



NovaWheel™ Desiccant Wheel Dryers

NovaWheel dryers take a proven drying technology to a new level of excellence... reducing your energy costs

Replace energy-hog dual-bed and carousel dryers* with NW Series Dryers – the energy saving dryer for processors. Failure to reduce production costs, can be a costly error during these times and there are multiple reasons that you should use NovaWheel dryers to reduce one of the few costs within your control – energy costs. Old dual bed and carousel dryers use huge amounts of energy compared to the NovaWheel and those increased costs lose customers, cause layoffs and kill profits.

7" Touch Screen Control PLC Control Standard on All Models

No confusing codes, annoying function buttons or manual look-ups. (4" color touch screen available on 25-200 lb/hr models)

Intelligent Regeneration

Constantly monitors regen inlet and outlet temperatures and controls them to optimize energy and dew point performance.

Variable Frequency Drive

Dryers from -1600 through -5000 employ a variable frequency drive that automatically optimizes the regen blower speed.

Clear Text Messages

No confusing codes that have to be looked up.

Chain Drive for Long Life and Drying Uniformity

Marginal belts used by other manufacturers stretch – The Novatec lifetime chain drive ensures more uniform regeneration of the desiccant and reduced maintenance.

Significant Reduction of Maintenance and Parts Costs

Compared To either carousel or dual bed dryers

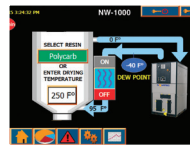
- Fewer moving parts for simpler operation.
- No valves.
- Filter elements easily accessible.

Central Dryer Packages

Available on all models
200 lb/hr and up.

*Carousel rotating desiccant bed dryers and dual bed dryers were popular in the 1990s but they are being phased out due to high energy usage, maintenance and downtime issues.

— 5 —
YEAR
warranty



NWB-300 and -400



NWB-25 through -200



NWB-2500 through -5000



NW-500 through -2000

Wide selection of Wheel Dryers

Standards that Others call Options!

NovaWheel model types:
see individual data sheets @
www.novatec.com/NovaWheel

- NovaWheel small, medium and large
- NovaWheel PowerGuard™ and IntelliPET series

Plus

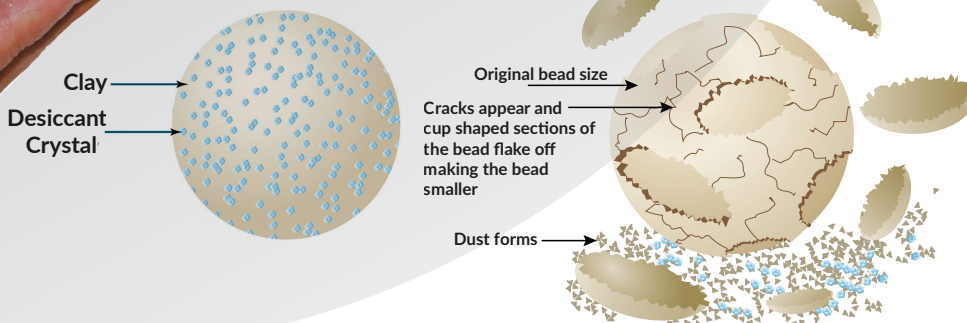
- › Data trending of processes
- › 7-Day timer with Auto START/STOP
- › Process temperatures up to 350°F (177°C) with interlock to heaters
- › Dew point analyzer
- › Filter maintenance alarm
- › Alarm light
- › Disconnect switch
- › Phase detection on portable models\
- › 5 Year warranty all models

Say Goodbye to Desiccant Bead Drying

Using traditional desiccant beads for drying is inefficient and costly.

Ordinary desiccant beads are really only 70% desiccant. The other 30% is a clay binder that holds the bead together. That's why you need so many desiccant beads in a twin tower dryer.

The expansion and contraction of the desiccant beads, due to the heating and cooling process, causes a rapid breakdown of the clay binder. As the bead disintegrates, drying efficiency is sharply reduced, compromising dew point and increasing energy usage.



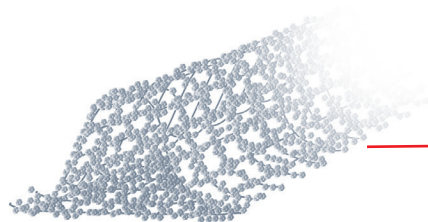
Ultimately the desiccant beads turn to unusable dust, which must be replaced with fresh beads while the dryer is taken offline.

