# TRI-LIGHT CTS"

## **Computer-to-Screen Exposure System**





- Maximum screen frame size using vacuum 132 x 152 cm (52" x 60")
- Maximum screen frame size using CTS rack 142 x 163 cm (56" x 64")
- Produces exceptional results on both conventional and computer-generated screens
- The logical choice for those using both screen types and for conventional screen printers planning for the future



Tri-Light CTS is the dual-purpose version of NuArc's popular Tri-Light ST Screen Exposure System. It produces the same exceptional results on conventional screens, but it also exposes screens that have been generated by CTS computer-to-screen imaging systems, making it the logical choice for those using both screen types—and for conventional screen printers planning for the future. Tri-Light CTS is also simple to operate. The entire screen exposure process—from vacuum drawdown (on conventional screens) through screen exposure and vacuum release—is accomplished with a single keystroke.

Tri-Light CTS has two methods of exposing screens. Two outer latches provide access to a conventional glass-and-vacuum blanket capable of handling screen frames up to  $132 \times 152$  cm ( $52" \times 60"$ ). A center latch bypasses the glass and vacuum in favor of an adjustable computer-to-screen rack system for exposing computer-generated screens directly to the light. The rack will handle a maximum screen frame size of  $142 \times 163$  cm ( $56" \times 64"$ ), and will accommodate two  $64 \times 91$  cm ( $25" \times 36"$ ) or four  $58 \times 79$  cm ( $23" \times 31"$ ) screen frames simultaneously. The separation provided by the rack system

eliminates the smearing and distortion that can result from screento-glass contact. On conventional screens, NuArc's unique manifold system ensures intimate contact by drawing vacuum evenly around the perimeter of the blanket frame.

NuArc's computerized and programmable integrator/controller ensures precise vacuum duration and screen exposure lamp output compensation. Screen exposures are powered by NuArc's instant-start multi-spectrum metal-halide System 631™, which idles at 1 kW and operates at user-selected settings of 6 kW, 3 kW and 1 kW. The 3 kW and 1 kW settings allow operators to slow down screen exposures when necessary. They also extend Tri-Light CTS's ability to adapt to future emulsion formulas. Tri-Light CTS also features NuArc's exclusive Proportional Temperature Control (PTC). PTC continuously monitors screen exposure lamp temperature, turning cooling fans on and off to keep the exposure lamp at the optimum operating temperature. Tri-Light CTS can be located in areas housing unexposed screens because the light source and vacuum frame are enclosed, and the screen exposure lamp can't be turned on while the blanket frame is open.

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## **TRI-LIGHT CTS™**

#### STANDARD FEATURES

#### **BLANKET & VACUUM**

- Advanced design eliminates the need for a vacuum hose connection to the blanket
- Exceptionally flexible and resilient material ensures intimate contact and blanket longevity
- · Gas shocks simplify blanket frame opening and closing
- · Oil-free pump is fast, quiet, and efficient
- Unique manifold system ensures intimate contact by drawing vacuum evenly around the perimeter of the blanket frame
- · Vacuum release system instantly releases vacuum

#### **CERTIFICATION**

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

#### **COMPUTER-TO-SCREEN (CTS) FEATURE**

- Elimination of blanket drawdown produces faster computer-to-screen exposures
- Exposes screens that have been generated by a computerto-screen (CTS) system
- Racks are adjustable to accommodate different size screens
- Separates the screen frame from the blanket to prevent smearing and distortion

## CONTROLLER/INTEGRATOR FOR SCREEN EXPOSURES

- Computer controlled and fully programmable
- Job Recall<sup>™</sup> allows storage and recall of numerous vacuum and screen exposure values
- Light integrator ensures precise screen exposure times
- Touch-screen panel with alphanumeric display

#### **DESIGN & CONSTRUCTION**

- 104 cm (41") working height for no-step access
- 9.5 mm (3/8") thick optically-clear plate glass
- Can be disassembled to fit through a 76 cm (30") wide opening
- Frame latches are made with state-of-the-art material for durability, longevity, and operator comfort
- · Fully-enclosed, heavy-duty all steel cabinet
- Light-Loc™ automatically turns off the screen exposure light source if the blanket frame is opened
- Removable covers provide easy access to components to clean or replace serviceable items like screen printing lamps
- Self-contained design speeds production by allowing placement in light-safe screen-coating rooms
- Ships fully assembled and ready to deploy
- · Square tubular steel welded frame

#### LIGHT SOURCE FOR SCREEN EXPOSURES

- Lamp drawer makes screen exposure lamp easy to access and change
- Multi-point metal-halide UV screen exposure lamps excel on all emulsions: direct, capillary, and indirect
- Point-light source provides maximum collimation and optimum coverage to hold fine lines and dots during screen exposure
- Proportional Temperature Control (PTC) turns cooling fans on and off to keep the screen exposure lamp at optimum operating temperature
- Screen exposure lamp idles at 1 kW when not exposing screens
- System 631 shuttered multi-spectrum metal-halide screen exposure lamp produces fast, efficient user-selected exposures of 6 kW, 3 kW or 1 kW

#### **SCREEN EXPOSURE AREA**

- 132 x 152 cm (52" x 60") maximum screen frame size when using the vacuum with conventional screens
- 142 x 163 cm (56" x 64") maximum screen frame size for rack-mounted CTS-generated screens (the rack will also accommodate two 64 x 91 cm (25" x 36") or four 58 x 79 cm (23" x 31") screen frames simultaneously)
- Compatible with the Tri-Loc® & Double Tri-Loc® Rapid Registration Systems from M&R

#### **WARRANTY, SERVICE AND SUPPORT**

- 24-hour hotline is staffed 365 days a year
- · Access to M&R's Training Center
- M&R OEM parts—including genuine M&R pallets & platens—and screen printing supplies are available online at store.mrprint.com
- One-year limited warranty excluding blanket, glass, and screen exposure lamps

### **OPTIONS**

#### INSPECTION LIGHT

- Allows the operator to check for alignment, dust, and pinholes before exposing screens
- Yellow safelight turns off automatically when the blanket frame is closed

#### REPLACEMENT SCREEN EXPOSURE LAMPS

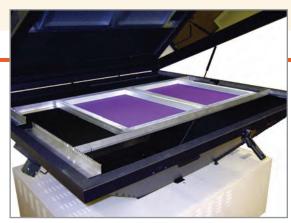
• 6 kW multi-spectrum metal-halide UV screen exposure lamp: Part Number MH153

## **SPECIFICATIONS**

|  | Tri-Light CTS  |
|--|--|
| Electrical Requirements <sup>1</sup>       | 208/230 V, 1 ph, 32/29 A, 50 Hz, 7 kW<br>208/230 V, 1 ph, 30/28 A, 60 Hz, 6 kW |
| Maximum Screen Frame Size (CTS Rack)       | 142 x 163 cm (56" x 64")   |
| Maximum Screen Frame Size (Vacuum Blanket) | 132 x 152 cm (52" x 60")   |
| Overall Size (H x W x D) <sup>2</sup>      | 117 x 188 x 180 cm (46" x 75" x 71")   |
| Shipping Weight                            | 710 kg (1565 lb)   |
| Vacuum Frame Size                          | 152 x 174 cm (60" x 68.5")   |
| Wattage                                    | 6 kW   |

<sup>&</sup>lt;sup>1</sup>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



ADJUSTABLE RACKS HOLD CTS-GENERATED SCREENS BELOW THE GLASS FOR DIRECT EXPOSURE



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<sup>&</sup>lt;sup>2</sup>Maximum unit height when open (with leveling legs fully extended) is 242 cm (95")