



# Conquest

UV Print/Cure System

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## Conquest™

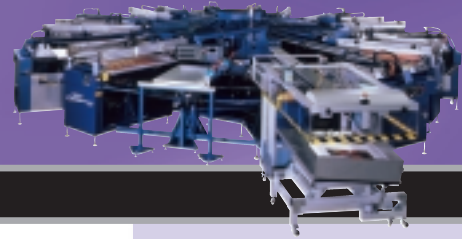
Conquest is M&R's versatile multi-color UV carousel printing system. Its unique design reduces labor costs by printing and curing up to 6 colors simultaneously without the need to dry and stack in-between. This reduction in substrate handling prevents dimensional changes to substrates and is especially beneficial for fragile substrates like glass. Since Conquest delivers finished prints in one revolution, it's possible to do color and registration adjustments for customer approval prior to the production run. It also makes partial shipments possible without the teardown and setup required with single-color flatbed presses.

Each UV cure station is capable of fully independent operation. The UV heads cure by shuttling across (traversing) the substrate while Conquest is in its print cycle, ensuring uniform UV coverage. Since traverse speed and wattage are independently controlled, operators can select the ideal cure for each ink/substrate combination. With Conquest's standard 300-watt cure system, each of the six stations can be independently set for single or multiple passes, can shuttle at an independently selected speed, and can be set at 125, 200, 250, or 300 watts per linear inch. For even greater latitude and control, Conquest offers two optional UV curing systems: A 400-watt UV Curing System and the M&R Switchback UV Curing System™. The optional 400-watt system has settings of 160, 200, 300, and 400 watts per linear inch. The optional Switchback System allows operators to easily switch between three lamp types: Ferric (Iron) Oxide, Gallium, and Mercury Vapor (standard), and offers infinitely adjustable settings from 160 to 400 watts per linear inch. Such versatility allows Conquest to offer UV curing performance and quality simply unobtainable with other carousel print/cure systems.

Conquest Systems are available in three sizes: 25" x 38" (64 x 97 cm), 30" x 40" (76 x 102 cm), and a phenomenal 38" x 50" (97 x 127 cm). All are available with M&R's Porter suction-style takeoff. Like all M&R equipment, Conquest is built with M&R's unsurpassed commitment to quality, durability, and design excellence, and is backed by the best service and support in the industry. If you want to improve registration and reduce labor cost, substrate handling, and rejects, and need the performance, price, and versatility that come with an M&R carousel UV print/cure system, insist on the best: Conquest.

# Conquest

## UV Print/Cure System



### Standard Features

#### Certification

- Panel meets Canadian Standards Association (CSA) standards and carries the CSA label

#### Color Capacity

- 1-6 colors (6 colors standard)

#### Control Center

- Control panel offers easy navigation, with programming and prompts in plain language
- Digital keypad with alphanumeric display
- Digital microprocessor with self-diagnostics
- Dwell and load station vacuum times are independently managed from the control panel
- Flood/non-flood setting leaves screen flooded or non-flooded after print cycle
- Foot pedal pauses machine cycle, releases vacuum at load table, and keeps paper locators firmly against vacuum bed
- Jog left/right allows the press to index in either direction so that during proofing the operator can alter the order of screen/color application on test prints without having to tear down and set up for each variation
- Production speed monitor ensures more accurate job costing

#### Cure System

- 300-watt UV Cure System with settings of 125, 200, 250, & 300 watts per linear inch
- Delivers optimal cure to heat-sensitive and heat-resistant stock
- Digital elapsed time meter monitors bulb life
- Easy-access housing simplifies maintenance and bulb changing
- Unique multi-pass capability
- UV heads are independently controlled for maximum flexibility
- UV units shuttle across substrates concurrent with print strokes to sustain cycle speed and provide uniform coverage

#### Design & Construction

- Constructed of rigid steel & aluminum and premium components
- Cycle interruption bars and light beams stop press when activated
- Design provides superb operator access
- Maintenance-free, brushless AC motors with variable-frequency drives

#### Index System

- Servo-driven index ensures accurate, smooth travel

#### Ink Dip System

- Electronically adjustable ink retrieval system keeps ink in the print area (U.S. Patent No. 5,649,479)

#### Maximum Image Area

- 25" x 38" (64 x 97 cm), 30" x 40" (76 x 102 cm), & 38" x 50" (97 x 127 cm)
- Custom sizes available

