FUSION

Electric Screen Printing Conveyor Dryer





Easy to own and economical to operate, Fusion is the ultimate affordable infrared electric screen printing conveyor dryer. Not only does it have the highest production capacity in its class of conveyor dryers, it's also the most energy efficient. Entry and exit openings are adjustable, and heavy-duty thermal insulation prevents heat from migrating into the workplace, while CoolSkin[™] technology leaves the dryer's skin cool to the touch. Fast cure rates and high product throughput maximize conveyor dryer capacity and minimize per-unit cost.

Fusion screen printing dryers cure with height-adjustable energy-efficient infrared panels, and some models can be equipped with an additional radiant panel for increased dryer production capacity. The control panel operates and displays temperature and conveyor belt speed, and process temperatures and set temperatures are controlled digitally. Temperature consistency is ensured by a Proportional Integral Differential (PID) control which 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 operates and displays

temperature and conveyor belt speed. Process temperatures and set temperatures are controlled digitally. PID control responds to ambient temperature changes by keeping the conveyor dryer chamber heat within 1° of target temperature at the thermocouple. Fusion's reliable, heavy-duty, variable-speed DC motor powers M&R's Teflon-coated fiberglass Patriot Belt™ with the SureTrak™ roller system. The red silicone guide stitched along one edge of the Patriot Belt™ rides in grooves machined into the large anodized aluminum SureTrak™ rollers, keeping the belt where it belongs. It's the most precise dryer belt tracking available (U.S. Patent Pending).

An automatic shutdown sequence keeps the dryer's blower and belt running until the conveyor dryer chamber has cooled. On its side with legs folded, Fusion can fit through a 78 cm (31") doorway. This rugged, affordable screen printing dryer is designed for years of dependable performance. Combined with a manual screen printing press or small automatic screen printing press and a registration system like M&R's Tri-Loc, Fusion makes a perfect production dryer in small screen printing shops or an ideal sampling dryer in midsize screen printing shops.

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FUSION

STANDARD FEATURES

AIR HANDLING

• Adjustable air displacement and evacuation systems

CERTIFICATION

- CE Certified: Built to specifications established by the European Committee for Standardization® (CE)
- UL Listed: Built to specifications established by Underwriters Laboratories[®] (UL)

CONTROL CENTER

- Automatic shutdown sequence keeps the blower and belt running until the conveyor dryer chamber has cooled
- Digital keypad with digital display

CONVEYOR SYSTEM

- Driven by a reliable, heavy-duty, variable-speed DC motor
- The Patriot Belt[™] is made of heat-resistant, Teflon[®]-coated fiberglass
- The red silicone guide stitched along one edge of the Patriot Belt™ rides in grooves machined into the large anodized aluminum SureTrak™ Rollers, providing the most precise belt tracking available (U.S. Patent Pending)

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 screen printing dryer
- On its side with legs folded, Fusion can fit through a 78 cm (31") doorway

ENERGY EFFICIENCY

- CoolSkin[™] technology leaves the conveyor dryer skin cool to the touch
- Fast curing rates and high product throughput maximize conveyor dryer capacity and minimize per-unit cost
- Fusion is the most energy-efficient electric screen printing conveyor dryer in its class
- \bullet Proportional Integral Differential (PID) controller ensures consistency by keeping dryer chamber heat within 1° of target temperature at the thermocouple
- Heavy-duty thermal insulation prevents heat from migrating from the conveyor dryer into the workplace
- Process temperature and set temperature are displayed and controlled digitally

HEAT CHAMBER

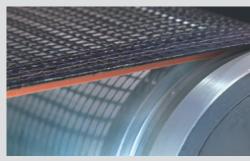
- Infrared radiant panel array
- Radiant panels are height adjustable

PRODUCTIVITY

- Fusion has the highest production capacity of any electric screen printing conveyor dryer in its class
- Sizes to fit most production needs from manual to automatic screen printing

WARRANTY. SERVICE AND 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™ CONVEYOR SYSTEM

OPTIONS

CONVEYOR SYSTEM

Conveyor extension sections are available in 30 cm (12") increments

HEAT CHAMBER

 36-6-3 models are optionally available with pre-wiring for a fourth radiant panel

SPECIFICATIONS

	Fusion 36-6-3	Fusion 36-6-4	Fusion 36-10-6	Fusion 48-10-6	Fusion 60-10-6
Belt Width	91 cm (36")	91 cm (36")	91 cm (36")	122 cm (48")	152 cm (60")
Electrical Requirements ¹	208/230 V, 1 ph, 60/63 A, 50/60 Hz, 12 kW 208/230 V, 3 ph, 34/37 A, 50/60 Hz, 12 kW 380/415 V, 3 ph, 22 A, 50/60 Hz, 12 kW	208/230 V, 1 ph, 76/83 A, 50/60 Hz, 16 kW 208/230 V, 3 ph, 44/48 A, 50/60 Hz, 16 kW 380/415 V, 3 ph, 27 A, 50/60 Hz, 16 kW	208/230 V, 1 ph, 109/120 A, 50/60 Hz, 24 kW 208/230 V, 3 ph, 64/71 A, 50/60 Hz, 24 kW 380/415 V, 3 ph, 38 A, 50/60 Hz, 24 kW	208/230 V, 3 ph, 87/95 A, 50/60 Hz, 32 kW 380/415 V, 3 ph, 51 A, 50/60 Hz, 32 kW	208/230 V, 3 ph, 109/119 A, 50/60 Hz, 39 kW 380/415 V, 3 ph, 65 A, 50/60 Hz, 39 kW
Exhaust Blower Size	10 cm (4")	10 cm (4")	10 cm (4")	10 cm (4")	10 cm (4")
Exhaust System Capacity @ 3 mm (1/8") Static Pressure ²	4531 I/min (160 cfm)	4531 l/min (160 cfm)	7079 I/min (250 cfm)	7079 I/min (250 cfm)	7079 I/min (250 cfm)
Heat Chamber Length	183 cm (72")	183 cm (72")	305 cm (120")	305 cm (120")	305 cm (120")
Overall Length	320 cm (126")	320 cm (126")	488 cm (192")	488 cm (192")	488 cm (192")
Overall Width	114 cm (44.75")	114 cm (44.75")	114 cm (44.75")	158 cm (62")	188 cm (74")
Radiant Panels ³	3	4	6	6	6
Shipping Weight	408 kg (900 lb)	454 kg (1000 lb)	635 kg (1400 lb)	726 kg (1600 lb)	816 kg (1800 lb)
Standard Infeed Length	76 cm (30")	76 cm (30")	107 cm (42")	107 cm (42")	107 cm (42")
Standard Outfeed Length	61 cm (24")	61 cm (24")	76 cm (30")	76 cm (30")	76 cm (30")

¹ 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

³36-6-3 models are optionally available with pre-wiring for a fourth radiant panel



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² Measured at the exhaust discharge port