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.

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.

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

Clear Text Messages
No confusing codes that have to be looked up.

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

7" Touch Screen Control PLC
Control Standard on All Models
No confusing codes, annoying function buttons or manual lookups. (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 blower speed.

Clear Text Messages
No confusing codes that have to be looked up.

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 -40º dew point.

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.

**Longer Desiccant Life Guaranteed**

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<tr>
<th>Desiccant Wheel Life</th>
<th>Guaranteed for 5 Years, – can up to 15 years!</th>
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<td>Years</td>
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<tr>
<th>Desiccant Bead Life</th>
<th>Up To 2 Years</th>
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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.
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

- 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