

DUAL BED DESICCANT DRYERS

NDB Series: Medium - Large Models 100-3800 lb./hr. (45-1725 kg/hr.)

NDB dryers are the industry “work horses”, employing accepted dual-bed drying technology that guarantees - 40° dew point process air. Energy consumption is nominal and operation is simple.

Standard Features:

- **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 packages
- **Reliable 4-Way Valves**
Heavy duty electric valve actuator and tubular valve linkage with roller bearings is standard
- **Control Choices**
An electro-mechanical control is standard on the stand-alone and central dryer packages while the NovaTouch touch panel control is optional

Electromechanical Control Standard Features:

- Over-temperature alarm and shutdown 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
- Standard on Dry/Convey Packages

PLUS:

- Cyclonic, 2-stage process filter
- Separate Process and Regeneration Filters
- Tubular Incoloy® sheath heaters
- Highly engineered pair of heavy-duty electrical 4-way valves direct air flow through the dryer for material drying and desiccant regeneration
- Electromechanical Controls in NEMA 1 enclosure
- Redundant process heater over-temp switch and light to guard against excessive temperatures
- Easy access open frame design
- 5” Casters (on NDB-100 through NDB-500)
- 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 250° F. (121 C)
- 13X Desiccant
- 460/3/60Hz operation



NDB-3000 shown with optional NovaTouch control



Standard Electromechanical Control



Optional NovaTouch™ Touch Panel Siemens PLC Control

Convey • Dry • Blend



DRY

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 & features.

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

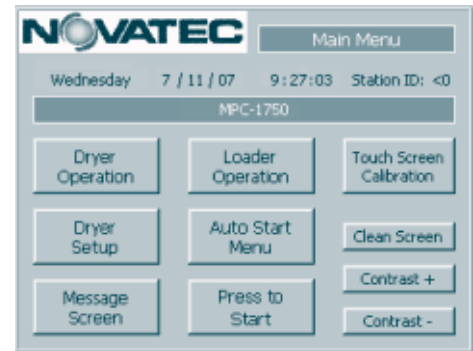


Feature	Electromechanical	NovaTouch
Touch screen technology	X	✓
Control temperature #1	X	✓
Control temperature – 2nd set point	X	✓
Over-temperature alarm and shutdown	X	✓
Hygro dew point sensor	X	✓
Real-time clock	X	✓
Seven day timer	X	✓
High/low temperature alarm	X	✓
Bed status	X	✓
Auto start/stop	X	✓
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	*

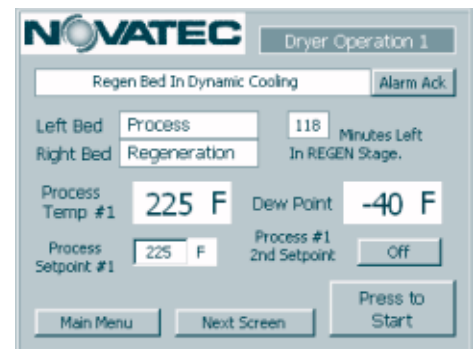
* On standard NBD packages with electromechanical controls, loader operation is controlled by a LOGO! Mini-PLC. The optional NovaTouch, when chosen, controls loader operation.

NovaTouch™ Options

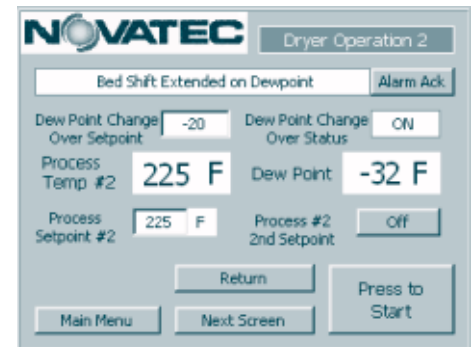
- Plug and play communications modules for Modem Modbus, Profibus and MPI are inexpensive and easily added options. Ethernet, with or without embedded web page, DeviceNet, Canbus and ASI protocols are available.
- EEPROM memory card
- Battery backup for real-time clock
- Custom setup for:
 - Moisture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



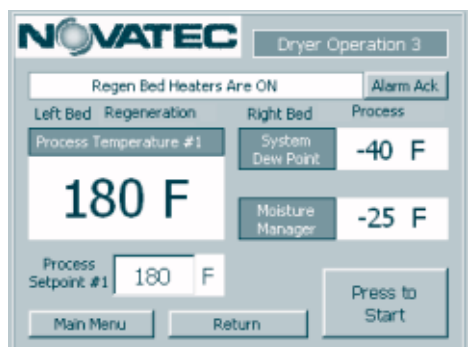
Main menu provides access to operation screens displaying parameter entry points.



