

DHD Series

Twin Bed Dryer



DHD - Twin Bed, Dehumidifying Hopper Dryer

Benefits:

- Energy efficient gas, electric or dual fuel dryer
- Open frame design for easy access to key components
- High performance change over valves
- Separate blowers for process and regeneration air
- High efficiency filtration
- FOCUSpro touchscreen control
- Low Dewpoint -40°F
- Airflow up to 5,000 CFM

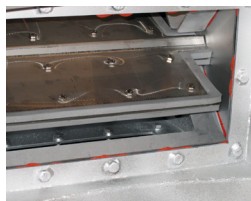
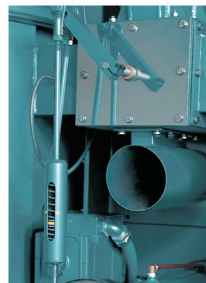


Energy efficient, solid construction

Double wall construction provides energy savings, safety and durability. A double wall process heater circulates cold air around the heater to preheat the air and cool the outer surface of the heater housing at the same time. The heat, that escapes on most dryer designs, is recovered and returned to the process air. Regeneration heaters are insulated with a high temperature ceramic material to provide even more energy efficient operation.

Precision, high performance air valves

Improve overall energy and operational efficiency. Precision air distribution valves reduce pressure loss across the system with our exclusive valve tensioning system. Air valves are seated with a high-temp silicone seal to eliminate cross contamination of process and regeneration air streams.



Reliability

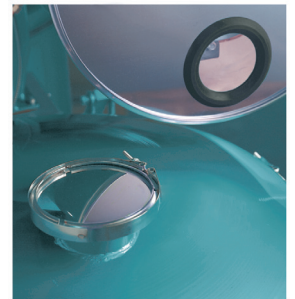
Low watt density, multiple tubular heater elements increase heater life and permit continuous operation, even if an individual element has failed. Element replacement is simple with the removal of a few single-bolt clamps.

Easy maintenance

Make a quick check of the desiccant through the desiccant sample port. The port may then be used to either remove or refill desiccant to its proper level automatically.

Conserve valuable floor space

Machine-mounted air filters save on valuable floor space and each has an observation window for easy filter inspection. High efficiency, pleated filters are conveniently located for quick change - no tools required!

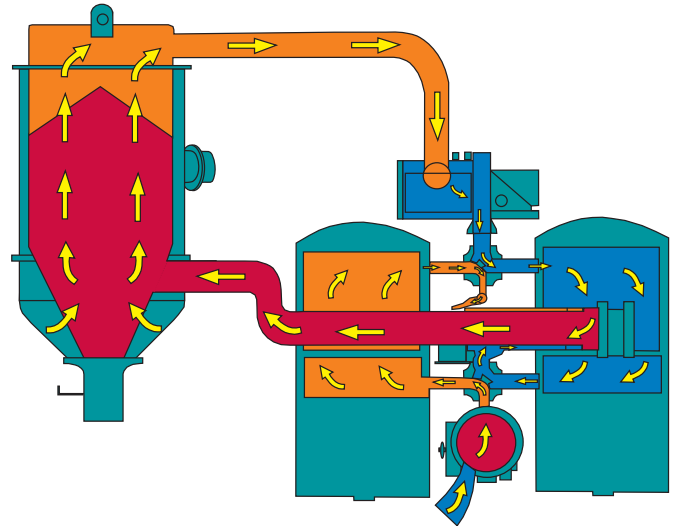


Operation and Control

Solid bed dryer operation

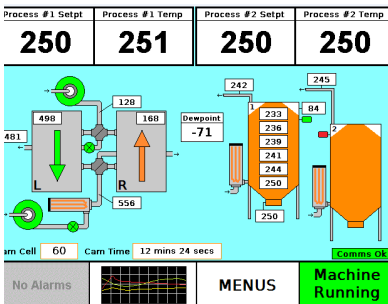
Performance, reliability and simplicity are key to the Una-Dyn solid bed dryer design. Uniform air flow ensures maximum contact between the moist air and the desiccant resulting in improved performance and energy efficiency. Controlling the dryer cycle on dewpoint demand increases cycle time and substantially reduces regeneration energy consumption.

