

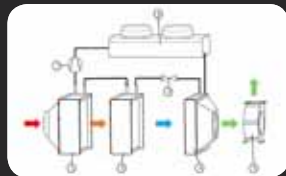
Dry Mold System DMS

Injection and Blow Molding without mold condensation

When the surface temperature of an object sinks below the dew point of the ambient air, condensation builds on this object. This problem especially occurs on chilled molds of plastic processing machines. As a result the optimal water temperature used for the cooling process cannot be realized. To avoid condensation the cooling water temperature has to be risen. This leads to extended cooling time and reduction of productivity.

The answer to this problem is to create a dry climate around the mold. The **Dry Mold System (DMS)** fills the enclosed mold area with dry process air. Result: The DMS allows the usage of cold water with constant and optimal process temperature without the trouble of condensation.

Operating principle: Process air is running through the DMS in a closed loop circuit. When starting the unit "warm and moist" air in the mould area flows to the dehumidification unit DMS. In the DMS, the air is dehumidified with the help of a special refrigeration unit without the use of any chilled water. The processed air is then supplied to the mould area again, closing the loop.



DMS Dry Mold System

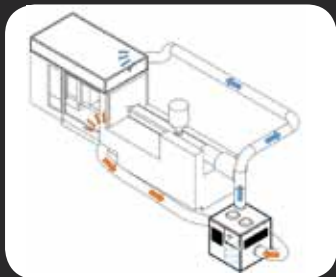
Blue Air Systems guarantees condensation free production with a mold cooling temperature as low as 6 °C throughout the year, in every weather, in every climate. This means higher productivity and constant product quality. The scope of supply is the dry mold system (standard units from 500 to 2.500 Nm³/h process air flow) and upon request a tailor made enclosure for the mold area of the production machine. Blue Air Systems uses sliding hoods or easy removable panels which provide simple handling in the production process (fast mold changes).

Advantages:

- Condensation free production for optimal mold cooling temperature
- Dehumidification without the need of chilled water - NO PRECOOLER needed
- State of the art, PWM refrigeration technology for automatic regulated power consumption
- Process air running in closed loop circuit
- Same production conditions throughout the year
- Higher machine efficiency through shorter cooling time
- Suitable for single production machines
- Low maintenance expenses
- Lowest energy consumption down to 0,0007 kW/m³
- Quick return on investment

Technical data:

DMS type	DMS 15	DMS 25	
Nominal process air flow	1.500	2.500	Nm ³ /h
Electr. installed power max.	5,0	9,0	kW
Electr. power consumption min.	1,6	3,4	kW



Dry Mold System
prevents mold condensation

Process air up to
Ø Energy consumption

2500 m³/h
0,0014 kW/m³

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