WHITLOCK-MATERIAL HANDLING

ADL SERIES LARGE DEHUMIDIFYING DRYER

ADL SERIES LARGE DRYER

AEC's ADL Series dryers are designed to dry (remove 1% water per hour) hygroscopic pelletized plastic material, when used in conjunction with an appropriately sized drying hopper. The unique energy-efficient design features Hi-Core™ Technology, which places the electric heating element inside the hollow core of the desiccant canister, allowing faster regeneration and cooling of the desiccant in less than one hour.

All models are available in three temperature ranges, standard, low and high heat. Expandable control platforms are available to complement your process.

FEATURES

- *Standard off-the-shelf programmable controller and 1/16 DIN digital temperature control*
  - *Standard units 180ºF to 250ºF*
  - *Low temperature units 120ºF to 180ºF*
  - *High temperature units 250ºF to 400ºF*

FEATURES

- *Unique Hi-Core™ desiccant canister design lowers energy costs 10-15% and reduces regeneration time to less than one hour*
- *Sizes up to 3000 cfm (5100 m^3/hr) are available for central or beside-the-press operation*
- *13X molecular sieve desiccant offers high adsorption and quick regeneration*
- *Single electrically-actuated air valve is more reliable than traditional pneumatic two-valve design*
- *High-pressure centrifugal blower delivers stated airflow under load. (High-performance dryers are equipped with multiple regenerative blowers) Peripheral blowers are available*
- *Convenient access panels allow easy access to process, regeneration and air filters*
- *Double-wall constructed stainless steel heater boxes provide maximum thermal efficiency*

OPTIONS

- *Gas-fired heat exchangers for both process and regeneration can reduce your energy costs 50% to 85% compared to electric heater models*
- *Advanced controller includes all the features of the basic control with the added convenience of a touch-screen interface*
- *Low-heat model 120ºF-180ºF (includes a pre-cooler to cool dry air before entering the process heater)*
- *High-heat model 250ºF-400ºF (includes insulated process delivery air hose, additional heaters or larger burner/gas heat exchanger, electronics to support this operation, and a return air after-cooler to maximize the efficiency of the dryer)*
- *Remote operator interface for added safety and convenience*
- *Stainless steel desiccant tanks, filter housings and after-coolers are optional*

1100 E Woodfield Road
Schaumburg, IL 60173 USA
Tel. 847-273-7700 Fax 847-273-7804

www.aecinternet.com

WHITLOCK/ MATERIAL HANDLING | HEAT & COOL | BLEND & RECLAIM | NELMOR/ GRANULATE | DOWNSTREAM EXTRUSION | AUTOMATE | SYSTEMS CONTRACTING | SERVICE

AEC is committed to a continuing program of product improvement.

Bulletin WH1-185.4

WHITLOCK-MATERIAL HANDLING

ADL SERIES LARGE DEHUMIDIFYING DRYER

The AP1 PLC controlled system includes a touch-screen interface.

The standard control system features digital temperature control.

AP1 CONTROLLER FEATURES

- *Touch-screen interface provides clear information about desiccant bed regeneration, process temperature, and dewpoint*
- *Off-the-shelf programmable controller monitors and controls the drying and conveying system*
- *Allows simple start-up, shut-down, and adjustment of drying and conveying parameters*
- *Integral PID temperature control with display of setpoint and actual process temperature*
- *Display of "actual" dewpoint*
- *Alarm indication also includes high temperature conditions, dirty filters, and heater failure*
- *Dryer "auto shutdown" sequence*
- *Loop break alarm*
- *7 day timer*
- *Material over-drying protection*

AP1 CONTROLLER OPTIONS

- *Ethernet module*

STANDARD CONTROL SYSTEM FEATURES

- *Off-the-shelf 1/16 DIN temperature controller with auto tune and PID*
- *Programmable logic based control system*
- *Enclosure meets NFPA 79, UL and CUL electrical standards*
- *Non-fused disconnect*
- *High process temperature alarm light*
- *Temperature controlled regeneration with safety*

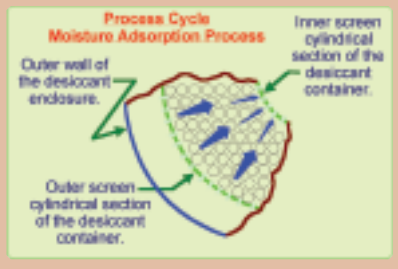
STANDARD CONTROL SYSTEM OPTIONS

- *Audible alarm with silence button*
- *Digital dewpoint monitor to -40ºF*

HI-CORE TECHNOLOGY

Hi-Core™ design (patent pending) locates electric or gas-fired heaters directly within a hollow core desiccant canister for maximum thermal efficiency.

During drying, air from the blower enters the canister from the large surface area on the outside of the cylinder. As the air moves towards the core, its pressure and velocity increase, aiding the moisture adsorption process.



During regeneration, heated air pressurizes the core of the desiccant canister. As the air moves outward through the canister, it loses pressure and velocity. The air slows down and expands, increasing its contact time with the desiccant and resulting in very efficient regeneration.

1100 E Woodfield Road
Schaumburg, IL 60173 USA
Tel. 847-273-7700 Fax 847-273-7804

www.aecinternet.com

WHITLOCK/ MATERIAL HANDLING | HEAT & COOL | BLEND & RECLAIM | NELMOR/ GRANULATE | DOWNSTREAM EXTRUSION | AUTOMATE | SYSTEMS CONTRACTING | SERVICE

AEC is committed to a continuing program of product improvement.

Bulletin WH1-185.4

Specifications, appearances and dimensions are subject to change without notice.

Printed in USA