High performance change over valves control air flow to and from the “on-line” active tower and regeneration tower for precision control of the drying process. The DHD standard processing temperature range is 180° to 250° F. Optional heaters and cooling coils permit drying at temperatures below 180°F or up to a maximum of 375°F.



Controls:

Una-Dyn offers a variety of dryer controls, from basic microprocessor control to full featured modules that are part of a factory control and monitoring system. Requirements for dryer controls differ from one plastics processor to another but Una-Dyn controls are designed and manufactured “in-house” to maintain exacting standards and unsurpassed quality across the board.



FOCUSpro control

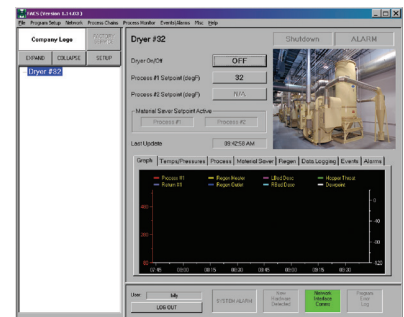
The FOCUSpro controller is an enhancement of the FOCUS controller – adding even more capabilities. In addition to maintaining all of the Focus controller’s capabilities, the FOCUSpro has proportional analog capabilities. Two proportional analog outputs allow it to control a gas-fired process heater and a process blower VFD. Two proportional analog inputs allow for process airflow and an analog hopper-level monitor. An optional, plug-on, dual-VCL controller allows any FOCUSpro dryer to also support conveying operations on two material chambers – no separate loader controller required.

F.A.C.S. - Factory acquisition control system

F.A.C.S. permits control of material conveying systems as well as monitoring of Maguire blenders, Silo Inventory, and most SPI compatible equipment such as dryers, mold temperature control units and chillers. The two-wire power and communications network, in conjunction with the Windows platform, makes this system economical, easy to install, setup and operate. The system is also simple to expand and re-configure.

Import drawings and pictures to show system configurations or locations of equipment throughout the plant using a PC. With process chain analysis and verification it is possible to set up, monitor and record setpoints, equipment performance, define material flow paths and equipment selection with a single command.

F.A.C.S. has full graphing capabilities and a built in SQL database to process all your information and store it with a complete set of reports for immediate or future use.



Hoppers

Una-Dyn's drying hoppers are designed to promote the mass flow of a wide variety of materials from virgin pellet to thin flake and other difficult-to handle regrinds. Hopper design incorporates the use of a solid cone in the hopper transition zone resulting in better air distribution, efficient and fast material drying, improved mass flow, and a hopper that is easy to clean.

Drying hoppers up to 20,000 cubic feet capacity are standard with larger capacities available for custom requirements. All hoppers include the following feature benefits:

Benefits:

- Solid mass flow inlet cone
- Laser-cut access doors
- Heavy-duty lid and door clamps
- Insulated side walls and access door
- Clear sight glasses
- Material drain-out port with slide gate
- Slide gate material shut-off on discharge
- Designed for easy and quick cleaning and maintenance
- Mezzanine or stand mounted

TSC Hopper

The TSC drying hopper features a stainless steel hopper and solid cone design. The smooth interior finish has no lips or ledges to retain or inhibit the flow of pellets. Excellent air distribution and material mass flow characteristics assure even, consistent drying.



EF Hopper

Scientifically designed to handle hard-to-flow materials, the steep solid cone, split chamber design produces an even flow of material and a hopper that is easy to clean.



USC Hoppers

Steel construction, incorporated with a split hopper design, allows the upper two-thirds of the chamber to be completely removed from the lower section. Ideal for applications utilizing virgin pellets, free flowing regrinds or a blend of these materials, USC Drying Hoppers are also available in stainless steel construction for all sizes.



Central Drying

Una-Dyn has built its reputation on tailoring systems to the client's unique requirements and budgets - planning for both current and future needs. Together, with the Integrated Systems Group (I.S.G.), Una-Dyn can design and engineer a central drying and material handling solution that is the best in the industry.

Una-Dyn uses state-of-the-art equipment and components that are flexible, efficient and reliable. Save valuable plant space, energy and manpower. Inquire today!