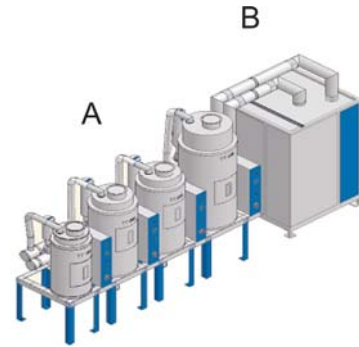


Typical application of a dry air drying system.

- A Drying Hopper
- B Dry Air Dryer

Component B is described below.



**Brief Description**

**Application**

For the drying of thermoplastic granules and regrind, independent of climate or ambient air conditions, before processing to remove all remaining moisture from the granules both inside and out.

- Colortronic drying systems are designed for continuous 24 hour operation
- Colortronic drying systems meet CE requirements

**Rugged, modular construction**

Dry-Flex dehumidified air dryers are modular and extremely flexible systems that can be individually adapted to meet all requirements. The dry air capacity can be adapted from 150 to 300 cfm (250 to 500 m<sup>3</sup>/h). The dryers can be easily upgraded and their air capacity can be increased as production requirements increase.

Colortronic dry air dryers operate on the principle of absorption. Under this principle, the air is not heated, rather the moisture is absorbed and removed from it inside the drying hopper. Through this technology plastic granules can be dried to extremely low residual moisture levels (i.e. 0.002% with PET). Colortronic dry air dryers have 2 drying cells which continuously maintain a dew point level of down to -76°F (-60°C). Because our air flow is constant, we maintain zero temperature change during the process.



Dry-Flex M with standard control and all available options.



Dry-Flex M with touchscreen control

**Technical Information**  
**Dry-Flex M Basic Version**

Centralized controls. 1/16 DIN temperature control of each drying hopper. Control for each drying hopper is mounted in the dryer control panel.

- Centralized process temperature control
- Capable of connecting up to 12 hoppers
- Siemens PLC control of the dryer conditioning cycle
- Maintenance free pneumatic bed shifting valves
- Hi-temperature safety of all heaters

**Dry-Flex M Touch Control**

PLC touchscreen control is located in the dryer panel. There are no controls at the drying hoppers. Touchscreen provides control of up to 12 hoppers. Control I/O is purchased in 4-hopper increments.

**Dry-Flex M Touch Control with Fuzzy Logic**

PLC touchscreen control with variable air flow capability. Same PLC touch control as described above but with the addition of a variable speed control for the process blower and outputs for control of variable air dampers at each drying hopper. Additional components are required at each drying hopper (quote separately).

**Performance**

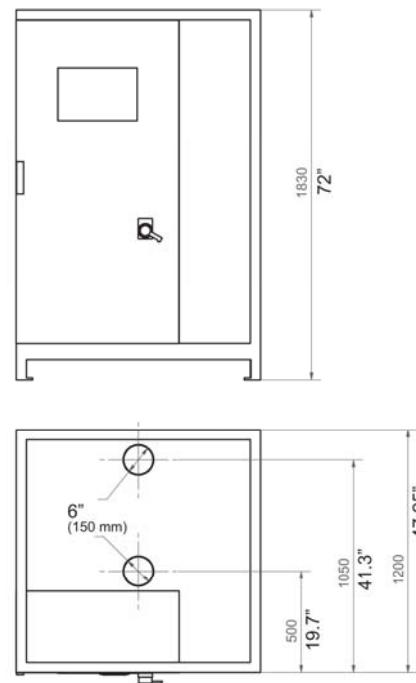
- Dehumidifying air to process
  - Dry-Flex M 250: 150 cfm (250 m<sup>3</sup>/h)
  - Dry-Flex M 400: 250 cfm (400 m<sup>3</sup>/h)
  - Dry-Flex M 500: 300 cfm (500 m<sup>3</sup>/h)
- Operating voltage: 460/3/60 (other voltages available)
- Average dewpoint: -76°F (-60°C)

**Optional Equipment**

- PLC touchscreen control of drying system (includes 7 day timer)
- Dewpoint indication on PLC touchscreen control
- Variable speed process blower with variable air flow control
- Temperature setback feature for material conditioning
- Communication interface
- Control extension modules for additional heater load
- Dewpoint indication on basic models
- Seven day timer on basic models
- Return air cooler
- Pre-air filter
- Condensation collection chamber

	Drying Temp		Dwell time	Drying Cap. DryFlex M 250		Drying Cap. DryFlex M 400		Drying Cap. DryFlexM 500	
	°F	°C		kg/h	kg/h	lbs/h	lbs/h	kg/h	lbs/h
ABS	176	80	3	175	280	617	386	350	772
ASA	212	100	3	167	267	289	368	334	736
CA	140	60	2-3	100	160	353	220	200	441
CP	167	75	2-3	100	160	353	220	200	441
EVA	176	80	2-3	96	154	340	212	192	423
Ionmere	194	90	3.5	100	160	353	220	200	441
PA11*	167	75	4-6	108	174	384	238	216	476
PA12*	167	75	4-6	108	174	384	238	216	476
PA6*	176	80	4-6	112	180	397	246	224	494
PA6.6*	176	80	4-6	120	194	428	264	240	529
PA6.6 GF35*	176	80	4-6	158	254	560	348	316	697
PBT	266	130	3-4	150	240	529	331	300	661
PC	248	120	2-4	188	300	661	414	376	829
PE filled	185	85	3	117	187	412	258	234	516
PE <sup>1</sup>	194	90	2	234	374	824	516	468	1032
PEEK	302	150	4	125	200	441	276	250	551
PEI	302	150	4	184	294	648	406	368	811
PES	302	150	4	117	187	412	258	234	516
PETP	266	130	3-4	142	226	498	313	284	626
PETP	300-392	150-200	6	117	187	412	258	234	516
PETG	149	65	4	125	200	441	276	250	551
PMMA	176	80	4	150	240	529	331	300	661
POM	212	100	3	150	240	529	331	300	661
PP <sup>1</sup>	194	90	2	250	400	881	551	500	1102
PPO	212	100	2.5	158	254	560	648	316	697
PPS	284	140	3	158	254	560	348	316	697
PS <sup>1</sup>	176	80	2	292	467	1060	644	584	1287
PSU	302	150	3	175	280	617	386	350	772
PUR	176	80	3	167	267	589	368	334	736
PVC	158	70	1-2	217	347	765	478	434	957
SAN	176	80	2-3	175	280	617	386	350	772
SB	176	80	2	167	267	589	368	334	736
TPE	230	110	3	125	200	441	276	250	551
TPU	194	90	3	133	214	472	293	266	586

<sup>1</sup> Material is not preheated to full pre-warming temp  
\* Initial moisture < 1%



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