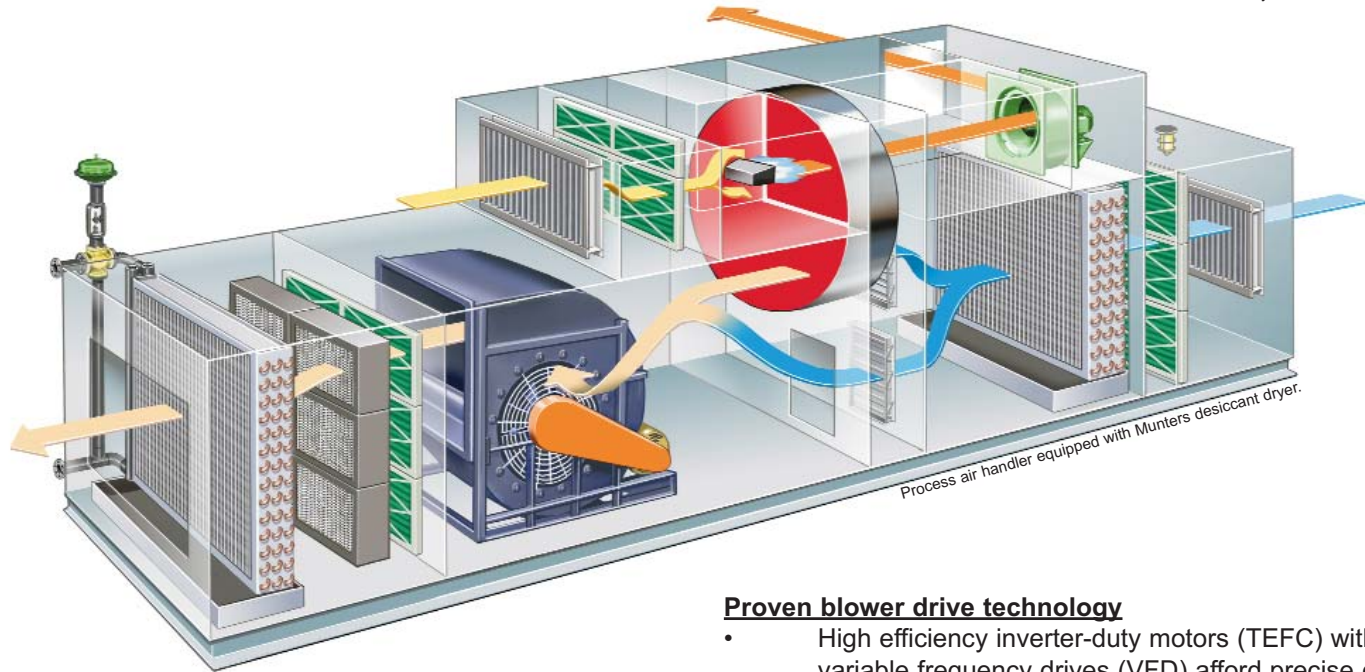


Thomas Engineering process air handling systems typically are built to deliver process air at temperatures up to 85°C (185°F) at maximum rated airflow. Systems are designed to use 100% outside air; performance based on ASHRAE 99% climate data for your local area to ensure consistent supply of conditioned air to your coating process year round.

Photo courtesy of Munters DHI



**Blower Control Ranges (CFM)**

- 1000 - 2500 48" Accela-Cota
- 1600 - 4000 60" and 60" XL Accela-Cotas
- 2000 - 7000 66" Accela-Cota, Continuous Coater, Spectrum
- 6000 - 10000 Continuous Coater

**Process Flexibility**

- Choice of heating media - steam, hot water, electric.
- Precise temperature control - face & bypass damper with automatic positioning.
- Dehumidification - chilled water coils; desiccant wheel.
- Dew point control - humidification using clean steam injection.

**Equipment Reliability**

- Rugged cabinet with double-wall construction and 2" insulation; painted galvanized steel exterior; optional stainless steel liners for interior and exterior; access doors and removable panels for service. Design options for indoor (mezzanine or ground) and outdoor (roof top or ground) installation sites.

**Proven blower drive technology**

- High efficiency inverter-duty motors (TEFC) with variable frequency drives (VFD) afford precise control of air flow and pan/room differential pressure.

**Process air filtration**

- Roughing, medium, and HEPA filtration available; industry standard filter sizes for local availability; each filter bank includes differential pressure monitoring and indication for service notification.

