The Ultimate Compact, Clean Desiccant Wheel Drying Solution

Conair's MicroWheel™ dryer is the perfect solution for processes that don't need the capacity of a large dryer and hopper, but still need the efficiency and reliability of Conair's desiccant wheel drying technology.

As the smallest and most compact dryer of its type on the market today, Conair now offers this perfect option for applications requiring a small and efficient dryer/hopper combination. Designed with the medical industry in mind, this dryer features stainless construction, clean operation, and a compact footprint.

Model MW1-0.5

New Wheel Drying Technology in a Micro Package

Previously, small drying jobs would require a dryer and hopper that were oversized for the processing machine, using excess energy and wasting material or hopper space. Some small drying solutions were previously offered only with twin-tower drying or compressed air. Conair's continued success with reliable desiccant wheel drying led to this new, better solution. In comparison with twin-tower drying, the MicroWheel™ dryer can provide 40% energy savings.

The MicroWheel dryer features a four-stage circuit for lower and adjustable dewpoint. Each dryer can be configured with a hopper sized to best fit your application. The MW1 models are available with 0.2 - 1.0 ft^3 {6 - 30 l} hoppers. The MW2 models are available with 1.0 - 1.75 ft^3 {30 - 60 l} hoppers.

- **Application flexibility, less dust, energy-efficient**
  Designed for flexibility, the MicroWheel™ can be used with a large variety of materials, with a delivery air temperature range of 131 - 356°F {55 - 180° C}. The delivery air blower automatically adjusts airflow based on application throughput, which saves energy and makes drying more efficient. In addition to being more energy-efficient than compressed air and twin-tower dryers, the MicroWheel does not create the dust that twin-tower desiccant beads produce. This makes the MicroWheel perfect for medical and applications that require clean operation.
- **Easy setup with built-in material database**
  Changing from one mold or production setup to another is quick and easy. The MicroWheel has a built-in material database. Simply select the material type from the list, set your desired rate, and the dryer performs all the necessary calculations for optimum dryer settings. In addition to the up to 30 pre-set materials, user material settings can be saved as well.
- **Built-in intelligence to protect your material**
  All MicroWheel dryers now come programmed with Smart Mode, which protects your material and drying process. When activated, Smart Mode automatically adjusts the process air flow to protect resin from over drying, and to increase drying efficiency. This is accomplished by maintaining a constant delta temperature for the return air temperature. It's like cruise control for your dryer.
- **Easy to maintain**
  The MW Series requires no cooling water or compressed air. Gaining access to the interior of the dryer is quick. Filters are easily maintained and the reliable gear drive of the desiccant rotor is maintenance free.

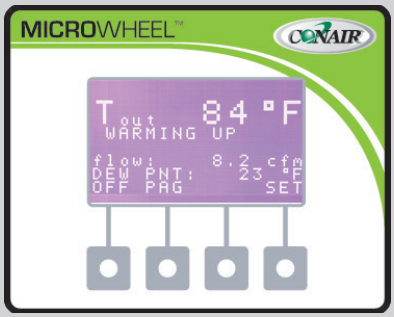
Which Package is Right for You?

Standard Packages	Base	Plus
Control Features		
Built-in material database	•	•
Smart Mode	•	•
Red LED alarm light	•	•
Remote control kit	•	•
Dewpoint sensor kit		•
Available Options		
Loader adapter	•	•
Network connection kit	•	•
Weekly timer kit	•	•
Filter check kit	•	•
Drain port/throat adapter	•	•

