

Large Format Screen Exposure System



FEATURES

- Maximum screen frame sizes 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 performs numerous screen exposure sequences

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 screen 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 metal-halide screen exposure lamps to speed production while retaining fine lines and dots. Dual 6 kW metal-halide screen exposure 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 screen exposure lamps if the door is opened, allowing Helios to be located in light-safe screen-coating rooms. The screen 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 screen exposure system, with an ergonomic design that's extremely user-friendly.

M&R is the world's largest manufacturer of screen printing equipment, and the online M&R Store features a wide variety of genuine M&R OEM parts and screen printing supplies. The NuArc line includes CTS computer-to-screen exposure systems, UV screen exposure units, lithographic imaging systems and free standing vacuum frames. 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.

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 screen 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 FOR SCREEN EXPOSURES

- Computer controlled and fully programmable
- Computer-controlled system monitors screen exposure lamp life
- Computer-generated diagnostics speed problem identification and resolution
- Fully automatic operation
- Job Recall™ allows storage and recall of numerous vacuum and screen exposure values
- Light integrator ensures precise screen exposures times
- Touch-screen panel with alphanumeric display

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 screen exposure 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 light-safe screen-coating rooms
- 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 FOR SCREEN EXPOSURES

- 6 kW multi-spectrum instant-start metal-halide screen exposure lamps produce fast, efficient exposures
- Access door simplifies maintenance and lamp replacement
- Computerized light balance and screen exposure lamp life monitoring systems
- Computerized screen exposure lamp centering is standard on models over 254 cm (100")
- Dual multi-spectrum metal-halide UV screen exposure lamps are standard on models over 254 cm (100")
- Multi-point metal-halide UV screen exposure lamps excel on all emulsions: direct, capillary, and indirect
- Patented (U.S. Patent No. 4,339,692) instant-start multi-spectrum metal-halide UV screen exposure 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 during screen exposure

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

REPLACEMENT SCREEN EXPOSURE LAMPS

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

SPECIFICATIONS

	Helios 6072	Helios 7296	Helios 82106	Helios 82156	Helios 82180	Helios 82184	Helios 86180	Helios 92120	Helios 94180
Air @ 6,9 bar (100 psi)	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)
Electrical Requirements¹	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
Lamps	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
Maximum Screen Frame Size	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")
Overall Size (H x W x D)	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")
Shipping Weight	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)
Vacuum Frame Size	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")

¹ 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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