

## Large Format Screen Exposure System



### FEATURES

- **Maximum screen frame capacities range from 152 x 183 cm (60" x 72") to 239 x 457 cm (94" x 180")**
- **Computer-controlled blanket frame opens and closes automatically**
- **Automated single-button operation**

NuArc's largest screen exposure system offers the ultimate in computerized touch-screen operation. Job Recall™ allows operators to program Helios to repeatedly perform numerous exposure sequences—from automatic door closing through automatic lamp centering (on larger models), vacuum draw down, screen exposure, vacuum release, blowback, and door opening. Helios models use powerful instant-start 6 kW multi-spectrum lamps to speed production while retaining fine lines and dots. Dual 6 kW lamps are standard on models designed for screen sizes of 208 x 269 cm (82" x 106") and larger.

Computer-generated diagnostics monitor all functions to quickly identify and resolve problems. The computer-directed pneumatic door prevents the blanket frame from twisting, and it frees operators from the tedious task of manual operation. NuArc's Light-Loc™ automatically shuts off lamps if the door is opened, allowing Helios

to be located in darkrooms. The exposure area is angled to ease screen loading and glass cleaning. Standard features include improved heavy-duty blanket material, automatic blowback to release vacuum, and a static electricity reduction system. With six standard models and a wide range of custom sizes available, there's a Helios for virtually any need. Standard models are sized to accommodate maximum screen frame sizes from 152 x 183 cm (60" x 72") to a phenomenal 239 x 457 cm (94" x 180"). Helios is an exceptionally fast, quiet, and efficient large format exposure system, with an ergonomic design that's extremely user-friendly.

All equipment from The M&R Companies is built with M&R's unsurpassed attention to detail and commitment to quality, durability, innovation, and design excellence, and is backed by M&R's unparalleled 24-hour access to service, support, and premium parts. It's no wonder M&R is the first name in screen printing equipment.

## STANDARD FEATURES

### Blanket & Vacuum

- Automated power door prevents the blanket frame from twisting
- Blanket frame is pneumatically operated and opens and closes under computer direction
- Dual air-driven pumps are fast, quiet, and efficient
- Exceptionally flexible and resilient material ensures intimate contact
- Exclusive air blowback system dispels vacuum after exposures are completed
- Unique manifold system ensures intimate contact by drawing vacuum evenly around the perimeter of the blanket frame

### Certification

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

### Controller/Integrator

- Computer controlled and fully programmable
- Computer-controlled system monitors lamp life
- Computer-generated diagnostics speed problem identification and resolution
- Fully automatic operation
- Job Recall™ allows operators to store & sequence multiple functions for numerous exposure operations
- Job Recall™ allows storage and recall of vacuum and exposure values
- Light integrator ensures precise exposures
- Touch-screen display with pushbutton control

### Design & Construction

- 1.27 cm (½") thick plate glass
- Angled design simplifies screen loading and glass cleaning
- Centrally located pneumatic controllers
- Fully-enclosed, heavy-duty all steel cabinet
- Light-Loc™ automatically turns off the light source if the door is opened
- Removable covers provide easy access to components to clean or replace any serviceable item
- Self-contained design speeds production by allowing placement in darkrooms
- Ships fully assembled and ready to deploy
- Square tubular steel welded frame

### Inspection Light

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

### Light Source

- 6 kW multi-spectrum instant-start metal-halide lamps produce fast, efficient exposures
- Access door simplifies maintenance and lamp replacement
- Computerized lamp centering is standard on models over 254 cm (100")
- Computerized light balance and lamp life monitoring systems
- Dual lamps are standard on models over 254 cm (100")
- Exposes all emulsions: direct, capillary, and indirect
- Patented (U.S. Patent No. 4,339,692) instant-start lamp and rapid recovery power supply eliminate warm-up and idling times, saving energy and reducing heat build-up
- Point-light source provides maximum collimation and optimum coverage to hold fine lines and dots

### Warranty, Service and Support

- 24-hour hotline is staffed 365 days a year
- Access to M&R's Training Center
- One-year limited warranty excluding blanket, glass, and lamps