**Inlet damper**

- Seals off process blower, filters and coils from outdoor environment when system is not in use.

**Exhaust air filtration**

- Choice of name brand industrial dust collector; includes automatic pulse filter cleaning to ensure highest operating efficiency.

**Solvent applications** - Equipment features and options available for XR systems.

**Choice of controls** - COMPU-COAT process automation or manual controls.

**THOMAS ENGINEERING AIR HANDLING UNIT**

TOTAL COVERAGE...EVERY TABLET...EVERY PROCESS...EVERY TIME...



The Thomas Engineering Air Handling System integrates mechanical equipment and control devices to deliver a supply of conditioned process air to the tablet bed for the purpose of drying applied coating solution. Thomas Engineering offers the greatest design flexibility to meet your process requirements.

Thomas Engineering continually explores new product technologies for equipment and process improvements. We, therefore, reserve the right to make changes to specifications and sales literature without notice. Equipment photos are for illustration only, and may not reflect actual devices/models used in a build project.

**Thomas Engineering - Equipment Range**

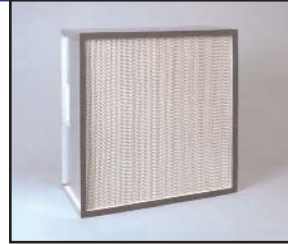
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- ACCELA-COTA® Spectrum - Containment Batch Coaters
- ACCELA-COTA® "D" and ACCELA-COTA® "S" - Production Size Batch Coaters
- 24" and 36" COMPU-LAB - Fully-Integrated Laboratory Size Coaters
- Continuous Coaters - High Throughput for Continuous Applications



# Coating Process Air Handling System

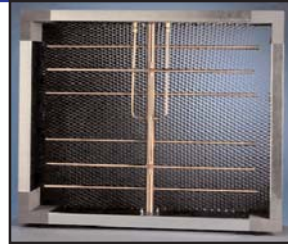
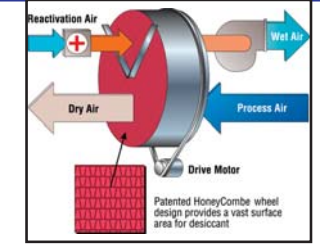


- Process Air HEPA Filtration (optional)**
- 99.97% efficient on 0.3 micron particles.
  - Tapered separators ensure uniform airflow.
  - Furnished integral with process AHU or as stand-alone unit for remote mounting in air duct.

- Face and Bypass Temperature Control**
- Direct-coupled electric actuator; low leakage design throughout.
  - Smooth response during start-up; maintains set-point during coating process.

- Roughing and Medium Process Air Filtration**
- Two stages, typically 30-35% and 60-65%.
  - Differential pressure monitoring for service notification.

- Desiccant Dehumidification (optional)**
- Maximum drying of process air for very low dew point requirements (less than 10°C).
  - Fully integrated with process air handling system using COMPU-COAT controls.



- Air Flow Measuring Station**
- Pitot tube array with straightening vanes.
  - Corrosion-resistant air straightener and manifolds.
  - Durable galvanized or optional stainless steel construction; includes mounting flanges.