Say Hello to the Energy-Efficient Desiccant Wheel

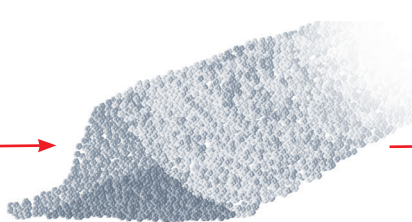
Discover the NovaWheel™ difference...

- Permanently bonded, pure molecular sieve desiccant.
- Big energy savings results from exposing 3 times the pure desiccant per minute available for drying - as compared to a twin tower dryer.

The desiccant wheel is built for efficiency

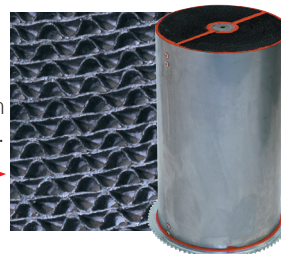


100% Pure crystalline desiccant is embedded in a woven substrate.



The result is 100% pure molecular sieve desiccant that is permanently bonded onto the substrate, delivering a uniform -40° dew point.

Actual desiccant on woven substrate.



This desiccant impregnated substrate is then formed into a tightly wound wheel that contains more pure desiccant than a twin tower of 3 times its size.

How The NovaWheel™ Works

As the NovaWheel rotates, stationary seals divide it into 3 distinct sections... Drying, Regeneration and Cooling.

This continuous process ensures that dry desiccant is always available, therefore:

- › Efficiency increases
- › Power consumption decreases
- › Consistent -40° dew point is guaranteed

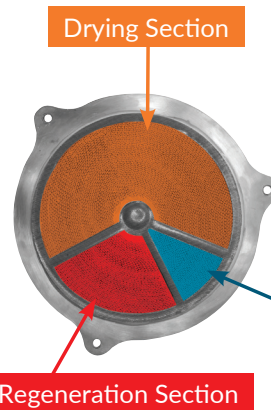
Drying Section - A process blower pulls moist air from the hopper and through a process filter and cooling coil.

Process air is forced through the drying section of the desiccant wheel where the moisture is adsorbed.

The desiccated air is then heated to the required temperature for drying and circulated back through the resin hopper.

Cooling Section - The desiccant is prepared to adsorb moisture when it rotates to the drying section.

Regeneration Section - Ambient, filtered air is heated and forced through the regeneration section removing the moisture that was adsorbed by the desiccant.



Greater Process Stability than Dual Bed Dryers!



Non-slip, lifetime chain drive reduces maintenance and ensures uniform drum rotation for consistent -40° dew point.

Longer Desiccant Life Guaranteed

Desiccant Wheel Life

Guaranteed for 5 Years, – can last up to 15 years!



Desiccant Bead Life

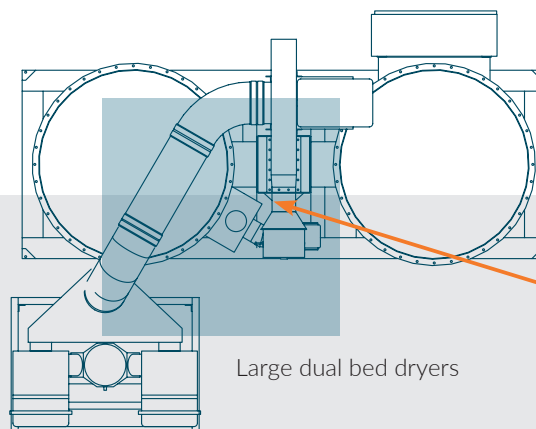
Up To 2 Years



Bead degradation begins immediately, reducing dryer efficiency.

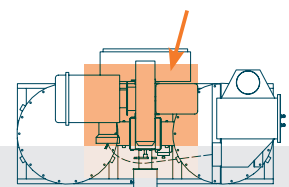
Reduce Dryer Footprint By up to 75%

The footprint of NovaWheel dryers is only 25-35% of comparable dual bed dryers.