MedLine® configuration also available

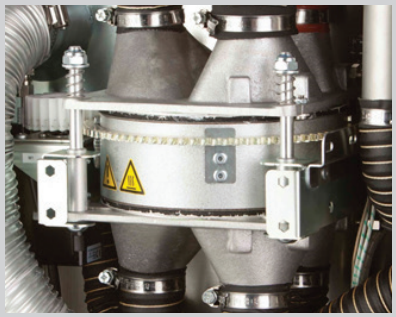
Feature Descriptions

Advanced Drying Control



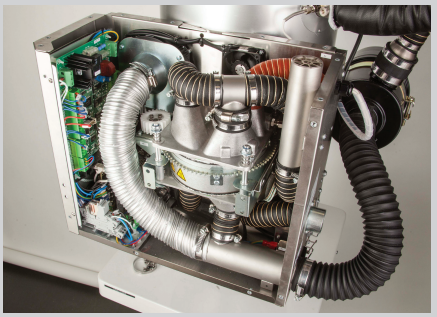
- **Built-in material database for easy operation:**
  - Select the material from list
  - Set the required rate
  - Dryer performs all calculations necessary
- User settings can be easily saved
- **Smart Mode:**
  - Adjusts the process air flow
  - Protects resin from overdrying
  - Increases drying efficiency
  - Maintains a constant delta temperature
- **Easily view:**
  - Drying temperature
  - Dewpoint
  - Airflow
  - Operation status
- Red LED alarm light
- Remote control kit
- **Dewpoint sensor kit (available only with the Plus Package)**
  A dewpoint sensor that provides the operator with the actual dewpoint of the process air.

Dessicant Wheel



- **Proven desiccant wheel operation**
  The cleanest, most efficient drying medium used today. Continuous wheel rotation provides uniform, spike-free drying that is easily monitored
- **Gear driven**
  No belt, no chain.
- Full process, regeneration, and cooling stages
- Dust-free, bead-free honeycomb desiccant media
- **Minimal air flow required**
  Air flow is automatically adjusted to match throughput requirements.
- Highly energy efficient
- Quiet

Inside the Cabinet



- Single-phase electrical connection
- No water or compressed air required
- Compact hopper-mounted package
- Clean, efficient operation
- Easy access for maintenance
- Designed for precision molders and medical production

Available Options

Drain port/throat adapter

- **Loader adapter**
  An adaptor for Conair TLM or TLR Tube Loaders.
- **Network connection kit**
  RS485 Modbus serial is available for communications.
- **Weekly timer kit**
  Set a timer for auto start/stop of dryer.
- **Filter check kit**
  Keep an eye on your process air filter.
- **Drain port/throat adapter**
  A stainless steel mounting base is available with drain port and purge port.

Throughputs

The following chart shows the throughput range for various material types that are pre-programmed into the dryer control.

