

## The NovaDrier™ can not be duplicated

The patented, exclusive air flow design and proprietary membrane guarantees  $-40^{\circ}$  dew point process air year round and uses 1/3 the compressed air of copycat models.

The NovaDrier, is the most popular small resin dryer on the market, with thousands sold, and proven to dry ALL thermoplastic resins. These dryers have no moving parts so maintenance is minimal. Conventional compressed air dryers can't match the drying performance of the membrane dryer because they never attain a  $-40^{\circ}$  dew point and they use up to 3X as much compressed air as the NovaDrier. Desiccant bed dryers can't match the low-maintenance reliability.

DRY

### New! Dew Point Meter Now Standard!

- **Always Produces  $-40^{\circ}$  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  $-40^{\circ}$  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 on ND-100 through ND-200
- Standard process temperature  $350^{\circ}\text{F}$ . ( $177^{\circ}\text{C}$ )
- Stainless steel hopper standard through 150 lb. (68 kg) capacity
- 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
- Return air pellet screen
- 2-Year warranty



ND-25 NovaDrier™  
Patent No. 6,584,701



ND-150 NovaDrier™



NovaDrier proprietary membrane ensures properly dried resin year round

## THE MEMBRANE MAKES THE DIFFERENCE!

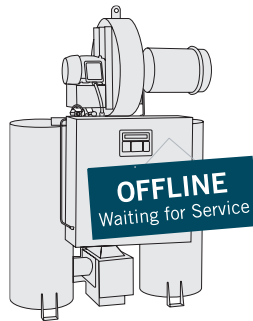
Thousands of membrane filaments actually remove water vapor from the air stream. The dew point is reduced to at least  $-40^{\circ}$  in all kinds of weather 24/7/365... using unrefrigerated compressed air.

**Old technology compressed air “dryers” are not really dryers. They do not remove water vapor from the air.**

### 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 MEMBRANE

**Are not dryers – do not remove moisture from air**

- NEVER produce  $-40^{\circ}$  process air.
- Only reduces the dew point of incoming air by about  $40-50^{\circ}$  F.
- Consume about 3-times more compressed air than a NovaDrier.
- 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 Membrane

