NWB-HC NovaWheel™ Dryers
NWB-HC and NWB-HC+ Portable Dryer/Hopper Series

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

This portable hopper/dryer combination is designed to add a vacuum loader and dry material anywhere in your plant. The energy saving NovaWheel™ dryer design includes a 4 or 7-inch color touch screen PLC that is easier to use than any other dry/convey control.

5 YEAR warranty
LOWEST TOTAL COST OF OWNERSHIP

NWB-50-HC+

Seven-inch Color Touch Screen

NWB-HC+ models include these unique features:

Seven-inch, High-Resolution, Color, Touch Screen, PLC Control
Intuitive icons guide the operator through set-up and monitor all drying parameters.

OverDry Protection
Unique feature that eliminates over-drying of Nylons and other sensitive resins.

Intuitive Control With Diagnostics Guide
A troubleshooting 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™ networkable color HMI

› **Intelligent Regeneration**
Monitors the regeneration process and makes changes, automatically, to minimize the energy used to no more than required.

› **Standard Three-Phase Detection**
Detects phase error and provides an alarm.

› **Auto-Start/Stop Timer**
Set for any combination of hours per day and days per week.

› **Automatic Monitoring and Alarm of Dryer Filter Condition**
Operator is alerted with an 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.

› **Hopper and Dryer Uncouple**
For use as separate units.
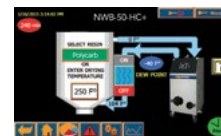
› **No-Charge Standards**
• Dew point analyzer with indication and alarm
• Red/green alarm light

› **5-Year Warranty**
For lowest cost of ownership.

NWB-HC-25 through -200 models

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

Four-inch Color Touch Screen

Plus

› Separate process and regeneration blowers

› Cooling coil with plasticizer drain for temperatures above 225°F (107°C)

› -40° dew point guaranteed

› Open access to all components

› Process temperatures up to 350°F (177°C) with interlock to heaters

› Five-inch casters for mobility

› 460/3/60 VAC standard

› 5-Year warranty on ALL models

NOVATEC™

Raising the Bar
for Mobile Wheel Dryers

5 YEAR warranty
LOWEST TOTAL COST OF OWNERSHIP

Standard stainless steel insulated hopper.

Automatically adjusts air temperature based on monitoring to regulate temperature in hopper.
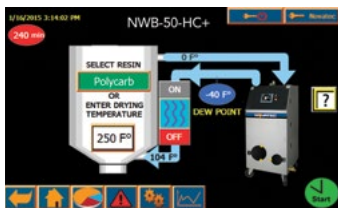
Standard LED alarm light.

Smart upgraded software senses faults and pictorially guides you to a solution.

Check Amperage of Process Heater

Attach amp clamp to wire that runs from contactor (6CON) to process heater.

Smart PLC touch screen makes setup easy

1/14/2015 9:28:21 AM RESIN MENU HOPPER #2 Novatec

Select	Material	Drying Temp f° min		Select	Material	Drying Temp f° min	
	Polycarb	250	240		Acrylic	190	240
	Nylon 6	180	240		Spare	150	240
	Nylon 66	160	240		Spare	150	240
	PET	325	240		Spare	150	240
	ABS	180	240		Spare	150	240

RUN

1. Select resin

1/16/2015 3:14:02 PM NWB-50-HC+ Novatec

240 min
SELECT RESIN Polycarb
OR ENTER DRYING TEMPERATURE
250 F°
ON
OFF
DEW POINT
-40 F°
104 F°
?
Start

2. Start drying

Siemens PLC with 4 or 7-inch high resolution color touch screen.

Dew point included at no extra charge.

Standard data logging.

Ethernet ready (Plus models).

Exclusive overdry protection Ideal for Nylon and other sensitive materials (Plus models).

5-year desiccant wheel warranty.

Minimizes energy consumption by continuously adjusting heater and air temperatures.

Standard phase detector avoids phase issues when relocated.

Automatically alerts you to change filters.

Standard EZ push handles.

NOVATEC

Built-in standards...sold as options everywhere else!

› Upgraded Siemens PLC with 4 or 7-inch high resolution display.

› Displays drying faults and uses pictorial solution screens.

