

Used MRT 3503 R Rotational Molding Machine

Machine type:	Blow Molding Machine
Ref:	SO139
Model:	MRT 3503 R
Condition:	Ready For Operation

Technical details

Type:	Rotary	No. of cavities:	3
Elevator:	Not stated	Preforms tipper:	Not stated
Unscrambler:	Not stated	Compressor:	Not stated
Chiller:	N/A	Preform neck type:	Not stated
Air Recovery System:	Not stated	Safety features:	Yes
Manuals:	No	Width:	13026 mm
Length:	14960 mm	Height:	5480 mm
Power:	42 kW	Voltage:	400 V
Frequency:	50 Hz		

Description

Used MRT 3503 R Rotational Molding Machine

Technical Specifications & Performance Data

The MRT 3503 R is a heavy-duty industrial forming system engineered for high-temperature plastic processing and container manufacturing. Its robust structure and precise motion control make it suitable for demanding production environments in industrial packaging and beverage production support, including integration upstream of filling and labeling equipment within a used bottling line or second hand production setup. The machine combines large-format capacity with controlled rotation on multiple axes to deliver consistent, repeatable forming quality.

- **Model:** MRT 3503 R
- **Spherical diameter:** 3500 mm
- **Machine length:** 14960 mm
- **Machine width:** 13026 mm
- **Machine height:** 5480 mm

- **Carriages:** 3
- **Straight arm:** 1
- **Maximum load (straight arm):** 2000 kg
- **Secondary axis diameter (straight arm):** 3250 mm
- **Offset arm:** Available
- **Maximum load (offset arm):** 1550 kg
- **Secondary axis diameter (offset arm):** 2900 mm
- **Primary axis revolutions:** 0–8 rpm
- **Secondary axis revolutions:** 0–8 rpm
- **Burner brand/model:** WEISHAUPT WM-G10/2 A exec. ZM-LN
- **Digital burner power (max):** 630 kW
- **Burner calibration power:** 550 kW
- **Maximum operating temperature:** 300°C
- **Alarm temperature:** 340°C
- **Fuel type:** Natural gas methane
- **Average fuel consumption (continuous cycle):** 46 m³/h
- **Installed electrical power:** 42 kW
- **Voltage/Frequency:** 400 V / 50 Hz
- **Average electricity consumption (continuous cycle):** 30–35 kW/h
- **Compressed air:** 2 lines, 6 bar max; 32000 NI/h
- **Water pressure:** 2 bar
- **Water consumption (max):** 4–6 l/min
- **Structure finish:** RAL 5002 / RAL 3020; Protections RAL 1023
- **Arm surface finish:** High-temperature silver

Advanced Automation & Control Systems

The MRT 3503 R features precise rotational control with independently adjustable primary and secondary axes from 0 to 8 rpm for accurate thermal forming profiles. A digital WEISHAUPT burner package enables stable process temperatures up to 300°C, with an alarm setpoint at 340°C for enhanced protection. Electrical integration is standardized at 400 V, 50 Hz with 42 kW installed power for auxiliary systems. Operator safety is supported by guarded enclosures and compliance certification, while color-coded protections aid visual management. The controlled heating, rotation, and timing provide consistent part quality and predictable cycle times in industrial packaging applications.

Production Line Integration Capabilities

This machine can operate as a standalone forming cell or be integrated into a broader production line with downstream trimming, quality checks, and conveyance toward beverage production or industrial packaging workflows. The generous envelope (3500 mm spherical diameter) and multiple carriages support high throughput configurations and flexible tooling strategies. Integration with conveyors and handling equipment is straightforward thanks to clear utility interfaces and stable thermal control.

Machine Condition & Maintenance History

The unit is presented in working configuration with compliance documentation and safety protections in place, suitable for deployment in second hand or used bottling line environments where upstream container forming is required. The combination of digital burner control and defined alarm thresholds supports predictable maintenance intervals and reliable operation.

Operational Performance & Versatility

With adjustable multi-axis rotation, the MRT 3503 R accommodates diverse mold designs and wall-thickness requirements for plastic containers and industrial components. The high-capacity burner ensures rapid and uniform heating, while controlled cooling aided by defined water utilities supports dimensional stability and surface finish. This versatility makes the system valuable for beverage production support, industrial packaging, and general manufacturing where robust forming capability is required.

Installation Requirements & Site Preparation

Plan for a footprint accommodating 14960 mm length, 13026 mm width, and 5480 mm height with adequate access for loading/unloading and maintenance. Utilities include 400 V / 50 Hz electrical supply (42 kW installed), natural gas methane (approx. 46 m³/h continuous average), compressed air at up to 6 bar with 32000 NI/h flow, and process/utility water at 2 bar with 4–6 l/min consumption. Ventilation and exhaust management should be sized for high-temperature operation and compliant with local regulations.

Safety Standards & Compliance Certification

The machine is equipped with protective guards and color-coded safety elements and is supplied with a Declaration of Conformity. Over-temperature protection is integrated through a 340°C alarm setting. The robust construction, controlled utilities, and standardized electrical configuration support safe operation in food and beverage packaging environments.