#### Off-Contact

- Four-corner off-contact settings allow quick and accurate screen leveling
- Tool-free off-contact adjustment
- Zero off-contact capability offers greater control over print quality

#### Peel

- Automatically synchronized gear-driven screen peel
- Flat flood capability
- Infinitely adjustable within range

#### Print Carriage

- Adjustable, tool-free front and rear sensors located on the printhead
- Dynamic braking prevents the print carriage from drifting into the printing area
- Hardened steel tracks provide years of smooth, vibration-free printing
- Heavy-duty design
- Independent drives for print carriage and head lift

#### Registration

- Master frame with micro-register adjustments and visual guides allow quick and easy setup

#### Screen Clamps & Holders

- Adjustable screen holders accommodate a wide variety of screen sizes
- Front screen loading makes fast screen changes possible
- Pneumatic screen clamps facilitate rapid screen loading and deliver unmatched stability on a wide variety of screens

#### Squeegee/Floodbar

- Calibrated independent and micro-adjustable pressure settings
- Park position allows flood and squeegee to be moved to the front or rear without flooding or printing, and allows easy squeegee and floodbar installation and removal
- Pneumatic squeegee/floodbar locks for faster setup and teardown

### Options & Accessories

#### Certification

- CE Compliant (Built to specifications established by the European Committee for Standardization®)

#### Control Center

- Modem with cable and module enable remote diagnosis by M&R Technical Support
- MPR (Management Production Reporting) Software System™ provides press status and production data in real time, giving facility managers the information they need to maximize efficiency

#### Cure System

- 400-watt UV Cure System with settings of 160, 200, 300, & 400 watts per linear inch
- Switchback™ UV Cure System is infinitely adjustable from 160 to 400 watts per linear inch, and accepts three types of UV lamps (Ferric (Iron) Oxide, Gallium, & Mercury Vapor), allowing operators to select the optimal curing source and intensity for even the most difficult ink/substrate combinations

#### Load Station

- Above-table double-sided sheet locator allows operator to load from any corner for double-sided work

#### Maximum Image Area

- Custom sizes available

#### Takeoff System

- M&R's Porter™ is a fully adjustable suction-style takeoff that adapts to virtually any substrate

- Squeegee and floodbar traverse speeds can be set individually
- Squeegee pressure equalizer regulator ensures uniform squeegee pressure
- Tool-free pressure and angle adjustments are independently set for superior print quality

#### Vacuum System

- Adjustable vacuum at load station aids operator in loading stock
- CNC-drilled 1 1/2" (3.81 cm) thick heavy-gauge anodized aluminum vacuum bed
- High-volume vacuum turbine system easily adjusts to different stock type and thickness

#### Service

- 24-hour hotline

#### Training

- Access to M&R's Training Center

#### Warranty

- One-year limited

### SPECIFICATIONS

Model	Maximum Image	Maximum Frame Size	Diameter	Air @ 100 PSI	Electrical Requirements* @ 3-phase, 300 watts/inch			Electrical Requirements* @ 3-phase, 400 watts/inch (including Switchback)			Shipping Weight
					208/230v, 50/60 Hz	380v 50 Hz	460v 60 Hz	208/230v 50/60 Hz	380v 50 Hz	460v 60 Hz	
Conquest 2538	25" x 38" (64 x 97 cm)	44" x 58" x 2.25" (112 x 147 x 5.7 cm)	28" 3" (861 cm)	12 cfm	250/240 amps	145 amps	120 amps	315/295 amps	180 amps	150 amps	17,000 lbs (7,711 kg)
Conquest 3040	30" x 40" (76 x 102 cm)	44" x 58" x 2.25" (112 x 147 x 5.7 cm)	28" 3" (861 cm)	12 cfm	280/265 amps	160 amps	130 amps	355/330 amps	195 amps	165 amps	18,000 lbs (8,165 kg)
Conquest 3850	38" x 50" (97 x 127 cm)	52" x 68" x 2.25" (132 x 173 x 5.7 cm)	33" 2" (1011 cm)	12 cfm	325/305 amps	180 amps	150 amps	420/390 amps	230 amps	195 amps	20,000 lbs (9,072 kg)

\* If incoming voltage differs from the voltage(s) listed in this brochure, calculate amperage accordingly

\* Other electrical configurations are available: Contact M&R for details

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