ITPS Series: 500 - 4,000 lb./hr. (225 -1800 kg/hr.)

IntelliPET Single Flow Dryers for PET applications with a high percentage of virgin resin such as preforms. Patented energy savings with Adaptive Process Heating Control and Regeneration Optimization.

This innovative drying system enables processors of PET resin to significantly reduce initial cost, equipment footprint, maintenance, and energy costs compared to other PET drying systems.

★ **IntelliPET Patented System Components Ensure Maximum Efficiency and Minimum Energy Usage**
A modified NovaWheel™, an electric or 90% efficient gas-fired process heater, a cyclone and a color touch screen with Adaptive Process Heating Control and Regeneration Optimization Control ensure maximum efficiency.

★ **Proprietary Technology Saves Up To 30+% On Energy Costs**
IntelliPET Adaptive Control and Regeneration Optimization automatically adjusts air inlet temperatures, blower speed and wheel speed, based on hopper return air temperature, to save energy and ensure consistent drying. Return air temperature is the most reliable indication of material dryness. Continuous feedback from the return air sensor is utilized for automatic adjustment of process settings, providing optimum energy efficiency and uniform drying regardless of initial material temperature, dryness, or throughput rate.

★ **Regeneration Optimization**
Variable Frequency Drives on Process Blower and Wheel Speed reduce regeneration energy by up to 30%

- **Maintenance and Footprint Reduction of Over 50%... PLUS Lower Initial Cost**
  IntelliPET requires fewer system components for reduced maintenance, smaller footprint and lower initial costs compared to other wheel dryer PET systems.
- **Each System Matched to Processing Needs**
  Instead of a “one design fits all needs” approach, IntelliPET Systems are matched to your individual requirements.
- **Central Dryer Packages**
  Available on all models.

10.4” Color Touch Screen Standard on all ITPS PowerGuard Dryers

Plus

- Vaisala dew point sensor on process air outlet.
- Pre-cooler (Return air)
- 2-Year warranty.

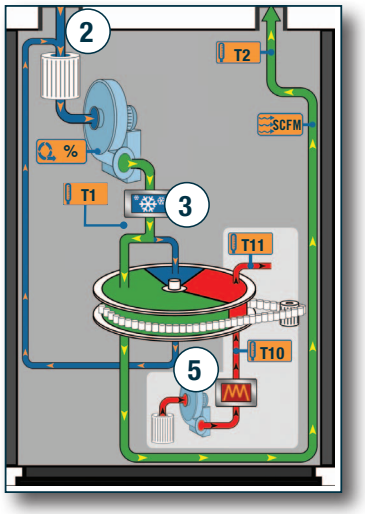
NOVATEC™ Part of the MAGUIRE Family

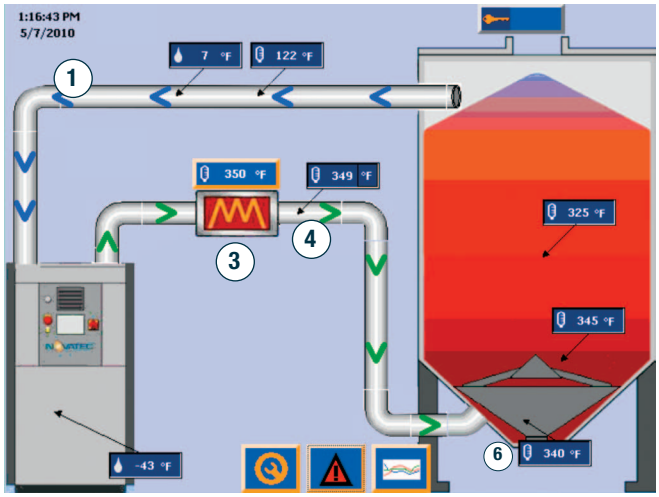
How It Works

IntelliPET Single Flow System with Patented Adaptive Control and Regeneration Optimization provides automatic adjustment of process temperature and blower speed ensures process consistency, and eliminates the need for operator intervention.

Key components of the IntelliPet™ Single Flow system:

- A modified NOVATEC NovaWheel™ desiccant wheel dryer includes PLC control with Adaptive Process Heating Control and Regeneration Optimization.
- A multi-zone single flow drying hopper.
- An electric or 90% efficient gas-fired process heater.
- A cyclone dust collector.





