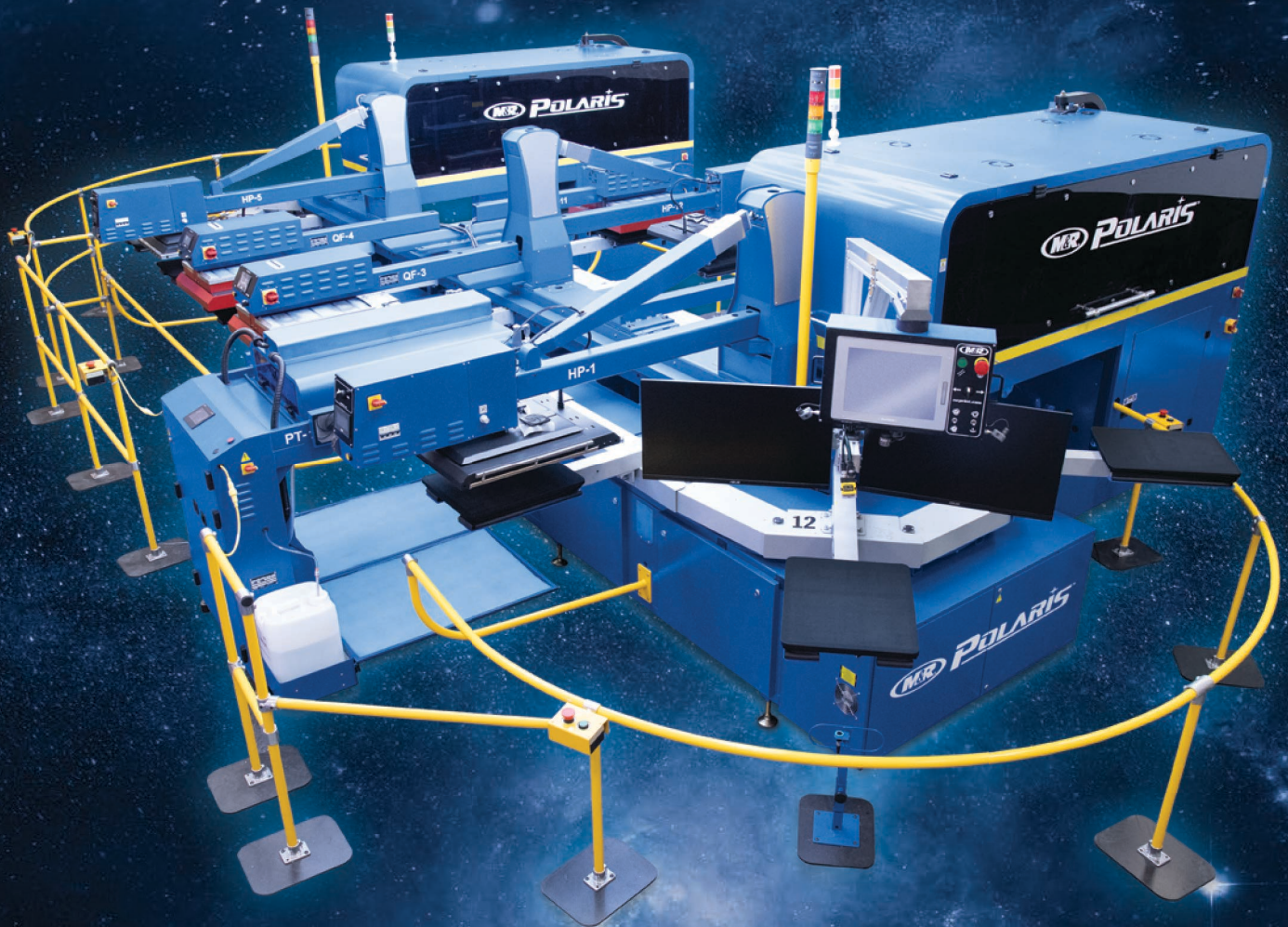


POLARIS™

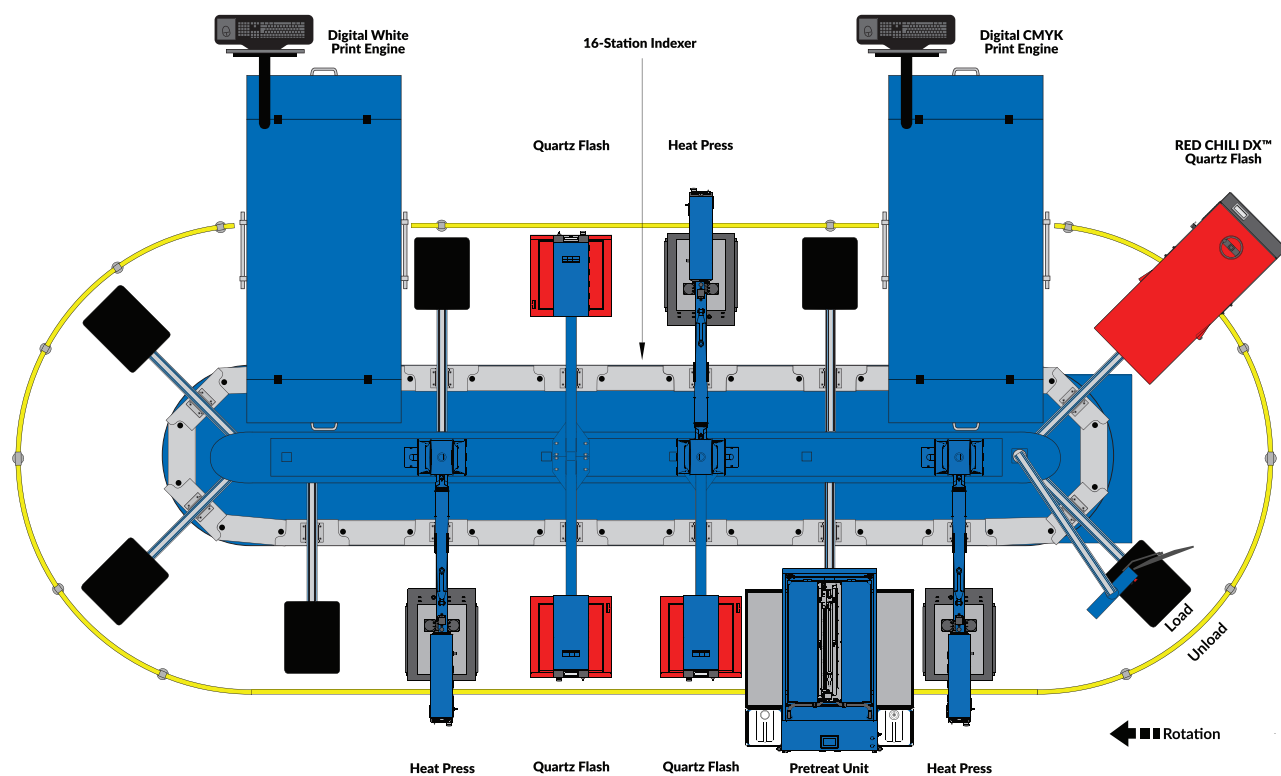
Industrial High-Speed DTG Printing System



DTG PRODUCTION ON A COSMIC SCALE

What Sets the Polaris Apart? **Every Part.**

Fast DTG Production On a Cosmic Scale



The Polaris™ Industrial High-Speed DTG Printing System sets a new standard with the latest generation of garment decoration technology from M&R. Designed to handle a sophisticated array of automation needs and quality requirements, the Polaris™ is set to accelerate growth and expand horizons.

Quality AND Speed? Polaris Does Both. Built on M&R's popular automatic oval press, the Stryker™ base provides a high-quality, smooth-operating servo-drive indexer for fast, continuous cycling. Operators can efficiently load and unload garments with reduced fatigue and faster cycling.

The onboard pretreatment system prepares garments in-line when and where you need it, eliminating storage needs for work-in-progress. Narrow spray tips align with

the platen for consistent, edge-to-edge pretreatment application, and can switch from dark to light shirt pretreatment settings at a touch of a button.

Integrates with Your Order System

The Polaris features a built-in, high-fidelity barcode scanner and customizable integrations to your order management system to pull orders locally or from the cloud. A world-class color management solution supports advanced controls for accurate and consistent quality across products.

Achieve True Star Power with Polaris

With amazingly fast print speeds and rugged construction, the Polaris is designed and manufactured with the same commitment to quality and exacting standards that has made M&R an industry leader for over 30 years.



Dual Digital Print Engines

Two print engines—one dedicated only to White, and one to CMYK—deliver bright, amazing color, one-off after another.

16-Station Indexer

The indexing platform that the Polaris is built upon is based on the proven technology of the M&R Stryker™—a wildly-popular oval automatic printing press, known for dependability and longevity. Built of heavy-duty steel and premium components, the Polaris is built to last and here to stay.



Onboard Pretreater

Our pretreater zone is a self-contained system, which quickly applies our special pretreat solution onto the garment as part of the DTG process, saving valuable time and touches.