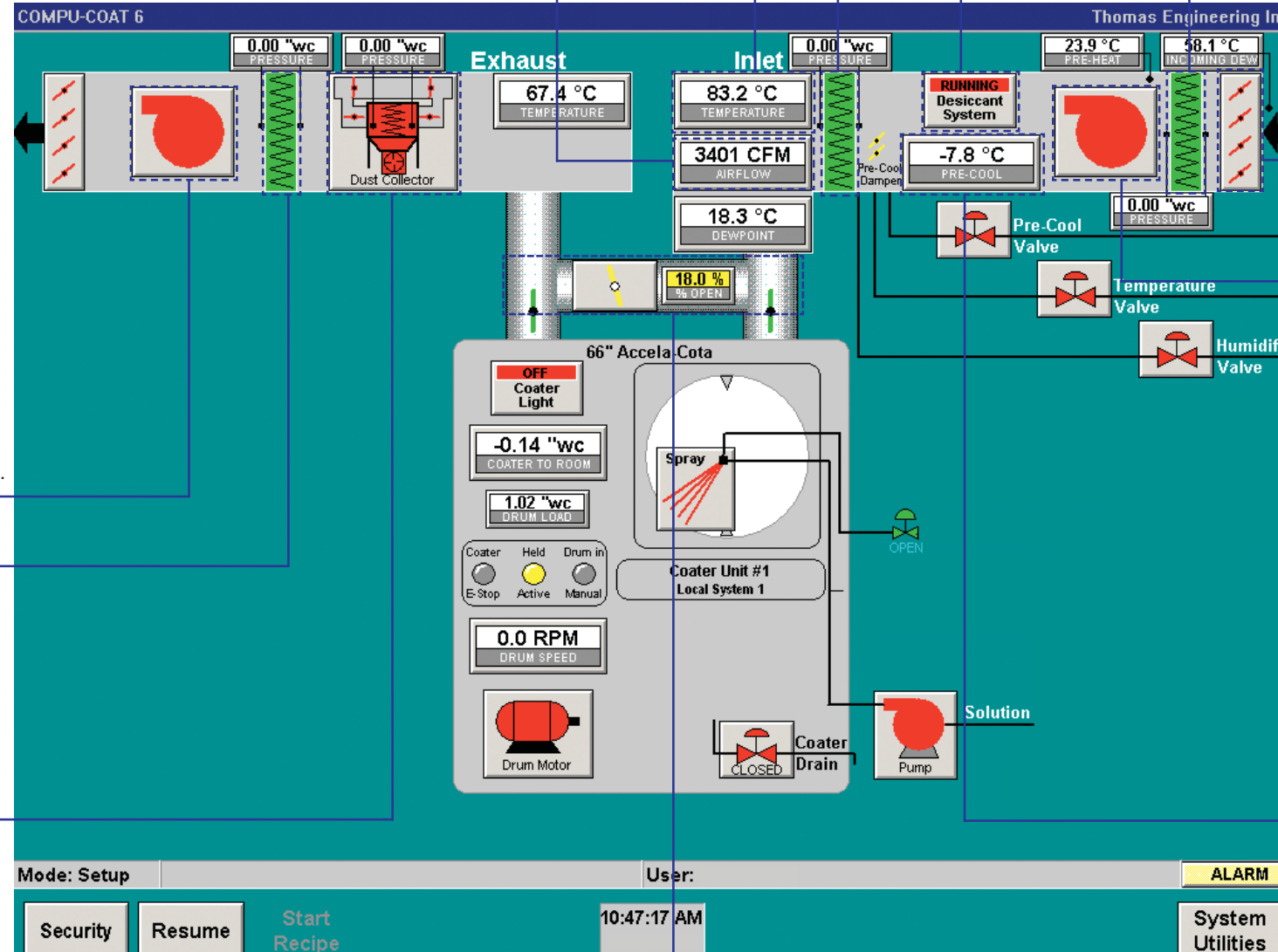
- Exhaust Blower with VFD and Motor**
- Precision-balanced blower wheel; designed for continuous operation.
  - Spark-resistant construction for all applications.
  - Direct drive unit to maximize efficiency and reduce maintenance.



- Exhaust HEPA Filtration (optional)**
- 99.97% efficient; gel seals for leak free operation.
  - Options for bag-in-/bag-out filter changes.



- Exhaust Dust Collector**
- Ledgeless construction eliminates dust build-up.
  - Acrylic urethane exterior finish; suitable for indoor and outdoor installations.
  - High efficiency exhaust air filtration.
  - Number of cartridges is defined by air flow requirements.



- Outside Air Inlet Damper/Actuator**
- Pneumatic damper actuator.
  - Limit switch for position verification.



- Process Air Blower with VFD and Motor**
- AMCA certified blower for outstanding performance.
  - Air diffuser for excellent air velocity profile through heating coils.



- Chilled Water Dehumidification Coils (optional)**
- Corrosion-resistant stainless steel casing.
  - Stainless steel drain pan.
  - Lowers process air dew point to approximately 10°C in most installations.



- Process Air Bypass (optional)**
- Maintains process air flow conditions during process pause.
  - Pan/Load compensation for automatic blower regulation.
  - Required with COMPU-COAT controls; integral component for process automation and alarm response strategies.



Process air handling is a critical aspect of the tablet coating process. Equipment is designed and built to suit specific user requirements, geographic location, customer hardware preferences and available site utilities. Using our proven COMPU-COAT automation, we provide seamless integration of air handling units with our Thomas spray systems and range of tablet coaters. Take advantage of our experience base of more than 1200 tablet coaters in the field. You can depend on coating system performance and unmatched technical support from the source you can trust...Thomas Engineering Inc.