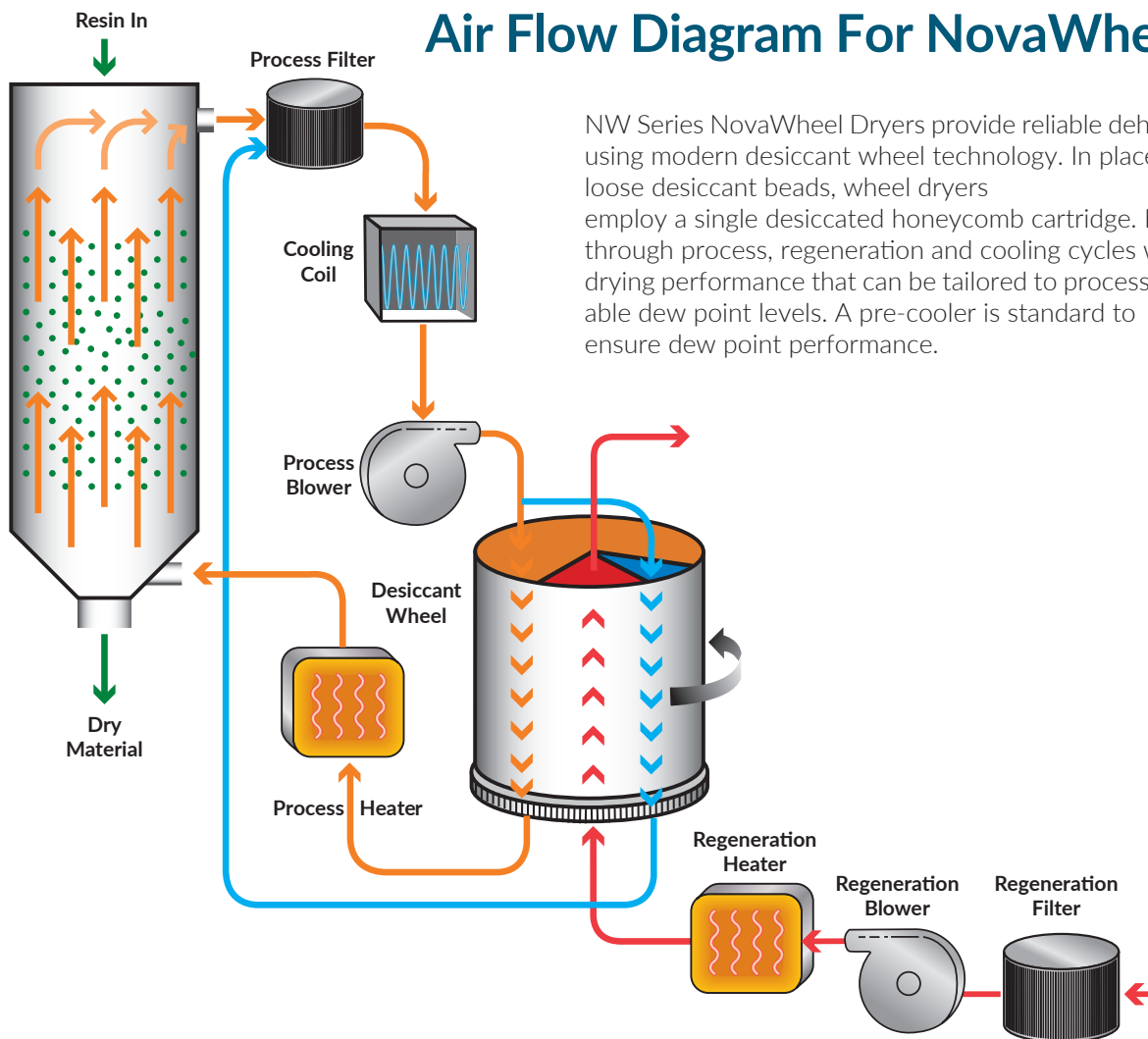


Large dual bed dryers

Medium dual bed dryers



Comparable NovaWheel footprint



Air Flow Diagram For NovaWheel™

NW Series NovaWheel Dryers provide reliable dehumidifying of plastic resins using modern desiccant wheel technology. In place of towers and tanks of loose desiccant beads, wheel dryers employ a single desiccated honeycomb cartridge. It continuously rotates through process, regeneration and cooling cycles with drying performance that can be tailored to process requirements with adjustable dew point levels. A pre-cooler is standard to ensure dew point performance.

NovaTouch™ Touch Panel PLC Standard



7" Color touch screen PLC standard on all NovaWheel and NWB+ models.

(4" color touch screen available on 25-200 lb/hr models)

- › NO confusing codes
- › NO annoying function buttons
- › NO manual look-ups
- › NO extra charge
- › Simplifies setup with easy prompts and controls.
- › Multiple communications capabilities optional.

See touch screen details in separate data sheets for small, medium and large NovaWheel dryers.
www.novatec.com/novawheel