Strategic Heat Presses and Quartz Flashes

The placement of our heat presses optimizes the DTG process on the Polaris by preparing a smooth, reliable printing surface. Evaporating the water out of pretreat and ink is a fundamental necessity, and our multiple quartz flashes are paramount to our rapid DTG process.



The Polaris provides a solution that is greater than the sum of its parts.

The Polaris represents over 30 years of idea creation, iteration and innovation from the critical minds at M&R. By combining rugged construction with cutting-edge design, the Polaris is tomorrow's DTG solution, delivered today.



MRPRINT.COM

POLARIS™

Industrial High-Speed DTG Printing System

The Polaris Industrial High-Speed DTG Printing System combines modern-day screen printing ideals with recent advancements in digital ink delivery. Based on M&R's popular automatic carousel press technology and paired with two of M&R's proven digital printheads, the Polaris produces just-in-time DTG prints with few operators required. An onboard pretreatment station reduces setup time and touches, and the dedicated white and CMYK digital print stations produce vivid, bold prints.

High-Quality DTG Printing • Onboard Pretreater • Fast and Efficient



High-Volume Throughput

Produce 240 just-in-time, high-quality DTG prints per hour* with minimal operators



Robust Digital Color

Two print engines—one dedicated only to White, and one to CMYK—deliver bright, amazing color, one-off after another.



Onboard Pretreater

The pretreater zone is a self-contained system, which quickly applies pretreat solution onto the garment, saving valuable time and touches.



Strategic Heat Presses

The placement of the heat presses optimizes the DTG process on the Polaris by preparing a smooth, reliable printing surface.

*Production rates can vary depending on image size and printing variables—your rate may be different. This rate is an estimated average production speed, based on related variables; the suggested rate does not imply a guarantee of production rate.



SPECIFICATIONS

ELECTRICAL REQUIREMENTS ^{1 2}		WATER REQUIREMENTS	
Main Requirements - Max. Load	220 V, 3 ph, 230 A, 50/60 Hz, 90 kW (if alternating 1 ph for stamper)	Water Line In	Filtered water (not distilled): 9.5 mm (3/8") tubing, 762 cm (25 ft.) max.
Indexing Platform	220 V, 3 ph, 24 A, 50/60 Hz, 9.6 kW (16 stations, supplied from above)	Drain Line Out	9.5 mm 3/8" tubing, 762 cm (25 ft.) max. or dedicated drain pump
Digital Print Stations (x2)	220 V, 1 ph, 10 A, 50/60 Hz, 2.2 kW	ENVIRONMENTAL REQUIREMENTS	
Pretreater	220 V, 1 ph, 4 A, 50/60 Hz, 250 W	Work Room Temperature	20 - 25 °C (68 - 77 °F)
Inline Flashes (x3)	220 V, 3 ph, 43 A, 50/60 Hz, 16.5 kW	Work Room Humidity	50% - 70% (non-condensing)
RED CHILI DX™ Flash	220 V, 3 ph, 30 A, 50/60 Hz, 11.5 kW	GENERAL SPECIFICATIONS	
Heat Presses (x3)	220 V, 1 ph, 17 A, 50/60 Hz, 3.3 kW	Digital Print Stations - Inks	One Station dedicated to White / One Station dedicated to Cyan, Magenta, Yellow and Black
Control Stand	220/120 VAC, 1 ph, 14/22 A, 50/60 Hz, 3 kW (Separate from max. load)	Printing Resolutions	600 dpi native printhead resolution Maximum resolutions: 600x1200, 600x1800
AIR REQUIREMENTS		Maximum Image Area	38 x 48.25 cm (15" x 19")
Indexing Platform	Air @ 6 Bar (100 psi), 9 CFM	Standard Pallet Size	38 x 48.25 cm (15" x 19")
Digital Print Stations (x2)	Air @ 6 Bar (100 psi), 3 CFM	Overall Size (H x W x D)	238 x 874 x 534 cm (94" x 364" x 210")
Pretreater	Air @ 6 Bar (100 psi), 0.6 CFM	Shipping Weight	7102 kg (15658 lb)
Heat Presses (x3)	Air @ 6 Bar (100 psi), 0.4 CFM		

¹ If incoming voltage differs from the voltage(s) listed in this brochure, calculate amperage accordingly. Other electrical configurations (such as 380-415 V) are available: Contact M&R Printing Equipment, Inc. for details.
² An uninterruptible power supply (UPS) should be used to protect electrical components.

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