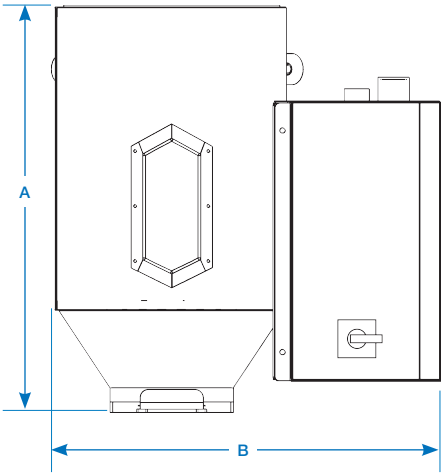
Material	Bulk density	Residence time	Temperature	Dewpoint	MW1		MW2	
Recipe code	lb/ft³ {Kg/dm³}	Hours	°F {°C}	°F {°C}	lb/hr {kg/hr} minimum	lb/hr {kg/hr} maximum	lb/hr {kg/hr} minimum	lb/hr {kg/hr} maximum
AS Mold	37.5 {0.60}	3	176 {80}	-40 {-40}	2.8 {1.3}	12.5 {5.6}	11.0 {5}	21.9 {9.9}
ABS ext	37.5 {0.60}	3.5	185 {85}	-40 {-40}	2.4 {1.1}	10.7 {4.9}	8.8 {4}	18.8 {8.5}
ABS / PC	40.6 {0.65}	3	212 {100}	-40 {-40}	2.6 {1.2}	13.5 {6.1}	11.0 {5}	23.7 {10.8}
ASA	31.2 {0.50}	3	194 {90}	-40 {-40}	2.4 {1.1}	10.4 {4.7}	11.0 {5}	18.2 {8.3}
CA	31.2 {0.50}	2.5	158 {70}	-40 {-40}	2.2 {1.0}	12.5 {5.6}	8.8 {4}	21.8 {9.9}
CAB	31.2 {0.50}	2.5	158 {70}	-40 {-40}	2.0 {0.9}	12.5 {5.6}	8.8 {4}	21.8 {9.9}
CP	37.5 {0.60}	4	167 {75}	-40 {-40}	2.0 {0.9}	9.4 {4.3}	8.8 {4}	16.4 {7.4}
EVA	37.5 {0.60}	3	176 {80}	-40 {-40}	1.8 {0.8}	12.5 {5.6}	6.6 {3}	21.9 {9.9}
EPDM	32.5 {0.52}	4	176 {80}	-40 {-40}	1.8 {0.8}	8.1 {3.7}	6.6 {3}	14.2 {6.4}
LCP	37.5 {0.60}	4	302 {150}	-40 {-40}	2.6 {1.2}	9.4 {4.3}	11.0 {5}	16.4 {7.4}
PA 6	40.6 {0.65}	5	167 {75}	-40 {-40}	2.2 {1.0}	8.1 {3.7}	8.8 {4}	14.2 {6.4}
PA 66	40.6 {0.65}	5	176 {80}	-40 {-40}	2.2 {1.0}	8.1 {3.7}	8.8 {4}	14.2 {6.4}
PA 66 + 35FV	53.1 {0.85}	5	176 {80}	-40 {-40}	2.6 {1.2}	10.6 {4.8}	11.0 {5}	18.6 {8.4}
PA 12	40.6 {0.65}	3	167 {75}	-40 {-40}	2.2 {1.0}	13.5 {6.1}	8.8 {4}	23.7 {10.8}
PA 11	40.6 {0.65}	5	167 {75}	-40 {-40}	2.2 {1.0}	8.1 {3.7}	8.8 {4}	14.2 {6.4}
PC	43.7 {0.70}	3	248 {120}	-40 {-40}	2.8 {1.3}	14.6 {6.6}	11.0 {5}	25.5 {11.6}
PC for CD	43.7 {0.70}	4	248 {120}	-40 {-40}	1.8 {0.8}	10.9 {4.9}	6.6 {3}	19.1 {8.7}
PC + PBT	43.7 {0.70}	3.5	230 {110}	-40 {-40}	2.2 {1.0}	12.5 {5.6}	8.8 {4}	21.9 {9.9}
PE	37.5 {0.60}	3	194 {90}	-40 {-40}	2.8 {1.3}	12.5 {5.6}	11.0 {5}	21.9 {9.9}
PE (40% n.f)	37.5 {0.60}	5	185 {85}	-40 {-40}	2.2 {1.0}	7.5 {3.4}	8.8 {4}	13.1 {5.9}
PEEK	37.5 {0.60}	4	311 {155}	-40 {-40}	2.6 {1.2}	9.4 {4.3}	11.0 {5}	16.4 {7.4}
PEI	37.5 {0.60}	4.5	311 {155}	-40 {-40}	2.6 {1.2}	8.3 {3.8}	11.0 {5}	14.6 {6.6}
PEN	53.1 {0.85}	5	338 {170}	-40 {-40}	2.0 {0.9}	10.6 {4.8}	6.6 {3}	18.6 {8.4}
