



# Dual-Bed Desiccant Dryers-Medium To Large

NDB dryers employ accepted dual-bed drying technology that guarantees - 40° dew point process air.



NDB dual-bed drying technology includes separate heaters and blowers for process and regeneration cycles. A highly engineered pair of heavy duty electrical 4-way valves direct air flow through the dryer for material drying and desiccant regeneration. The NDB-750 and up employ a hopper-mounted process heater.

### Open Frame Design

Easy access is available to all parts of the dryer.

### Choice of Configurations

The NDB series dryers are available as stand-alone dryers or central dryer and dry/convey packages.

### Reliable 4-Way Valves

Heavy duty electric valve actuator and tubular valve linkage with roller bearings is standard.

### 5-Year Warranty

For lowest cost of ownership.

### LOGO! Mini PLC Control Standard

- Over-temperature alarm and shut down with indication
- Auto-tune PID temperature control with dual LED display
- Calibration feature and set point secure switch
- Full function graphic display.

### NovaTouch™ Touch Panel Siemens PLC Control

A popular option on standard and central drying packages and standard on Dry/Convey Packages.



NDB-300-N



LOGO! Mini PLC control standard



Optional NovaTouch™ touch panel Siemens PLC control

### Plus

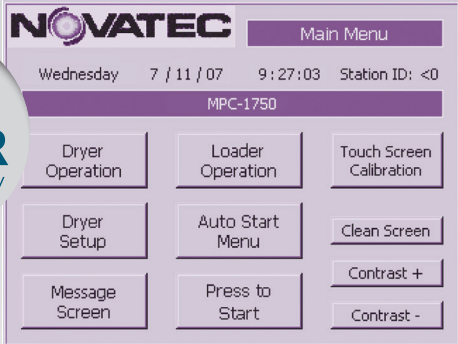
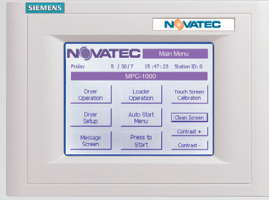
- › Cyclonic, 2-stage process filter
- › Separate process and regeneration filters
- › Tubular Incoloy® sheath heaters
- › Redundant process heater over-temp switch and light to guard against excessive temperatures
- › Easy access open frame design
- › Skid mounted on sizes above NDB-500
- › Standard process temperatures up to 350° (177° C) An optional cooling coil is required for drying temperatures above 225° F. (107 C)
- › 13X Desiccant
- › 460/3/60Hz operation
- › 5-Year warranty

# Optional NovaTouch™ Touch Panel PLC



To enhance the command and control of your NBD series dryers, Novatec offers the optional NovaTouch PLC touch panel with outstanding benefits and features.

- Easy-to read touch screen
- Built-in prompts simplify use
- Components available locally
  - Touch panel calibration
  - Contrast/clean screen
  - Multi-level password setup



Main menu provides access to operation screens displaying parameter entry points.

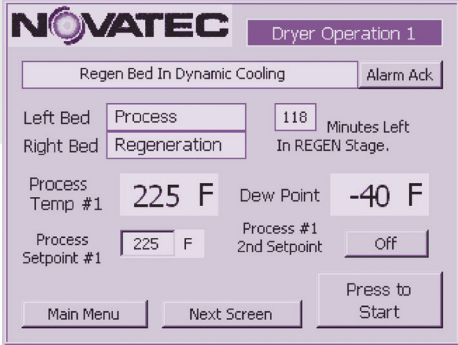
Feature	LOGO! Mini PLC	NovaTouch
Touch screen technology	X	✓
Control temperature #1	✓	✓
Control temperature - 2nd set point	X	✓
Over-temperature alarm and shutdown	✓	✓
Hygro dew point sensor	X	✓
Real-time clock	X	✓
Seven day timer	X	✓
High/low temperature alarm	X	✓
Bed status	✓	✓
Auto start/stop	X	✓
Warning and error messages	X	✓
Dew point changeover	X	✓
Blower differential pressure switch	X	✓
Calibration feature and set point secure	X	✓
Set deviation limits	X	✓
Language capabilities	X	✓
PLC diagnostics	X	✓
Adjust PID settings	X	✓
Dynamic cool	X	✓
NEMA 12 enclosure	X	✓
Loader operation	X	✓

Note: The optional NovaTouch, when chosen, controls loader operation.