### 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.

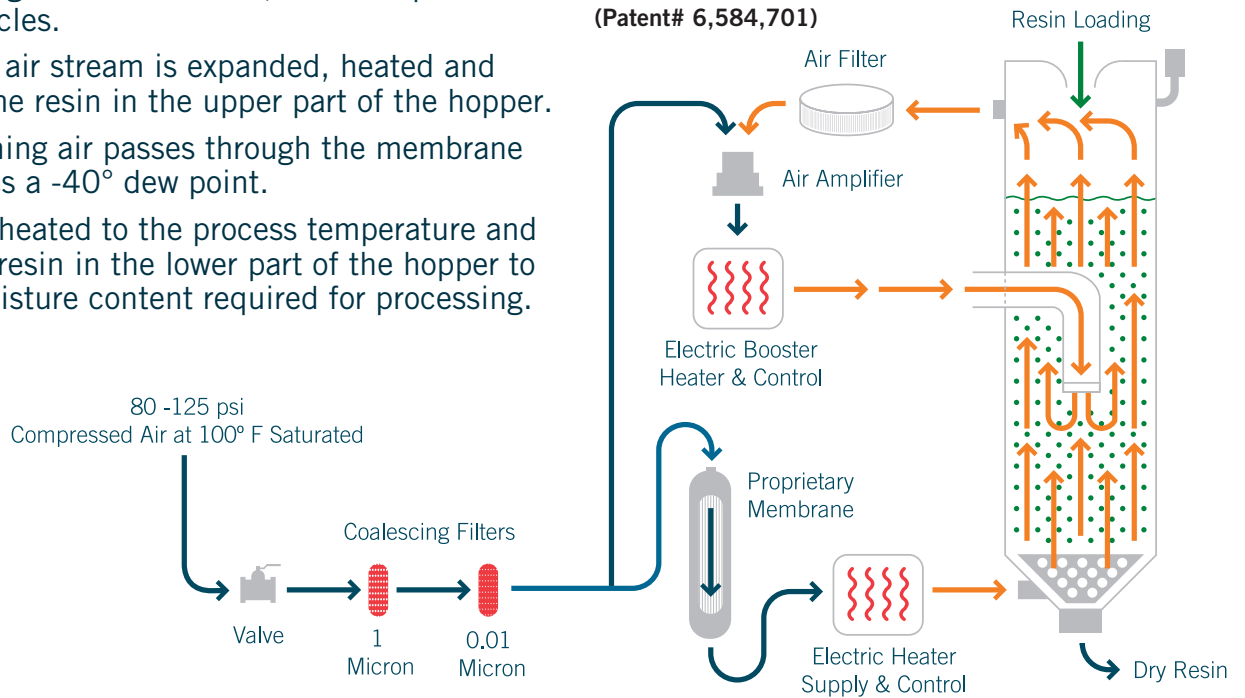


Compressed Air “Dryer” With Add-On Membrane

# The patented NovaDrier design cannot be copied!

- 2 coalescing filters remove oil, water droplets and small particles.
- Part of the air stream is expanded, heated and pre-dries the resin in the upper part of the hopper.
- The remaining air passes through the membrane and reaches a  $-40^{\circ}$  dew point.
- That air is heated to the process temperature and brings the resin in the lower part of the hopper to the low moisture content required for processing.

## Patented NovaDrier Air Flow (Patent# 6,584,701)

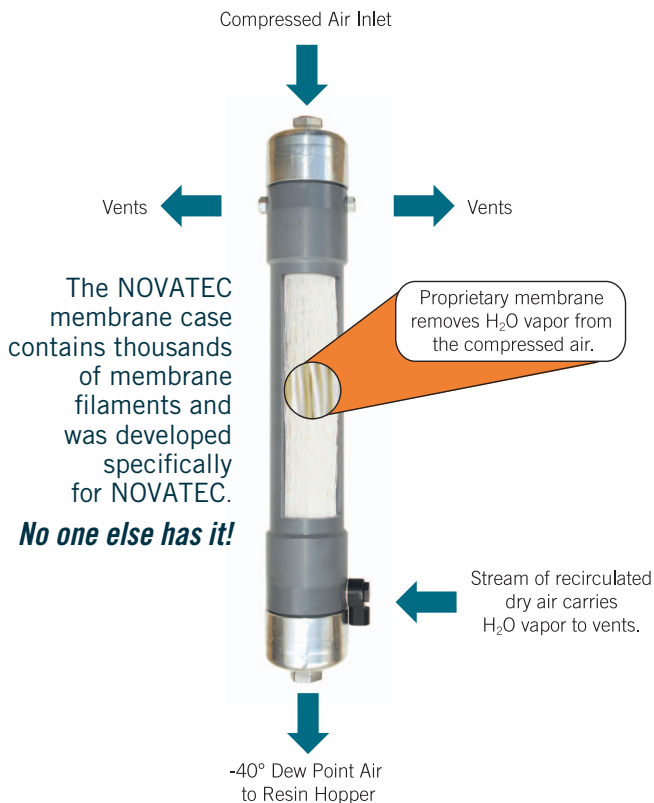


## How A Membrane Works...

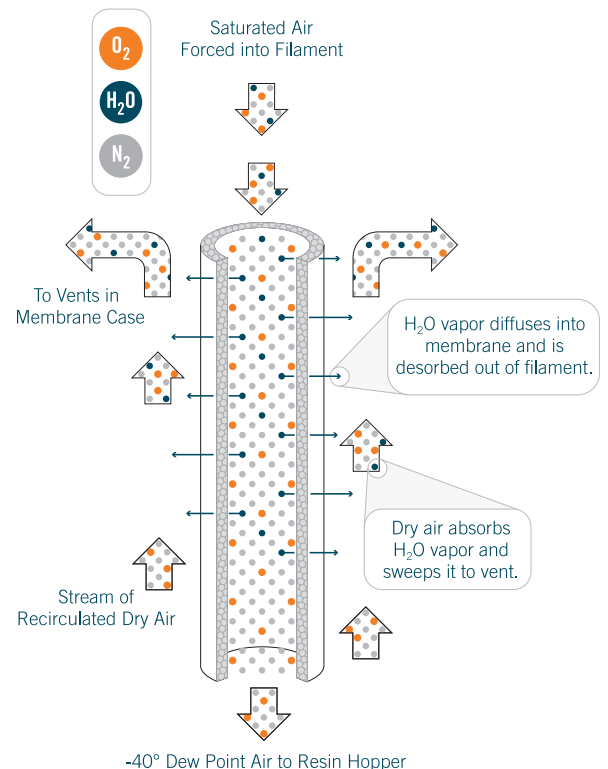
The principle is simple – the design is proprietary.

- Compressed air in.
- Water vapor is separated from the compressed air.
- A stream of dry air drives water vapor away.
- $-40^{\circ}$  dew point process air to drying hopper.

### The Membrane Assembly



### NovaDrier Membrane Filament



DRY

# The MEMBRANE DRYER— Any air, any season, any material

Compare the MEMBRANE DRYER  
with other dryer types...

