

## Gas Textile Dryer



### FEATURES

- Boomerang's two curing modes make it the ideal dryer for both direct-to-garment printers and traditional screen-printing presses
- Two-conveyor dual-pass mode gives digital textile prints 610 cm (20') of curing and returns them to the front of the dryer
- Single-pass mode delivers garments to the end of the dryer when curing traditional screen-printing inks

M&R's new Boomerang Gas Textile Dryer features a two-belt conveyor that doubles garment dwell time in the heat chamber and returns the garment to the load end of the dryer. While Boomerang was designed with the digital garment printing market in mind, Boomerang's versatile outfeed system provides for traditional single-pass operation when curing garments printed with plastisol or other screen-printing inks. The dryer's 'boomerang' return mode ensures maximum efficiency and productive workflow when curing garments printed on a digital press. Boomerang also features M&R's high-efficiency gas-dryer technology, 91 cm (36") belt width, 305 cm (10') heat chamber length, and a new control-panel that uses icons instead of text to control dryer operation.

Not only does Boomerang have the highest production capacity in its class, it's also the most energy efficient. Heavy-duty thermal insulation prevents heat from migrating into the workplace, while CoolSkin™ technology leaves the dryer skin cool to the touch. Fast cure rates and high product throughput maximize dryer capacity and minimize

per-unit cost. The high-performance burner—factory configured for either liquid propane (LP) or Natural Gas (NG) operation—has ample capacity for even the most demanding requirements. Separate blowers control circulation and exhaust, and a high-volume forced air system quickly brings the chamber to the desired temperature, speeding the start of production.

Process temperatures and set temperatures are controlled digitally. Temperature consistency is ensured by a fuzzy-logic controller, which responds to ambient temperature changes by keeping chamber heat within +/-1° of target temperature at the thermocouple. When readings fall outside those settings, a temperature monitor issues an audible alarm. Entry and exit openings are adjustable, and crowned rollers ensure positive belt tracking. An automatic shutdown sequence keeps the blower and belt running until the chamber has cooled. Boomerang, with its versatile conveyor system, is a great choice for almost any shop.

# BOOMERANG™

## STANDARD FEATURES

### Air Handling

- Enhanced airflow accelerates drying/curing
- High-volume circulation blower reduces energy costs
- Stainless steel filter slides out for easy cleaning
- Two separate dedicated blowers (circulation and exhaust)

### Certification

- CE & UL compliant: Sub panel built to specifications established by the European Committee for Standardization® (CE) and Underwriters Laboratories® (UL)
- CSA Certified and built to meet or exceed AGA & CGA standards

### Control Center

- Automatic shutdown sequence keeps the blower and belt running until the chamber has cooled
- Temperature monitor issues visible and audible alarms when readings fall outside user-specified parameters

### Conveyor System

- Conveyor belts are made of heat-resistant, Teflon®-coated fiberglass
- Crowned rollers for positive belt tracking
- Digital belt speed readout makes it easy to duplicate speed settings
- Driven by a reliable, heavy-duty, variable-speed DC motor
- Two-belt conveyor system doubles cure time in the heat chamber while maintaining high production speeds
- Unique configurable outfeed system provides for traditional single-pass operation when curing garments printed with plastisol or other screen-printing inks

### Design & Construction

- Adjustable entry/exit openings
- Air-cooled cabinet ensures long life for electrical components
- Bearings are designed for high speeds and high temperatures
- Circuit breakers allow easy reset

### Energy Efficiency

- Boomerang is the most energy-efficient dryer in its class
- CoolSkin™ technology leaves the dryer skin cool to the touch
- Fast curing rates and high product throughput maximize dryer capacity and minimize per-unit cost
- Fuzzy-Logic controller ensures consistency by keeping heat within 1° of target temperature at the thermocouple
- Heavy-duty thermal insulation prevents heat from migrating into the workplace
- Pressurized vector air knives provide consistent and uniform temperatures throughout the drying chamber
- Process temperature and set temperature are displayed and controlled digitally

### Heat Chamber

- Burner is available for liquid propane (LP) or natural gas (NG)
- Direct-fired burner is maximum-rated at 125 000 Btu
- Double-wall construction
- Galvanized steel interior
- Modular gas train simplifies maintenance

### Productivity

- Boomerang has the highest production capacity in its class

### Warranty, Service and Support

- 24-hour hotline is staffed 365 days a year
- Access to M&R's Training Center
- One-year limited warranty

## OPTIONS

### Electrical Specifications

- 208/230 V, 1 phase

### Warranty, Service and Support

- Additional one-year limited warranty

## SPECIFICATIONS

	Boomerang
Belt Width	91 cm (36")
Burner Input Maximum <sup>4</sup>	125 000 Btu
Electrical Requirements <sup>1</sup>	110V, 1 ph, 14 A, 60 Hz, 1 kW
Exhaust Blower System <sup>2,3</sup>	10.2 cm (4"): 9910 l/min (350 cfm) @ 6 mm (1/4")
Gas Input Size	1.9 cm (.75")
Heat Chamber Length	305 cm (10')
Heat Chamber Width	137 cm (54")
LP/Natural Gas Input Pressure	.93 mm Hg (5" w.c.)
Overall Length	483 cm (190")
Shipping Weight <sup>5</sup>	1021 kg (2250 lb)
Standard Infeed/Outfeed Length	104/46 cm (41"/18")
Standard Infeed/Outfeed Length (Return Mode)	104/119 cm (41"/47")

<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 for details

<sup>2</sup> Measured at the Exhaust Discharge Port

<sup>3</sup> Static pressure

<sup>4</sup> Normal usage varies, but is significantly lower than the stated maximum

<sup>5</sup> Weight applies to models with a 244 cm (96") heat/expansion chamber



Two-belt conveyor system doubles cure time and returns garments to the load end of the dryer.



Outfeed conveyor configured for traditional single-pass operation.



**The M&R Companies**  
M&R • NUARC • AMSCOMATIC

**M&R Sales and Service, Inc. 1N372 Main Street, Glen Ellyn, Illinois 60137-3576 USA**

**USA: 800-736-6431 / 630-858-6101 / Fax: 630-858-6134 • Outside USA: +1-847-967-4461 / Fax: +1-847-967-0417**

M&R Printing Equipment, Inc. and its subsidiaries (hereinafter M&R), believe the information in this advertisement to be accurate at publication, though it does not purport to list all manufacturing and specification variations, nor does it assume liability resulting from incompleteness or inaccuracy. M&R reserves the right to change specifications without notice. M&R expressly disclaims any liability for damages, consequential or incidental, from purchase, installation, servicing, and/or use of any product/service based upon information herein. No warranties of merchantability or fitness for a particular purpose are made or are to be implied from the information herein. No information herein may be reproduced or used in any manner without the prior, express written consent of M&R in each case. Copyright 2008 M&R Printing Equipment, Inc. All rights reserved. 100708