› Automatically detects and avoids overdrying (Plus models).

› Smart Ethernet connection with data logging (Plus models).

NOVATEC

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

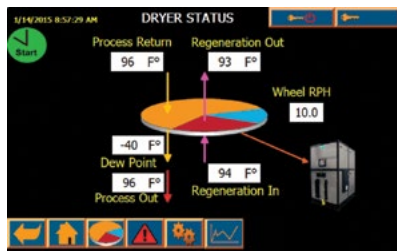Simply touch any of the intuitive icons to access related screens.
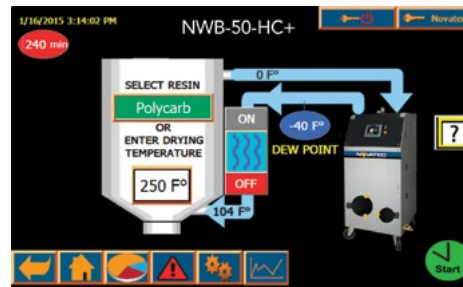
Operation Screen

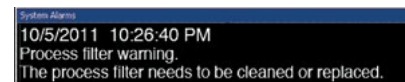**Maintenance Schedule**

Auto-Start/Stop Menu

Troubleshooting Guide

Dryer Status Screen

Setup Screens for Hopper and Machine Loading

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

Features	NovaTouch Control
Touch Screen Entry	Standard
Control Temperature #1	Standard
Second Set-point	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

NOVATEC

SPECIFICATIONS

Model Number*	Width		Depth		Height		Air Connection		Hopper Capacity**		Throughput Capacity**			
											@460/3/60		@415/3/50	@575/3/60
	in	cm	in	cm	in	cm	in	cm	lb	kg	lb/hr	kg/hr	kg/hr	kg/hr
NWB-25-HC+	55.7	142	32.8	83.0	67.3	171	2	5	55	25	25	11.5	10	11.5
NWB-50-HC+	55.7	142	32.8	83.0	70.6	179	2	5	110	50	50	22.7	19	22.7
NWB-100-HC+	61.4	156	33.9	84	79.2	201	4	10	220	100	100	45	38	45
NWB-150-HC+***	61.4	156	33.9	84	92.7	235	4	10	330	150	150	68	57	68
NWB-200-HC+***	70.6	179	37.1	94	93.5	237	6	10	600	272	200	91	74	91
NWB-300-HC+***	70.6	179	51	130	106.2	270	6	10	800	363	300	136	110	136

*Specify + after model number for 7-inch color screen. Delete + for 4-inch color screen through -200. ** Based on polycarbonate pellets @ 38 lb/ft³