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



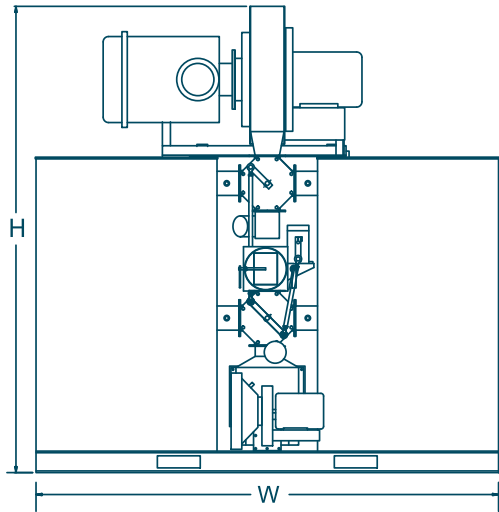
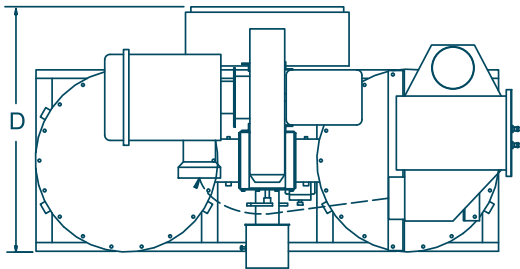
Dryer Operation 2 displays system status, dew point changeover set point and status.



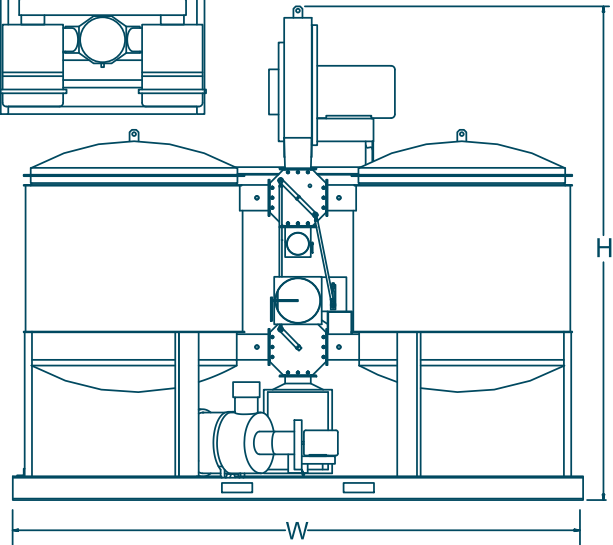
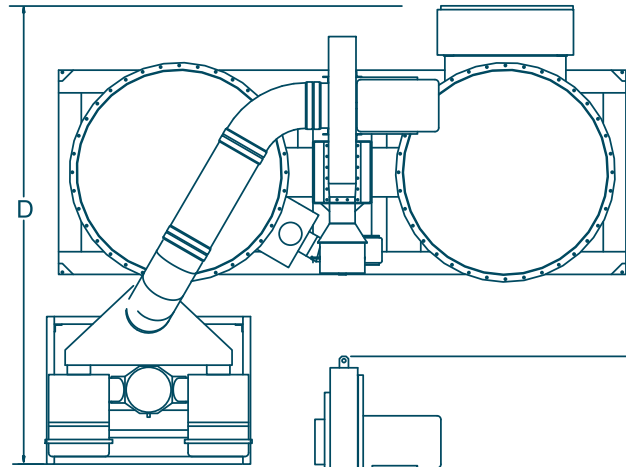
Dryer Operation 3 displays system status, bed status and dew point for the optional Moisture Manager.

Dual Bed Dryer 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	



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.

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