# NWB-DC and NWB-DC+ Dry/Convey Series

# NWB-DC+ Series include a 7" color touch screen PLC control with unique standard features that others call options!

This energy saving NovaWheel<sup>™</sup> dryer design includes a 4" or 7" color touch screen PLC that is easier to use than any other dry/convey control. No confusing codes, function buttons or manual lookups. Plus, there are standard dryer features not found on competitive models.

# NWB-DC+ models include these unique features:

#### 7" Hi-Res Color Touch Screen PLC Control

Intuitive icons guide operator through set-up and monitors all drying parameters.

## **OverDry Protection**

Unique feature that eliminates over-drying of nylons and other sensitive resins.

# Intuitive Control With Diagnostics Guide

A trouble shooting guide, complete with photos on the touch screen walk you through operational alarms as well as routine maintenance.

#### Ethernet Ready Plus SD Card

Smart Ethernet connection with data logging and trending.

# Networking Capability

ColorNet<sup>™</sup> networkable color HMI

# **Standard Features - All Models**

# Intelligent Regeneration

Monitors the regeneration process and makes changes, automatically, to minimize the energy used to no more than that required.

#### **Standard Three-Phase Detection:** Detects phase error and provides alarm

Detects phase error and provides alarm.

## Auto-Start/Stop Timer

Set for any combination of hours per day and days per week.

#### **Central Vacuum Blower for Conveying** Minimizes maintenance and energy usage.

#### Hopper and Dryer Uncouple For use as separate units.

# Automatic Monitoring and Alarm of Dryer Filter Condition

Operator is alerted with alarm light when process or regeneration filters need to be cleaned or replaced.

## High Efficiency Stainless Steel Hopper

Fully insulated with full-length sight glass and pellet screen.



NWB-50-DC+ Includes hopper and machine mount receivers





7" Color Touch Screen

# **No-Charge Standards**

- Dew point analyzer with indication and alarm
- Red/green alarm light

# 5-Year Warranty

For lowest cost of ownership.

# NWB-DC-25 through -200 models

Includes a 4" color touch screen PLC control and standard features shown, plus USB memory stick for data logging and trending.



4" Color Touch Screen

## Plus

- Separate process and regeneration blowers
- Cooling coil with plasticizer drain for temperatures above 225°F
- Hopper receiver and machine mount receiver
- Vacuum purge valve with slide-gate discharge
- > 5" Casters for mobility
- > -40° Dew point guaranteed
- Process temperatures up to 350°F (177°C) with interlock to heaters
- > Open Access to components
- > 1.5" Flex hose (50 ft) and clamps
- > 460/3/60 VAC standard
- > 5-Year warranty



# **Raising the Bar** for Portable Dryers





# Built-in Standards...Sold as Options Everywhere Else!

- Upgraded Siemens PLC with 4" or 7" high resolution display
- Displays drying faults and uses pictorial solution screens
- Automatically detects and avoids over-drying (Plus models)
- Smart Ethernet connection with data logging (Plus models)

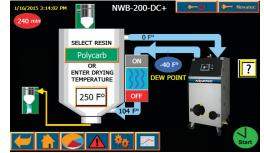


# Siemens Color Touch Screen PLC Control Equals **Convenience and Reliability**

# Another NOVATEC FIRST...

- No more confusing codes
- > No annoying function buttons
- > No manual look-ups

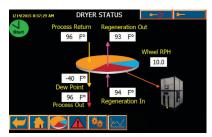
Simply touch any of the intuitive icons to access related screens.



Operation Screen

1/12/2015 3:14:08 PM MAINTENA MATERIAL CONDITION NORMAL	NCE SO		⊷0 INTERVAL	- Setup
CLEAN REGENERATION	2	DAYS	WEEKS	MONTHS
? CLEAN PROCESS FILTER	2	DAYS	WEEKS	MONTHS
PRAIN PLASTICIZER RESERVOIR & CLEAN	2	DAYS	WEEKS	MONTHS
CLEAN PLASTICIZER	2	DAYS	WEEKS	MONTHS
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Maintenance Schedule



Dryer Status Screen





Setup Screens for Hopper and Machine Loading

TROUBLESHOOTING GUIDE								
Potential Issues May be:								
Power to Process Heater		۲						
Temperature Reading/Sensor	•	۲						
Process Air Flow		۲						
A A A M M C A								
Troubleshooting Guide								

10/5/2011 10:26:40 PM Process filter warning. The process filter needs to be cleaned or replaced.

Process and Regeneration Filter Conditions are Automatically Monitored and Displayed.

# Main Features:

- > Intuitive touch screen for ease of operation
- > No confusing alarm codes to look up
- > Seven day timer for auto on/off
- > Filter maintenance alerts with oversized filters
- > Set points with deviation limits
- > Dew point sensor
- > Real-time clock with battery backup

# NovaTouch™ Control at **No Extra Charge!**

Features	NovaTouch Control
Touch Screen Entry	Standard
Control Temperature #1	Standard
Over-temperature Alarm and Shutdown	Standard
Hygro Dew Point Sensor	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
Blower Differential Pressure Switch	Standard
Calibration Feature and Set Point Secure	Standard
Set Deviation Limits	Standard
Language Capabilities	Standard
PLC Diagnostics	Standard
*Adjust PID Settings	Standard