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

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

NWB-25-HC+ through NWB-50-HC+

NWB-100-HC+ through NWB-200-HC+

NWB-300 -HC+
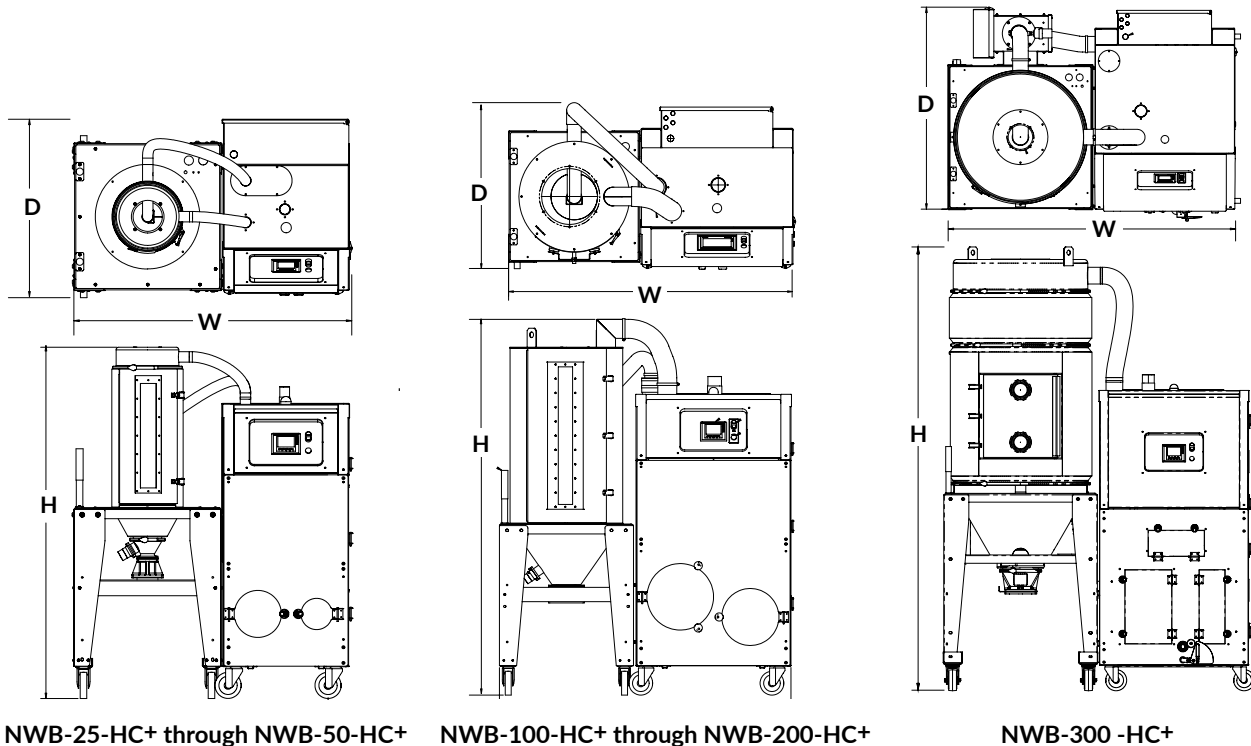
OPTIONS

› **Thermal+ For All Plus Models**
Ensures that new heat- sensitive resins are dried properly. *See seperate data sheet.*

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

› **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.

ACCESSORIES

› **Stainless Steel Hopper Extensions for -HC and -HC+**
25 lb for -25, 70 lb for -50, 110 lb for -100, 200 lb with or without sight glasses for -200 and -300.

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

NOVATEC

Thermal+™ Option for NWB+ Series

Protection from Overdrying 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.

5 YEAR warranty — LOWEST TOTAL COST OF OWNERSHIP

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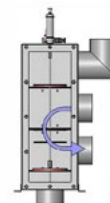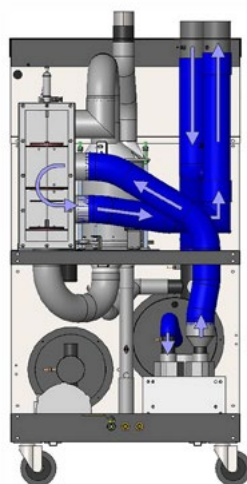
When The Resin Is Dry
The blower loop will exclude the desiccated -40°F/C air and recirculate heated air.

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.

← FROM PROCESS BLOWER

→ TO PROCESS HEATER LINE

TO CASSETTE PROCESS AIR INLET

← FROM PROCESS BLOWER

→ TO PROCESS HEATER LINE

FROM CASSETTE PROCESS AIR OUTLET
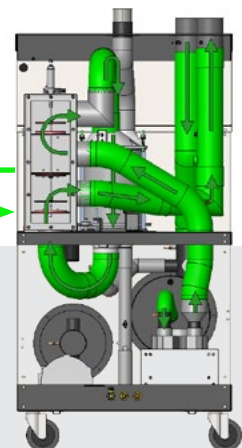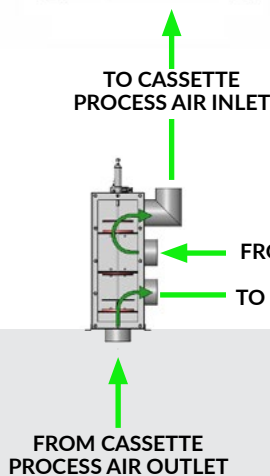
Order option for NWB+ and NWB-HC+

KIT-NWB75-HX-01 for -25 and -50 models
KIT-NWB150-HX-01 for -100 and -150 models

Order option for NWB-DC+

KIT-NWB75-HX-02 for -25 and -50 models
KIT-NWB150-HX-02 for -100 and -150 models

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