# **RADICURE**<sup>™</sup>**D**

## **Electric Infrared Textile Drver**





#### conveyor dryer chamber lengths 183 cm to 305 cm (6' to 10')

**FEATURES** 

- Patriot Belt<sup>™</sup> with the SureTrak<sup>™</sup> Roller System
- Patented suspended-fabric insulating system

Built for long life and maximum performance, Radicure D is M&R's premium infrared electric screen printing conveyor dryer. It's available in belt widths from 91 to 152 cm (36" to 60"). Not only does it have the highest production capacity in its class of conveyor dryers, it's also the most energy efficient. Radiant panels can be quickly and easily raised and lowered with convenient single-point height adjustment. The heavy-duty thermal insulation in M&R's patented (U.S. Patent No. 6,161,304; UK Patent No. GB2357827B) suspended-fabric insulating system prevents heat from migrating into the workplace, and M&R's CoolSkin<sup>™</sup> technology leaves dryer skin cool to the touch. Fast cure rates and high product throughput maximize conveyor dryer capacity and minimize per-unit cost.

Curing is provided by an infrared radiant panel array and forced hot air. Separate dedicated blowers power circulation and exhaust. Radicure D's Proportional Integral Differential (PID) control allows the dryer to power up gradually to avoid maximum amperage loads during initial warmup. PID control also helps maintain even temperatures during production by phasing on and off rather than

using the full-load/no-load approach. The control panel allows easy monitoring and adjustment of operational status, temperature, and belt speed settings. Process temperatures and set temperatures are controlled digitally. PID control responds to ambient temperature changes by keeping dryer chamber heat within 1° of target temperature at the thermocouple.

Radicure D's reliable, heavy-duty, variable-frequency AC-drive motor powers M&R's Teflon-coated fiberglass Patriot Belt<sup>™</sup> with the SureTrak<sup>™</sup> roller system. The red silicone guide stitched along one edge of the Patriot Belt<sup>™</sup> rides in grooves machined into the large anodized aluminum SureTrak<sup>™</sup> rollers, keeping the belt where it belongs. It's the most precise dryer belt tracking available (U.S. Patent Pending). Maintenance is simplified with easy-toreach filters and lubrication points. A tower light shows when temperatures are within user-set parameters, and an automatic shutdown sequence keeps the blower and belt running until the conveyor dryer chamber has cooled. Radicure D is simply the finest infrared electric screen printing conveyor dryer available.

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## **RADICURE**<sup>™</sup>**D**

## **STANDARD FEATURES**

#### **AIR HANDLING**

- Adjustable air displacement and evacuation systems
- Enhanced airflow accelerates drying/curing
- High-volume circulation blower reduces energy costs
- Stainless steel filter slides out for easy cleaning
- Suspended insulating system (U.S. Patent No. 6,161,304. UK Patent No. GB2357827B) provides enhanced airflow and improves curing performance by leveraging infrared energy that would otherwise be lost into the dryer's insulation
- Two separate dedicated blowers (circulation and exhaust)
  CERTIFICATION
  CE Ortified Built to exceptions actablished by the
- CE Certified: Built to specifications established by the European Committee for Standardization® (CE)
- UL Listed: Built to specifications established by Underwriters Laboratories<sup>®</sup> (UL)

#### **CONTROL CENTER**

- Automatic Cool-Down Mode: After the dryer has been turned off, the circulation blower and conveyor belt will continue to run until the heat chamber has cooled
- Digital temperature readout shows set-point temperature and actual temperature in real time
- PID control allows the conveyor dryer to power up gradually to avoid maximum amperage loads during initial warmup
- PID control helps maintain even temperatures during screen printing production runs by phasing on and off rather than using the full-load/no-load approach
- Tower light indicates when temperatures are within user-set tolerances

#### **CONVEYOR SYSTEM**

- Digital belt speed readout makes it easy to duplicate conveyor dryer speed settings
- Maintenance-free, brushless AC electric motor with variable-frequency drive provides reliable, accurate belt-speed control
- Minimum belt speed: 91 cm (36") per minute
- The Patriot Belt<sup>™</sup> is made of heat-resistant, Teflon<sup>®</sup>-coated fiberglass
- The red silicone guide stitched along one edge of the Patriot Belt<sup>™</sup> rides in grooves machined into the large anodized aluminum SureTrak<sup>™</sup> Rollers, providing the most precise belt tracking available

#### **DESIGN & CONSTRUCTION**

- Adjustable entry/exit openings
- Air-cooled cabinet ensures long life for electrical components
- · Circuit breakers allow easy reset
- Low-profile design makes it easier to see over the dryer