## OPTIONS

### Replacement Lamp

- 6 kW multi-spectrum metal-halide lamp: Part Number PM78

## SPECIFICATIONS

	Helios 6072	Helios 7296	Helios 82106	Helios 82156	Helios 82180	Helios 82184	Helios 86180	Helios 92120	Helios 94180
<b>Air @ 6,9 bar (100 psi)</b>	283 l/min (10 cfm)	283 l/min (10 cfm)	425 l/min (15 cfm)	425 l/min (15 cfm)	425 l/min (15 cfm)	425 l/min (15 cfm)	425 l/min (15 cfm)	425 l/min (15 cfm)	425 l/min (15 cfm)
<b>Electrical Requirements<sup>1</sup></b>	208/230 V, 1 ph, 27/21 A, 60 Hz, 4.8 kW 208/230 V, 1 ph, 30/27 A, 50 Hz, 6.2 kW	208/230 V, 1 ph, 27/21 A, 60 Hz, 4.8 kW 208/230 V, 1 ph, 30/27 A, 50 Hz, 6.2 kW	208/230 V, 1 ph, 54/42 A, 60 Hz, 9.7 kW 208/230 V, 1 ph, 60/54 A, 50 Hz, 12.4 kW	208/230 V, 1 ph, 54/42 A, 60 Hz, 9.7 kW 208/230 V, 1 ph, 60/54 A, 50 Hz, 12.4 kW	208/230 V, 1 ph, 54/42 A, 60 Hz, 9.7 kW 208/230 V, 1 ph, 60/54 A, 50 Hz, 12.4 kW	208/230 V, 1 ph, 54/42 A, 60 Hz, 9.7 kW 208/230 V, 1 ph, 60/54 A, 50 Hz, 12.4 kW	208/230 V, 1 ph, 54/42 A, 60 Hz, 9.7 kW 208/230 V, 1 ph, 60/54 A, 50 Hz, 12.4 kW	208/230 V, 1 ph, 54/42 A, 60 Hz, 9.7 kW 208/230 V, 1 ph, 60/54 A, 50 Hz, 12.4 kW	208/230 V, 1 ph, 54/42 A, 60 Hz, 9.7 kW 208/230 V, 1 ph, 60/54 A, 50 Hz, 12.4 kW
<b>Lamps</b>	6 kW Instant Start x 1	6 kW Instant Start x 1	6 kW Instant Start x 2	6 kW Instant Start x 2	6 kW Instant Start x 2	6 kW Instant Start x 2	6 kW Instant Start x 2	6 kW Instant Start x 2	6 kW Instant Start x 2
<b>Maximum Screen Frame Size</b>	152 x 183 cm (60" x 72")	183 x 244 cm (72" x 96")	208 x 269 cm (82" x 106")	208 x 396 cm (82" x 156")	208 x 457 cm (82" x 180")	208 x 467 cm (82" x 184")	218 x 457 cm (86" x 180")	234 x 305 cm (92" x 120")	239 x 457 cm (94" x 180")
<b>Overall Size (H x W x D)</b>	193 x 254 x 231 cm (76" x 100" x 91")	218 x 315 x 231 cm (86" x 124" x 91")	244 x 340 x 231 cm (96" x 134" x 91")	244 x 467 x 231 cm (96" x 184" x 91")	243 x 535 x 238 cm (96" x 211" x 94")	243 x 546 x 238 cm (96" x 215" x 94")	246 x 535 x 241 cm (97" x 211" x 95")	264 x 381 x 239 cm (104" x 150" x 94")	264 x 536 x 241 cm (104" x 211" x 95")
<b>Shipping Weight</b>	880 kg (1940 lb)	1098 kg (2421 lb)	1409 kg (3106 lb)	1980 kg (4364 lb)	2267 kg (4998 lb)	2317 kg (5109 lb)	2378 kg (5241 lb)	1973 kg (4350 lb)	2654 kg (5850 lb)
<b>Vacuum Frame Size</b>	175 x 206 cm (69" x 81")	206 x 267 cm (81" x 105")	231 x 292 cm (91" x 115")	231 x 419 cm (91" x 165")	231 x 480 cm (91" x 189")	231 x 480 cm (91" x 189")	241 x 480 cm (95" x 189")	257 x 325 cm (101" x 128")	262 x 480 cm (103" x 189")

<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.



**The M&R Companies**  
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