**Membrane Dryer  
Produces -40°  
Dew Point Air  
Year Round**

## Performance

### The Membrane Dryer:

- Operates at full capacity on normal compressed air.
- Always produces -40° dew point (or less) process air.

**The result:**

Properly dried material... YEAR ROUND!

### Compressed Air “Dryer” Without Membrane:

- Require cool, pre-dried incoming air at 100 psi.
- NEVER produce -40° dew point process air.

**The result:**

Variation in resin dryness and product characteristics.

## Energy Usage

### The Membrane 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 Membrane:

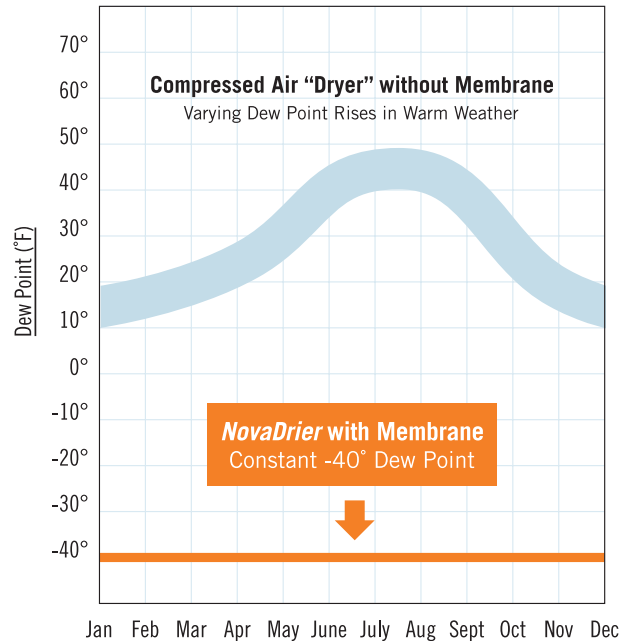
- Use nearly 2 times the compressed air compared to the NovaDrier.

### Add-On Membrane Models:

- Use nearly 3 times the compressed air compared to the NovaDrier.

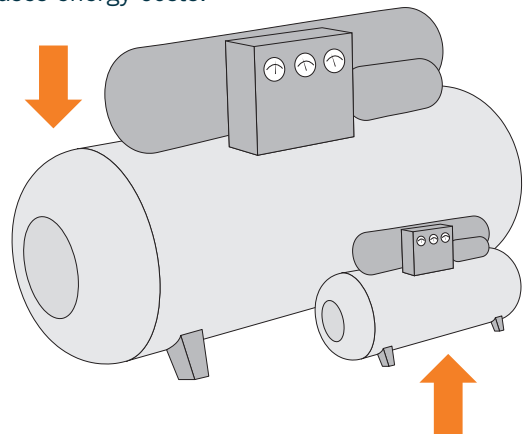
**The result:**

Much higher energy costs.



### Compressed Air “Dryers”

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



**NovaDrier Membrane Resin Dryer**  
Uses 1/2 – 1/3 the compressed air.

## Resin Contamination

### The Membrane 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 Free  
Operation

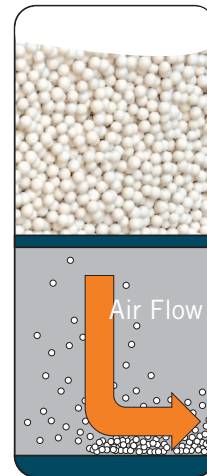


#### Desiccant Bed Dryers:

- 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.



#### Disintegrating Desiccant

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

## Maintenance/Downtime

### The Membrane 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 -40 dew point air in 4 minutes.

#### The result:

Minimal cost for parts and near-zero maintenance.



#### NovaDrier

Membrane dryers cost pennies/day.

#### Desiccant Dryers:

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



#### Dual Bed Dryers

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

#### Non-Membrane Compressed Air Dryers:

- Downtime in the summer because of improperly dried resin.

#### The result:

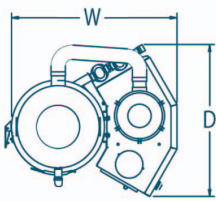
Higher costs and lost production time.