#### **ENERGY EFFICIENCY**

- CoolSkin<sup>™</sup> technology leaves the dryer skin cool to the touch
- Fast curing rates and high product throughput maximize dryer capacity and minimize per-unit cost
- PID control ensures consistency by keeping dryer chamber heat within 1° of target temperature at the thermocouple
- Heavy-duty thermal insulation prevents heat from migrating into the workplace
- Radicure D is the most energy-efficient dryer in its class

#### **HEAT CHAMBER**

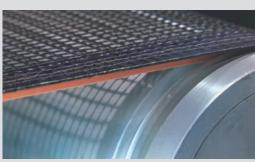
- · Infrared radiant panel array and forced hot air
- Single-point radiant panel height adjustment

#### PRODUCTIVITY

 State-of-the-art energy-enhancing features give this dryer the highest production capacity in its class

#### **WARRANTY, SERVICE & SUPPORT**

- 24-hour hotline is staffed 365 days a year
- Access to M&R's Training Center
- Parts & supplies are available online at store.mrprint.com
- Two-year limited warranty



PATRIOT BELT<sup>™</sup> CONVEYOR SYSTEM

### **OPTIONS**

#### **CONVEYOR SYSTEM**

- Conveyor extension sections are available in 30 cm (12") increments
- High-speed conveyor system for specialized graphics and industrial applications

#### HEAT CHAMBER

- · Cooling fan mounted over outfeed
- Fourth radiant panel on the 36/6 model increases productivity

## **SPECIFICATIONS**

	Radicure D 36/6-3	Radicure D 36/6-4	Radicure D 36/10	Radicure D 48/10	Radicure D 60/10
Belt Width	91 cm (36")	91 cm (36")	91 cm (36")	122 cm (48")	152 cm (60")
Electrical Requirements <sup>1</sup>	208/230 V, 1 ph, 63/69 A, 50/60 Hz, 12.1 kW	208/230 V, 1 ph, 81/89 A, 50/60 Hz, 15.8 kW			
	208/230 V, 3 ph, 37/41 A, 50/60 Hz, 12.1 kW	208/230 V, 3 ph, 48/53 A, 50/60 Hz, 15.8 kW	208/230 V, 3 ph, 71/78 A, 50/60 Hz, 23.4 kW	208/230 V, 3 ph, 93/103 A, 50/60 Hz, 32 kW	208/230 V, 3 ph, 112/123 A, 50/60 Hz, 38.8 kW
	400 V, 3 ph, 24 A, 50/60 Hz, 12.1 kW	400 V, 3 ph, 31 A, 50/60 Hz, 15.8 kW	400 V, 3 ph, 42 A, 50/60 Hz, 23.4 kW	400 V, 3 ph, 54 A, 50/60 Hz, 32 kW	400 V, 3 ph, 67 A, 50/60 Hz, 38.8 kW
Exhaust Blower System <sup>2, 3</sup>	12 cm (5"): 14017 l/min (495 cfm) @ 3 mm (1/8")	12 cm (5"): 14017 l/min (495 cfm) @ 3 mm (1/8")	30 cm (12"): 50970 l/min (1500 cfm) @ 6 mm (1/4")	30 cm (12"): 50970 l/min (1500 cfm) @ 6 mm (1/4")	30 cm (12"): 50970 l/min (1500 cfm) @ 6 mm (1/4")
Heat Chamber Length	183 cm (6')	183 cm (6')	305 cm (10')	305 cm (10')	305 cm (10')
Overall Length	305 cm (10')	305 cm (10')	610 cm (20')	610 cm (20')	610 cm (20')
Overall Width	127 cm (50")	127 cm (50")	127 cm (50")	158 cm (62")	188 cm (74")
Radiant Panels	3	4	6	6	6
Shipping Weight	817 kg (1800 lb)	817 kg (1800 lb)	1112 kg (2450 lb)	1293 kg (2850 lb)	1497 kg (3300 lb)
Standard Infeed Length	76 cm (30")	76 cm (30")	152 cm (60")	152 cm (60")	152 cm (60")
Standard Outfeed Length	46 cm (18")	46 cm (18")	152 cm (60")	152 cm (60")	152 cm (60")

<sup>1</sup> If incoming voltage differs from the voltage(s) listed in this brochure, calculate amperage accordingly. Other electrical configurations are available: Contact M&R Sales and Service, Inc. for details.

<sup>2</sup> Measured at the exhaust discharge port

<sup>3</sup> Static pressure



#### M&R Sales and Service, Inc. 440 Medinah Road, Roselle, Illinois 60172-2329 USA USA: 800-736-6431 / 630-858-6101 • Outside USA: +1-847-967-4461 • FAX: 630-858-6134

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