



The MDS makes the difference!

The MDS technology is composed of thousands of fibers that remove humidity from the air stream. The result is a dew-point constant in all conditions, regardless of the quality of compressed air for 24 hours a day, 365 days year.

The traditional compressed air dehumidifiers cannot be called truly "dehumidifiers" because they do not remove water from the air





- Always Produces -50° Dew Point Process Air The result is properly dried material...YEAR ROUND!
- Uses Far Less Compressed Air Than Conventional Compressed Air Dryers or Add-On Membrane Models The result is reduced energy costs.
- Desiccant Free Operation
 The result is higher part quality because there are
 no dew point spikes or deviations and no desiccant
 dust to contaminate resin.
- New, Easy-To-Use Control Larger numerals and easier to change settings
- Absolutely Minimal Maintenance Changing 2 coalescing filter elements once per year is the only scheduled maintenance.

Plus:

- Desiccant-free drying for all thermoplastics
- Constant -50° or lower dew point process air in less than 4 minutes
- Works with any source of compressed air... refrigerated or pre-dried air is not required
- Energy Saver standard by antistress system
- Standard process temperature 180°C
- Stainless steel hopper standard through 50 liters
- Slide gate drain-port and slide-gate discharge on all hoppers
- Microprocessor temperature controller
- Machine mount or stand mount models
- Insulated hopper on all models
- Over-temperature indicator
- Low air pressure indicator
- 2 Year warranty

MDS THE CLEAN TECHNOLOGY

As works the MDS technology.....

The principle is simple - the design is **PATENTED**.

- Introduce compressed air
- The water vapor is separated from compressed air
- A flow of dehumidified air removes the water vapor
- Drying air with a dew point of -50 ° C





Performance

The MDS Dryer:

- Operates at full capacity on normal compressed air.
- Always produces -50° dew point (or less) process air.

The result:

Properly dried material... YEAR ROUND!

Compressed Air "Dryer" Without MDS system:

- Require cool, pre-dried incoming air at 100 psi.
- NEVER produce -50° dew point process air.

The result:

Variation in resin dryness and product characteristics.



Energy Usage

The MDS Dryer:

- Reduces compressed air consumption with patented design.
- Requires only 80 psi for full capacity operation.

The result:

Reduced energy costs.

Compressed Air "Dryer" Without MDS system:

• Use nearly 2 times the compressed air compared to the MDS dryer.

Add-On Membrane Models:

• Use nearly 3 times the compressed air compared to the MDS dryer.

The result:

Much higher energy costs.



Compressed Air "Dryers"

Conventional single-pass design wastes compressed air and increases energy costs.



MDS Technology Dryer Uses 1/2 – 1/3 the compressed air.

The conventional compressed air dryers

DESICCANT DRYERS

High Maintenance

- Moving valves wear out.
- Desiccant needs to be replaced.
- 4-hour startup time.
- Dew point spikes and deviations.



Desiccant Dryer

COMPRESSED AIR "DRYERS" WITHOUT MDS TECHNOLOGY

Are not dryers - do not remove moisture from air

- NEVER produce -50° process air.
- Only reduces the dew point of incoming air by about 40-50° F.
- Consume about 3-times more compressed air than a MDS dryer.
- Have to be taken off-line during warm months.
- A compressed air dryer without a membrane is not a full-fledged dryer.



Compressed Air "Dryer" Without MDS technology

COMPRESSED AIR "DRYERS" WITH ADD-ON MEMBRANE

Increases energy usage by about 250%

- Require the processor to install an external membrane.
- Usually not filtration protected and can be easily contaminated.



Compressed Air "Dryer" With Add-On Membrane

Resin Contamination

The MDS Dryer:

DESICCANT-FREE OPERATION

Non-desiccant operation means:

- Uniform dew point year round.
- No valves.
- No desiccant to contaminate resin.
- No desiccant replacement.

The result:

Uniform dew point without resin contamination... meaning higher part quality.

Desiccant Bed Dryers:

- Dew point spikes and variation.
- Desiccant begins to disintegrate as soon as it is put into service.
- Reduced effectiveness of the drying process.
- Desiccant dust can contaminate the resin.

The result:

Lack of part uniformity.

Maintenance/Downtime

The MDS Dryer:

- Change 2 filter elements once per year!
- No moving parts.
- No desiccant to change.
- No complications... turn the power on, set the temperatures and you have -50 dew point air in 4 minutes.

The result:

Minimal cost for parts and near-zero maintenance.

Desiccant Dryers:

- A multitude of moving parts to be replaced.
- Desiccant which requires constant vigilance and replacement.

Non-Membrane Compressed Air Dryers:

• Downtime in the summer because of improperly dried resin.

The result:

Higher costs and lost production time.

Desiccant Free Operation





Disintegrating Desiccant

Reduces efficiency, can contaminate resin and must be replaced regularly.

To Hopper



MDS DRYER MDS dryers cost cents/day



Desiccant dryers and conventional compressed air dryers have high maintenance and downtime costs.







The opinion from a satisfied customer:

"In the past, most of our defects were not a proper dehumidification. Since we have gone from the traditional dehumidifiers to the MDS have drastically reduced defects on moulding media. The dehumidifiers MDS are at the highest level with a request for very little maintenance. This reduces costs considerably. We currently have more than 15 MDS in our group machines. 5 of these dehumidifiers are part of a centralized system. A great product and a great service ... this makes us happy and the most important thing our customers are happy who appreciate the quality of the final product."



Via Thomas Edison, 20 35012 Camposampiero (Padova) - Italy Tel.: +39.(0)49.9303128 Fax: +39.(0)49.9316049 info@simatecplastics.com www.simatecplastics.com