IntelliPET Adaptive Control and Regeneration Optimization automatically adjusts air inlet temperatures, blower speed and wheel speed, based on hopper return air temperature, saving energy, ensuring process stability and consistent drying. ** Hopper temperature sensors are for monitoring/trending purposes only and do not control the drying process.*

The Keys To Efficiency

1 - The IntelliPET Adaptive Control system monitors hopper return air temperature to optimize air temperature in the upper portion of the hopper through heater and blower speed adjustments, to reduce energy consumption. Patent # 6,951,065,B2

2 - Within the dryer, the air is filtered and then enters a blower.

3 - The air is cooled before passing through the desiccant wheel and subsequently re-heated before entering the bottom of the hopper.

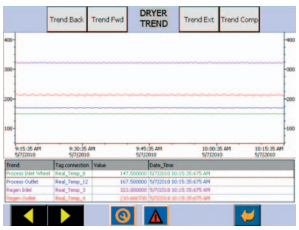
4 - Air flow and inlet air temperature are constantly monitored and controlled through the Adaptive Control and Regeneration Optimization Control using the feedback from the hopper return air temperature.

5 - Regeneration Optimization use a variable frequency drive to control blower and desiccant wheel speed. Patent # 5,688,305

6 - Guaranteed constant temperature of material exiting the hopper.

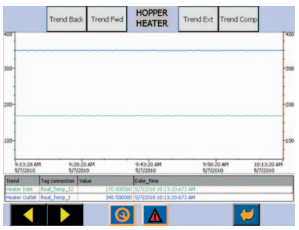
Four Screens Show Real Time Trending On 14 Drying Parameters

The trending information can be downloaded, providing permanent quality assurance records and exported through Ethernet.

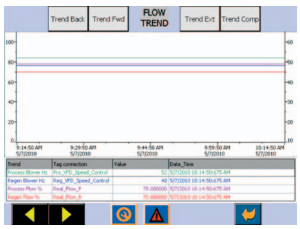


DRYER TREND

REGEN & DEW POINT



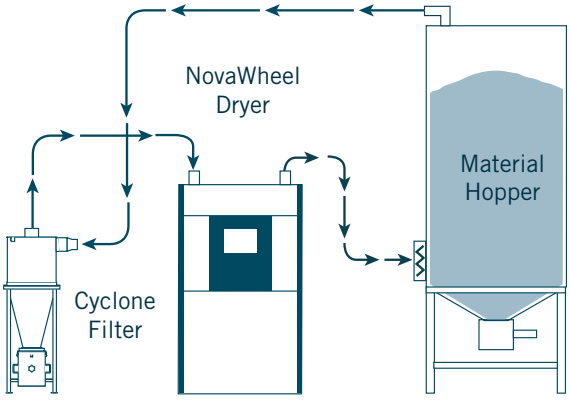
HOPPER HEATERS

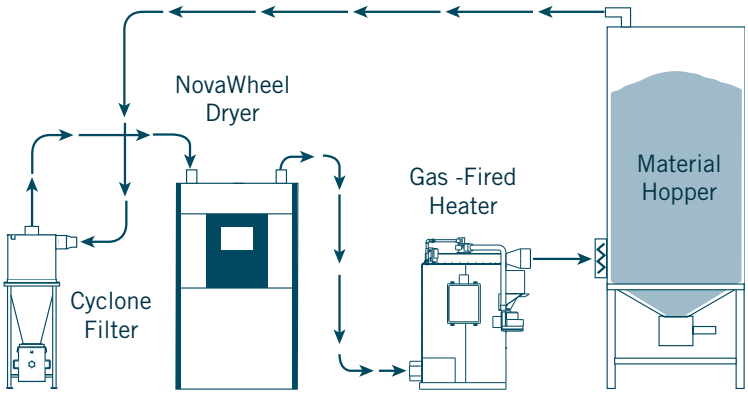


FLOW TREND

Choice of Configurations

Large volume processors of PET profit most from the IntelliPET system.





Choose either electric or our patented, Gas-Fired process heater with 90% thermal efficiency. An optional self cleaning "pulse" type dust collector is available.

All components are sized based on the throughput and bulk density of the material being processed which can vary from 25-52 lb./ft.^{3} (400 to 830 kg/m^3).

Hands-Free, Automatic Operation

- Large 10.4" color touch screen makes initial set-up easy.
- Provides at-a-glance indications of temperature and blower parameters.
- Monitors all dryer functions including bed temperature, percent of process air flow and process/ regeneration temperatures.

** Hopper temperature sensors are for monitoring/trending purposes only and do not control the drying process.*

Ethernet Connection Provides Constant Monitoring

- Ethernet connection allows access to system through any PC, anywhere.
- System alarms can be emailed to any email account on a PC, Blackberry or SmartPhone.