# Specifications

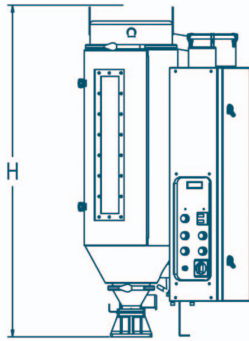
Model	††Throughput Capacity		Compressed Air Flow		Electric		H		W		D		†Shipping Weight		Hopper Volume		Hopper Capacity	
	lb./hr.	kg/hr.	SCFM	NM <sup>3</sup> /hr.	*Demand kw	**Usage kw	in.	cm	in.	cm	in.	cm	lb.	kg	ft. <sup>3</sup>	liters	lb.	kg
<b>ND-7</b>	7	3.2	2.6	4.1	1.8	0.21	37	94	21	53	26	66	235	107	0.5	14	20	9
<b>ND-25</b>	25	11.3	5.7	9.2	1.8	0.46	46	117	23	59	28	71	324	147	1.85	52	60	27
<b>ND-50</b>	50	22.7	11.9	19.1	6.1	1.0	59	150	28	71	31	78	370	168	4.2	120	150	68
<b>ND-75</b>	75	34	17.0	28.1	6.1	1.5	75	190	28	71	31	78	520	236	6.1	173	225	100
<b>ND-100</b>	100	45.5	24.8	39.9	10.6	2.0	71	181	38	95	37	94	670	305	10.3	292	400	182
<b>ND-150</b>	150	68	39.9	64.2	13.3	3.2	77	196	46	116	40	102	790	360	15.7	446	600	272
<b>ND-200</b>	200	91	53	93	18.6	4.1	85	215	46	116	40	102	850	386	21	595	800	363

Standard Voltage: 115/1/50-60 on ND-7 & ND-25 • 460/3/60 on ND-50 through ND-200.

\*Total connected load. \*\*Usage at 180° F. (82° C). † Without stand. †† Throughput based on polycarbonate pellets at 38 lb./ft<sup>3</sup>.



**Bolt hole patterns:**  
4.75" sq. for ND-7 through ND-75, 6" sq. for ND-100 through ND-200



## Accessories:

Separate line item on order and shipped separately - (See price list #106)

- **Hopper extension:** Part# HX9-10 for ND-7, HX12-25 for ND-25, HX16-70 for ND-50, HX24-200 for ND-100
- **Floor stand:** Part# FS-ND-1 for ND-7 through ND-100 Part# FS-ND-2 for ND-150 and FS-ND-3 for ND-200
- **Casters, 5", set of 4:** Part# ashm13
- **Vacuum Take-off Box & Vacuum Purge Valve:**  
Request information

## Open Access Stand

All stands have been redesigned for open access to facilitate unloading of resin.



STAND:  
FS-ND-1



CASTERS:  
(set of 4)  
ashm13

**Options:** Separate line item on order - (See price list #106)

- **7-Day timer:** Part# ae7dtND
- **Short Run Diffuser Tube:** ND-7: Part #: SRD-1  
ND-25 and ND-50: Part #:SRD-2

Model	Standard Voltage	Optional Voltage & P/N	
<b>ND-7</b>	115/1/50-60	220/1/50-60 (No charge)	
<b>ND-25</b>	115/1/50-60	All models specify VOLT-NDXX-20	
<b>ND-25-DC</b>	460/3/60	575/3/60	VOLT-ND25DC-57
		415/3/50	VOLT-ND25DC-40
<b>ND-50</b>	460/3/60	575/1/60	VOLT-ND50-57
		415/3/50	VOLT-ND50-40
<b>ND-50-DC</b>	460/3/60	575/3/60	VOLT-ND50DC-57
		415/3/50	VOLT-ND50DC-40
<b>ND-75</b>	460/3/60	575/3/60	VOLT-ND75-57
		415/3/50	VOLT-ND75-40
<b>ND-75-DC</b>	460/3/60	575/3/60	VOLT-ND75DC-57
		415/3/50	VOLT-ND75DC-40
<b>ND-100</b>	460/3/60	575/1/60	VOLT-ND100-57
		415/3/50	VOLT-ND100-40
<b>ND-100-DC</b>	460/3/60	575/1/60	VOLT-ND100DC-57
		415/3/50	VOLT-ND100DC-40
<b>ND-150</b>	460/3/60	575/1/60	VOLT-ND150-57
		415/3/50	VOLT-ND150-40
<b>ND-150-DC</b>	460/3/60	575/1/60	VOLT-ND150DC-57
		415/3/50	VOLT-ND150DC-40
<b>ND-200</b>	460/3/60	575/1/60	VOLT-ND200-57
		415/3/50	VOLT-ND200-40
<b>ND-200-DC</b>	460/3/60	575/1/60	VOLT-ND200DC-57
		415/3/50	VOLT-ND200DC-40

## Dry/Convey Packages

Available as ND-25-DC, ND-50-DC, ND-75-DC, ND-100-DC.

ND-150-DC & ND-200-DC include:  
VR-5 machine-mount vacuum receiver, regenerative blower, VL-3 Loader, line purge device, 1.5" probe, floor stand w/ 5" casters and LOGO! controls.