\*By Novatec only



## Specifications:

		Width Depth		Height**		Air		Hopper		Throughput Capacity***					
Model		um		pui	TICIE	,iii	Conne	ection	Capacity***		@460/3/60		@415/3/50	@575/3/60	
Number*	in	n cm	in	cm	in	cm	in	cm	lb	Kg	lb/hr	Kg/hr	Kg/hr	Kg/hr	
NWB-25-DC+		135 3	135		83.0	67.3	171	2	5	55	25	25	11.5	10	11.5
NWB-50-DC+	53			32.8		70.7	179	2	5	110	50	50	22.7	19	22.7
NWB-75-DC+					86.7	220	2	10	165	75	75	34.1	29	34.1	
NWB-100-DC+	(1 5	5 156	457	24	86	79.2	201	4	10	220	100	100	45	38	45
NWB-150-DC+ †	61.5		6 34	00	92.7	235	4	10	330	150	150	68	57	68	
NWB-200-DC+ †	70 (	5 179	37.1	94	93.4	237	6	10	600	272	200	91	74	91	
NWB-300-DC+ †	70.6		1/9	51.7	131	106.4	270	6	10	800	363	300	136	110	136

\* Specify + after model number for 7" color screen. Delete + for 4" color screen through -200.

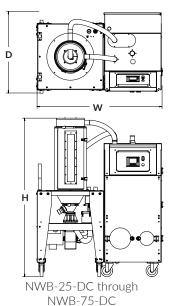
\*\*Add 11" to "H" for VR-5 on NWB-25-DC+ & -50-DC+. \*Add 14" to "H" for VR-12 on NWB-100-DC+ & -150-DC+.

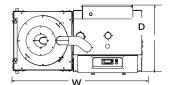
\*\*Add 20" to "H" for VR-12 on NWB-75,-200 & -300-DC+.

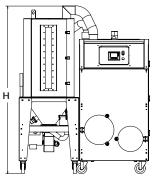
\*\*\*Based on polycarbonate pellets @ 38 lb/ft<sup>3</sup>

Casters or hopper extension are packed separately to avoid extra freight charges due to height.

NOTE: Dimensions and throughput are the same for -DC and -DC+ models.







NWB-100-DC through NWB-200-DC

# **Options:**

**Thermal+ For All Plus Models:** Ensures that new heatsensitive resins are dried properly. See separate data sheet.

**Blowback:** On machine mount receiver and hopper receiver

**8 lb Glass Hopper:** (In lieu of 2 lb when ordered with VR-12-MM only)

Alternate Voltages: (in lieu of 460V/3ph/60Hz) 415/3/50 (no charge) or 460/3/60-CUL, 575/3/60-CUL, 230/3/60

**Water Saver:** Reduces energy usage by ensuring that no more cooling takes place in an external cooling coil than is required (Plus models)

# Accessories:

Stainless Steel Hopper Extensions for -DC and -DC+:

25 lb for -25 70 lb for -50 110 lb for -100 200 lb with or without sight glasses for -200 and -300

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NWB-300-DC

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**External Proportioning Valve with Coupler:** 1.5" or 2.0" O.D.

**External Process Air Cooling Coil on Stand or on Stand with Plasticizer Trap:** (Applies to -300 models only) Drying temperatures less than 170°F (77°C) require an external process air cooling coil. Please contact factory for options.

Accessories Included @ No Charge							
Model	Machine Mount Receiver Capacity	Hopper Receiver Capacity					
-25, -50	5 lb/2.3 Kg	5 lb/2.3 Kg					
-75	5 lb/2.3 Kg	12 lb/5.5 Kg					
-100, -150, -200, -300	12 lb/5.5 Kg	12 lb/5.5 Kg					
Flex Hose, Clamps and Pickup Wand Included							



Thermal+ Packages for NWB Series Dryers Throughput: 25-150lb/hr (11-68 Kg/hr)

# **Therm#I**<sup>™</sup> Option for NWB+ Series

Protection from Over-Drying for Sensitive Resins

# NWB+, NWB-DC+ and NWB-HC+ press-side dryers now available with Thermal+ option

NWB+ series press-side dryers up to 150 lb/hr can now be equipped with Thermal+ from Novatec to ensure that new heat-sensitive resins are dried properly.

Processors are being inundated new resins with which they have no previous experience. If they are not dried to the required specifications the molded products produced are subject to rejection due to stringent quality control requirements or they fail prematurely in the field.

# How Thermal+ Works...

# **Automatically Controlled Valving Changes**

Sensor measurement out of the drying hopper determines whether moisture is being pulled from the resin, or if the resin is already dried to the appropriate moisture level.

# If The Resin Requires More Drying

The sensor in the hopper outlet signals this condition, and dry air is introduced into the loop automatically.

## When The Resin Is Dry

The blower loop will exclude the desiccated -40°F/C air and recirculate heated air.

# **Additional Drying Is Required At Any Point**

Dry air is introduced into the loop automatically and when the desired dryness is achieved, the desiccant wheel is again bypassed automatically.

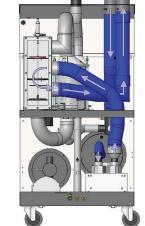
#### All Of These Operations Occur Without Any **Operator Intervention**

Each resin can have a recipe that always ensures proper resin moisture.

## Order option for NWB+ and NWB-HC+

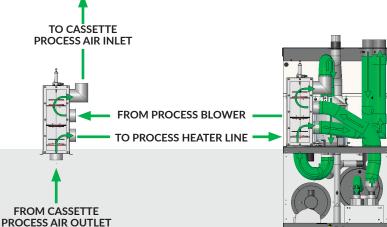
KIT-NWB75-HX-01 for -25, -50 and -75 models KIT-NWB150-HX-01 for -100 and -150 models Order option for NWB-DC+ KIT-NWB75-HX-02 for -25, -50 and -75 models

KIT-NWB150-HX-02 for -100 and -150 models





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