PowerGuard 10.4" Touch Screen Color Control Features	
Color Touch Screen 10.4"	Standard
Control Temperature #1	Standard
Second Set-point	Standard
Over-temperature Alarm and Shutdown	Standard
Real Time Clock	Standard
Seven Day Timer	Standard
Auto Start/Stop	Standard
High/Low Temperature Alarm	Standard
Warning and Error Messages	Standard
Battery Backup	Standard
EEPROM	Standard
Calibration Feature and Set Point Secure	Standard
Set Deviation Limits	Standard
Language Capabilities	Standard
Diagnostics	Standard
Adjust PID Settings	Standard
NEMA 12 Enclosure	Standard
Loader Operation	Standard
Communications Capability	
Ethernet	Standard**
Modbus	Optional*
Modem	Optional*
MPI	Optional*
Profibus	Optional*
DeviceNet	Optional*
ASI	Optional*
*As a PLC based option ** With embedded web page	

Specifications

Dryer Model Number	Throughput		Bulk Density		Cabinet Size						Hopper Required			Cyclone P/N Air-Flow	Air Connection Diameter	
					Width		Depth		Height							
	lb./hr.	kg/hr.	lb./ft³	kg/m³	in.	cm	in.	cm	in.	cm	Part Number	ft³	Liters		in.	cm
ITPS-500	500	225	25	400	46	117	63	160	99	251	NPH-4000	100	2830	CDC-60 400 cfm 1275 m³/hr.	6	15
			35	560							NPH-3000	71	2021			
			45	720							NPH-2500	56	1572			
			52	830							NPH-2000	48	1361			
ITPS-750	750	341	25	400							NPH-6000	150	4245	CDC-80 750 cfm 1275 m³/hr.		
			35	560							NPH-4000	107	3032			
			45	720							NPH-4000	83	2358			
			52	830							NPH-3000	72	2041			
ITPS-850	850	386	25	400							NPH-8000	170	4811		8	20
			35	560							NPH-5000	121	3436			
			45	720							NPH-3000	94	2673			
			52	830							NPH-3000	82	2313			
ITPS-1000	1000	450	25	400							NPH-8000	200	5660			
			35	560							NPH-6000	143	4043			
			45	720							NPH-5000	111	3144			
			52	830							NPH-4000	96	2721			
ITPS-1300	1300	591	25	400	65	165	88	224	115	292	NPH-10000	260	7358	CDC-100 1500 cfm 2550 m³/hr.	8	20
			35	560							NPH-8000	186	5256			
			45	720							NPH-6000	144	4088			
			52	830							NPH-5000	125	3538			
ITPS-1500	1500	682	25	400							NPH-12000	300	8490			
			35	560							NPH-8000	214	6064			
			45	720							NPH-8000	167	4717			
			52	830							NPH-6000	144	4082			
ITPS-2000	2000	909	25	400							NPH-15000	400	11320			
			35	560							NPH-10000	286	8086			
			45	720							NPH-10000	222	6289			
			52	830							NPH-8000	192	5442			
ITPS-2500	2500	1136	25	400	77	196	106	269	115	292	NPH-20000	500	14150	CDC-120 3000 cfm 5100 m³/hr.	12	30
			35	560							NPH-15000	357	10107			
			45	720							NPH-12000	278	7861			
			52	830							NPH-10000	240	6803			
ITPS-3200	3200	1455	25	400							NPH-24000	640	18112			
			35	560							NPH-18000	457	12937			
			45	720							NPH-15000	356	10062			
			52	830							NPH-12000	308	8708			
ITPS-4000	4000	1818	25	400							NPH-30000	800	22640			
			35	560							NPH-24000	571	16171			
			45	720							NPH-18000	444	12578			
			52	830							NPH-15000	385	10885			

Voltage: Standard 460/3/60.

Central Dryer Packages: (No process heater/contactors - P/L #105). All sizes available as Central Dryer models - add -C after standar ITPS model number.

Options: Show as separate line item on order.

Alternate Voltage: 415/3/50 (no charge) 575/3/60 See price list #105.

Accessories: Show as separate line item on order. Shipped separately - see price list #105.

For ITPS & ITPD	-500 to -800	-1100 to -1300	-1500 to -2000	-2500 to -4000
*Process air cooling coil on stand	CC-4S	CC-7S	CC-8S	CC-9S
Cooling coil on stand with plastizer trap	CCP-4S	CCP-7S	CCP-8S	CCP-9S

*Required for process temperatures under 170°

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