

THE 100XP FLUID-BED

Applied Chemical Technology continues to provide new and improved fluid-bed technology to industry with the 100 XP Explosion Proof Fluid-Bed. The 100XP withstands maximum developed pressures up to 12 bar. The gas stream can be vented or recirculated. A solvent recovery system is optional. Sanitary fittings on the ductwork components allow the unit to be easily disassembled for cleaning.

The 100 XP unit is a multipurpose fluid-bed for small scale coating, granulating, and drying applications. It is ideal for process development and for collecting scale-up data for commercial processes. The standard oil heater provides a maximum operating temperature of 200°C. An optional hot water/chiller system is available for solvent recovery systems.

UTILITY REQUIREMENTS FOR THE 100XP

Electrical

	<u>Oil Heater</u>	<u>Water Heater</u>
Current:	30 amp	30/15 amp
Phase:	1	3
Voltage:	230 V	230/460 V

Water

Flow Rate:	2-4 GPM
Inlet Temp:	35-70°F

Compressed Air

Flow	1-2 cfm
PSIG	60 psi

Inert Gas Flow*

Flow	1-5 scfh
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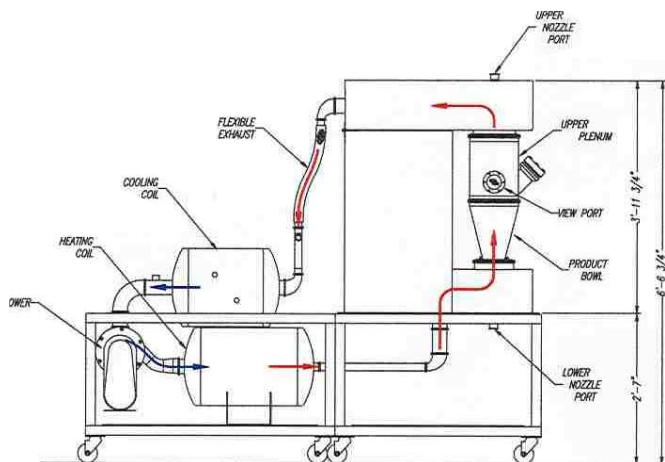
*i.e. Nitrogen, Argon, etc.



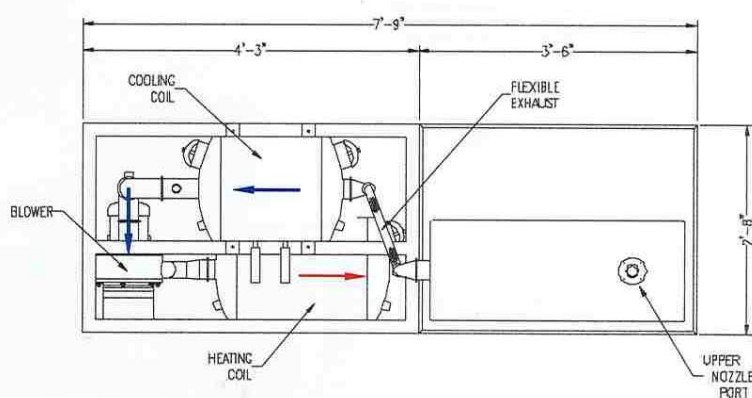
Specifications

- 5 liter bowl capacity, batch fluid-bed with internal baghouse
- Explosion proof construction to meet Class I Div II specifications
- Internal baghouse equipped with Teflon coated bags
- Manual pulsejet bag cleaning system (automatic pulse is available)
- Explosion proof: 12 bar shock rated
- Maximum temperature: 200°C
- Material of construction: 316 Stainless Steel (parts in contact with product)
- Capable of re-circulating or venting the gas stream
- Air atomized removable stainless steel spray system
- Top and bottom spray configuration
- 316 SS upper housing with glass view port
- Cooling/heating coils—does not include chiller for solvent recovery
- Blower:
 - Variable speed
 - Maximum airflow is 70 cfm
 - 40 in. w.c. static pressure
- Ductwork exhaust flanged to facilitate connection of additional piping.
- Includes:
 - O-rings for sealing distributor plate and product chamber
 - Air pressure regulator
 - Air pressure gauge
- Instrumentation includes:
 - Air flow measurement
 - Inlet air temperature
 - Outlet air temperature
 - Temperature controller
 - Transmitters are PLC/DCS compatible
 - Differential pressure gauge across bed
 - Differential pressure gauge across bags
- Optional oil/water heater system
- Optional chiller system for solvent recovery
- Optional sanitary viewports

100XP Explosion Proof Fluid-Bed Layout



A front view of basic 100XP shown with standard features including heating and cooling coils



A top view of basic 100XP shown with standard features