PES	43.7 {0.70}	4	311 {155}	-40 {-40}	2.6 {1.2}	10.9 {4.9}	11.0 {5}	19.1 {8.7}
PES	43.7 {0.70}	4	356 {180}	-40 {-40}	2.2 {1.0}	10.9 {4.9}	8.8 {4}	19.1 {8.7}
PET	53.1 {0.85}	4	266 {130}	-40 {-40}	2.4 {1.1}	13.3 {6.0}	8.8 {4}	23.2 {10.5}
PET ext	53.1 {0.85}	6	338 {170}	-40 {-40}	1.8 {0.8}	8.9 {4.0}	6.6 {3}	15.5 {7.0}
PETG	37.5 {0.60}	4.5	149 {65}	-40 {-40}	2.0 {0.9}	8.3 {3.8}	8.8 {4}	14.6 {6.6}
PBT	43.7 {0.70}	3.5	257 {125}	-40 {-40}	2.6 {1.2}	12.5 {5.6}	11.0 {5}	21.9 {9.9}
PI	37.5 {0.60}	2.5	248 {120}	-40 {-40}	2.6 {1.2}	15.0 {6.8}	11.0 {5}	26.3 {11.9}
PMMA	40.6 {0.65}	4	176 {80}	-40 {-40}	2.4 {1.1}	10.2 {4.6}	8.8 {4}	17.8 {8.1}
POM	37.5 {0.60}	3	212 {100}	-40 {-40}	2.8 {1.3}	12.5 {5.6}	11.0 {5}	21.9 {9.9}
PP	31.2 {0.50}	2.5	194 {90}	-40 {-40}	2.8 {1.3}	12.5 {5.6}	11.0 {5}	21.9 {9.9}
PP ext	31.2 {0.50}	2	212 {100}	-40 {-40}	3.1 {1.4}	15.6 {7.1}	13.2 {6}	27.3 {12.4}
PP GF20	39.3 {0.63}	3	194 {90}	-40 {-40}	2.6 {1.2}	13.1 {5.9}	11.0 {5}	22.9 {10.4}
PP GF30	42.5 {0.68}	3	194 {90}	-40 {-40}	2.6 {1.2}	14.2 {6.4}	11.0 {5}	24.8 {11.2}
PP (40% t.)	37.5 {0.60}	2.5	194 {90}	-40 {-40}	2.2 {1.0}	15.0 {6.8}	8.8 {4}	26.3 {11.9}
PPO	31.2 {0.50}	2.5	221 {105}	-40 {-40}	2.8 {1.3}	12.5 {5.6}	11.0 {5}	21.8 {9.9}
PPS	37.5 {0.60}	3.5	284 {140}	-40 {-40}	2.8 {1.3}	10.7 {4.9}	11.0 {5}	18.8 {8.5}
PS	34.3 {0.55}	2	176 {80}	-40 {-40}	2.8 {1.3}	17.2 {7.8}	11.0 {5}	30.0 {13.6}
PSU	40.6 {0.65}	3.5	275 {135}	-40 {-40}	2.6 {1.2}	11.6 {5.3}	11.0 {5}	20.3 {9.2}
PSU GF20	52.4 {0.84}	3	302 {150}	-40 {-40}	1.8 {0.8}	17.5 {7.9}	6.6 {3}	30.6 {13.9}
PUR	43.7 {0.70}	3	185 {85}	-40 {-40}	2.4 {1.1}	14.6 {6.6}	8.8 {4}	25.5 {11.6}
PVC	49.9 {0.80}	1.5	158 {70}	-40 {-40}	4.0 {1.8}	33.3 {15.1}	15.4 {7}	58.2 {26.4}
SAN	31.2 {0.50}	2.5	176 {80}	-40 {-40}	2.8 {1.3}	12.5 {5.6}	11.0 {5}	21.8 {9.9}
SB	37.5 {0.60}	2	176 {80}	-40 {-40}	2.8 {1.3}	18.8 {8.5}	11.0 {5}	32.8 {14.9}
TPE	40.6 {0.65}	3	230 {110}	-40 {-40}	2.0 {0.9}	13.5 {6.1}	8.8 {4}	23.7 {10.8}
TPU	40.6 {0.65}	3	194 {90}	-40 {-40}	2.4 {1.1}	13.5 {6.1}	8.8 {4}	23.7 {10.8}