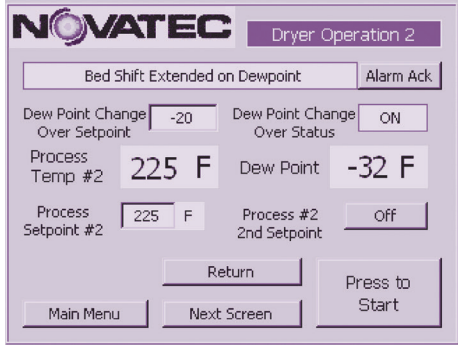
## \* NovaTouch™ Custom Options:

- › Plug and play communications modules for Modem Modbus, Profibus and MPI are inexpensive and easily added options. Ethernet, with or without embedded web page, DeviceNet, CAN Bus and ASI protocols are available.
- › EEPROM memory card
- › Battery backup for real-time clock
- › Custom setup for:
  - MoistureManager (Patent number 6,289,606)
  - Energy saver

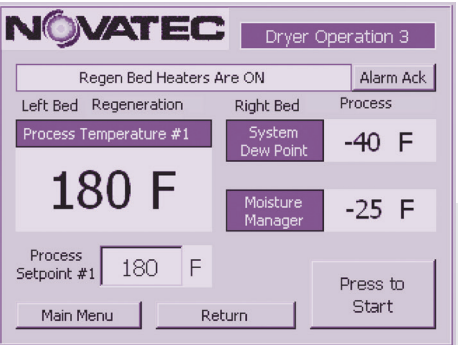
\* Contact Novatec for more information.



Dryer Operation 1 displays bed status, process temperatures and dew point.



Dryer Operation 2 displays system status, dew point changeover set point and status.



Dryer operation 3 displays system status, bed status and dew point for the optional MoistureManager.



## Specifications:

Standard Dryer	Central Dryer	*Throughput Capacity Up To	
		lb/hr	Kg/hr
NDB-100	NDB-100-C	100	45
NDB-200	NDB-200-C	200	90
NDB-300	NDB-300-C	300	136
NDB-500	NDB-500-C	500	227
NDB-750	NDB-750-C	750	341
NDB-1000	NDB-1000-C	1000	455
NDB-1500	NDB-1500-C	1500	682
NDB-1750	NDB-1750-C	1750	795
NDB-3000	NDB-3000-C	3000	1364
NDB-3800	NDB-3800-C	3800	1727

Central drying systems have similar dimensions and require an HB process heater to be added to each hopper.

Note: Process heater is included and mounted on hopper for NDB-750 and up.

\*Nominal throughput, based on PC pellets. Consult factory if dryer used above 3000 ft (900m) elevation

## Options:

**NovaTouch PLC Control:** Add "-N" after main part number.

**Alternate Voltage:** 575/3/60

**Dew Point Meter**

**7-Day Timer**

**Accessories:** Shipped separately

**Cooling Coil:** Required when process temperature over 225° F. (107° C)

**Capacitance Bracket:** only for dry/convey packages

**4 ea. 5" Casters with mount:** for NDB-100 and 200

**Capacitance Switch:** 24VDC 115VAC (for NDB-100 and 200)

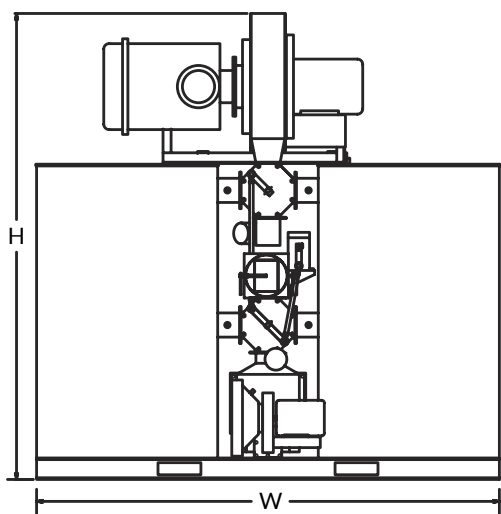
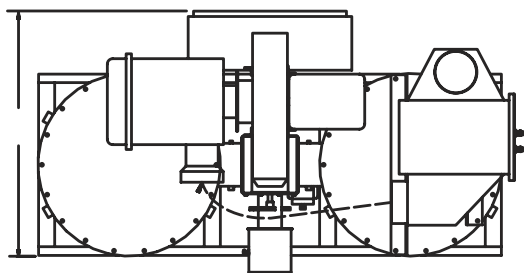
## Dry/Convey packages available as NDB-100-DC & NDB-200-DC and include:

- › VR-5 machine-mount vacuum receiver, regenerative blower,
- › VL-3, line purge device and floor stand with casters
- › NovaTouch™ PLC control
- › Insulated hopper with return air pellet screen
- › Process heater at dryer
- › Optional 575/3/60 voltage

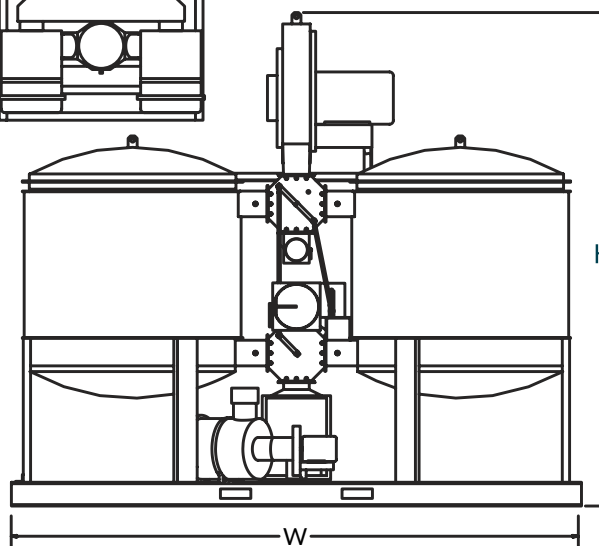
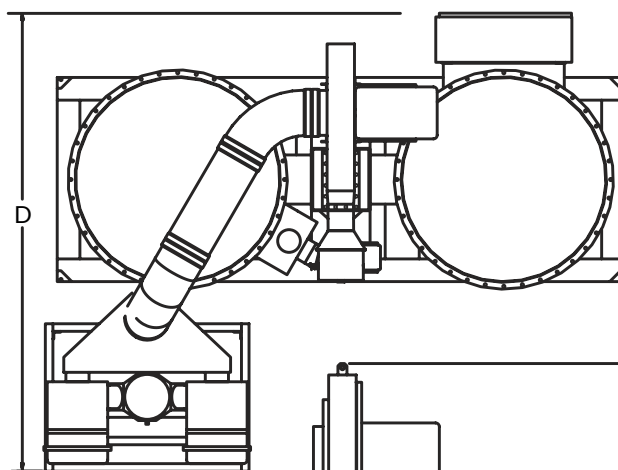
Specifications:

Dryer Part Number	Process Rate		Overall Dimensions						Process Air Duct Diameter		Weight	
			W		D		H		in	cm	lb	Kg
	lb/hr	Kg/hr	in	cm	in	cm	in	cm				
NDB-100 / NDB-100-C	100	45	58	147	41	104	62	158	3.875	9.84	490	222
NDB-200 / NDB-200-C	200	91	58	147	47	119	62	158	3.875	9.84	530	241
NDB-300 / NDB-300-C	300	136	71	180	56	142	80	203	5.875	14.92	725	329
NDB-500 / NDB-500-C	500	227	71	180	56	142	80	203	5.875	14.92	825	374
NDB-750 / NDB-750-C	750	340	87	221	58	147	87	221	7.875	20	1100	499
NDB-1000 / NDB-1000-C	1000	454	87	221	80	203	87	221	7.875	20	1500	680
NDB-1500 / NDB-1500-C	1500	680	123	313	66	168	115	292	7.875	20	3750	1701
NDB-2000 / NDB-2000-C	2000	907	150	381	125	318	130	330	11.875	30.16	Upon Request	
NDB-3000 / NDB-3000-C	3000	1364	160	406	130	330	130	330	11.875	30.16	Upon Request	
NDB-3800 / NDB-3800-C	3800	1727	182	462	163	414	114	290	11.875	30.16	Upon Request	

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



Typical design for -100 through -1500 models



Typical design for -2000 through -3800 models.  
Add approximately 16" (41 cm) to "D" above if cooling coil ordered.