Throughput Notes

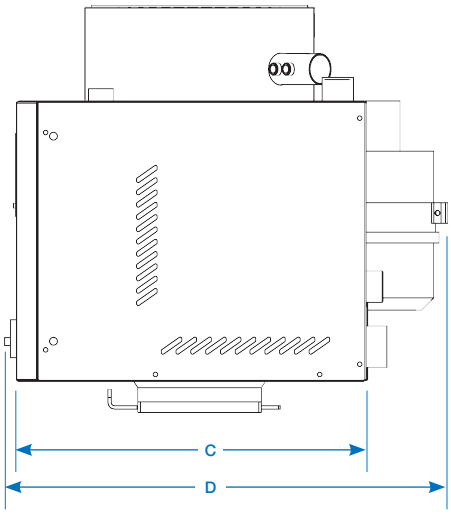
Information contained in this throughput table is for reference purposes only. Throughputs will vary based on application. Always consult with your Conair Sales Representative for proper sizing for your application.

*Specifications can be found on the following page.

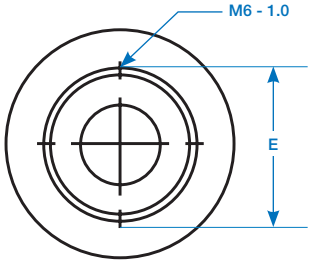
Specifications



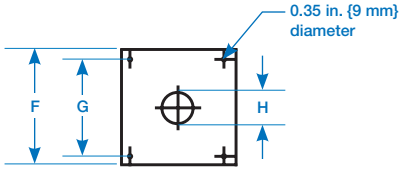
Front view



Side view



Hopper top flange



Hopper bottom flange

Models	MW1-0.2	MW1-0.5	MW1-1.0	MW2-1.0	MW2-1.75
Performance characteristics (with full hopper)					
Drying temperature* ˚F {˚C}	131 - 356 {55 - 180}			131 - 320 {55 - 160}	
Dewpoint† ˚F {˚C}	-40 {-40}				
Maximum airflow‡ ft³/min {m³/hr}	8.2 {14.0}			14.7 {25.0}	
Dimensions inches {mm}					
A - Overall height	19.5 {495}	24.6 {626}	27.7 {704}		38.5 {978}
B - Overall width	18.3 {465}	20.6 {524}	25.1 {637}	28.8 {732}	
C - Depth of dryer	17.7 {450}			25.8 {655}	
D - Overall depth (including filter)	20.7 {526}	21.6 {549}	23.9 {607}	26.8 {681}	
Hopper capacity ft³ {liter}	0.21 {6.0}	0.53 {15.0}	1.06 {30.0}		1.77 {50.0}
Air hose diameter	1.5 {38}				
E - Hopper top mounting pattern	5.5 {141}	7.1 {180}	11.0 {280}		
F - Hopper bottom flange width	5.9 {150}		7.9 {200}		
G - Hopper bottom flange mounting pattern	4.9 {125}		6.5 {165}		
H - Hopper bottom flange outlet diameter	2 {50}		2.4 {60}		
Approximate weight lbs {kg}					
Standard installed (hopper empty)	77 {35}	82 {37}	106 {48}	133 {60}	144 {65}
Voltage - Full load amps**					
220V/1 phase/50hz or 60hz	N/A			9.5	
110V/1 phase/50hz or 60hz	8.6			N/A	

Specification Notes

* Drying temperature setpoint is set by the user, depending on the material type and the application.

† Energy usage and calculations are based on a dewpoint of -40˚F {-40˚C}.

‡ Airflow range is calculated by the control, based on application.

** FLA data for reference purposes only. Does not include any options or accessories on equipment. For full FLA detail for power circuit design of specific machines and systems, refer to the electrical diagrams of the equipment order and the nameplate applied to the machine.

Specifications may change without notice. Consult a Conair representative for the most current information.