



2-Stage Wiped Film Distillation

DESCRIPTION

clearSTILL is a two-stage wiped film distillation machine that performs two independent distillation passes in a single contained cycle. The result is golden clear distillate with high potency for use in any product category. It supports throughput capacity of 4-6L per hour while doubling throughput and labor efficiency over single-pass machines. clearSTILL provides the best solution for opening the production bottleneck created by conventional wiped film distillation machines while lowering labor costs.

Programmable methods enable automated process control with reporting; and certified stainless-steel materials support global market requirements.

FEATURES



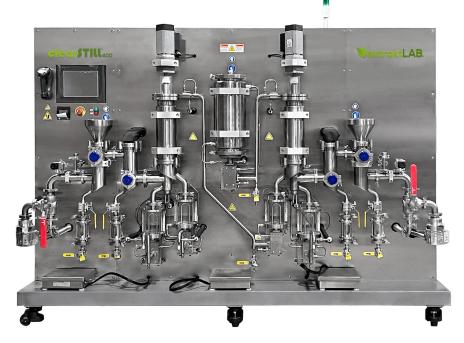








Continuously Feed From fracTron-1000



EXTENDED

PROCESSING POWER

- Dual stills with continuous process flow
- 2-stage distillation @ 4-6L/hr
- Double the volume of single-stage systems
- Half the labor of single-stage systems
- Oil-free pumps eliminate oil changes & oil contamination of the product.
- Integrated cold-finger cleaner

PROCESS CONTROL

- Containment between stages eliminates contamination risk
- Programmable methods with user authentication
- · Automated hardware control
- Mass flow tracking of yields
- Data visualization and alarms
- WIFI enabled monitoring and control
- Ultrasonic, laser, mass, and vacuum sensors enable superior process control capability

GMP COMPLIANCE

- Lot, calibration and maintenance tracking
- Barcode-enabled paper and electronic trail
- Continuous containment between stages
- · Certified wetted materials
- Easy clean-in-place capabilities
- 21 CFR Part 11 compliant software

SPECIFICATIONS

ATTRIBUTE	VALUE	
General Specifications		
Dimensions (in)	L103 x W44 x H72	
Unit Weight (lbs)	2155	
Sound Pressure (db)	<60	
Electrical Specifications		
Certifications, Listed	UL 508A	
E-stop; Thermal Switches	Standard	
Frequency (Hz)	50/60	
Full Load Amps (amps)	80	
Phase	3	
Voltage (VAC)	208-230/380	
Fluidics Specifications		
Condensate Pumps	2	
Feed Pumps	1	
Residual Pumps	2	
Feed Rate (L/hr)	up to 3	
Control Interface Specifications		
Control Input	Manual	

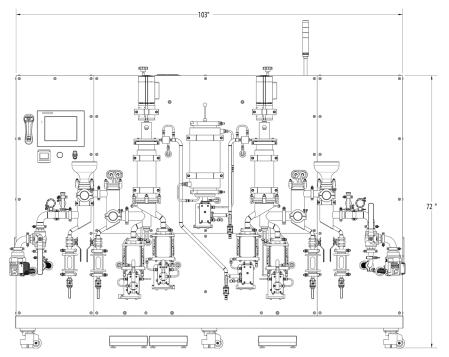
ATTRIBUTE	VALUE	
Evaporator Specifications		
Diameter (in)	6	
Distillation Vessels	2	
Heating Jacket	All tubes, pumps	
Heating Range (°C)	28 - 300	
Power (kW)	9	
Vacuum System Specifications		
Roughing Vacuum Pumps	2	
Short Path Pressure (torr)	0.001	
Turbo Vacuum Pumps	2	
Type	Oil-Free	
Wiped Film Pressure (torr)	0.1	
Condenser Specifications		
Chiller Fluid	Silicon Oil	
Cold Finger, Inline	Yes	

ATTRIBUTE	VALUE	
Condenser Specifications (continued)		
Distillation Condensers	2	
Cold Trap Condensers	4	
Feed Vessel		
Vessel Volume (L)	7	
Materials		
Metals	316SS, 304SS	
Speciality Polymers	Viton, PTFE, EPDM	
Performance Specifications*	•	
Cooling Range (°C)	-40 < X < -1	
*Actual Performance Results May Vary		
Warranty		
Duration (months)	12	
Quality and Labor	Parts & workmanship	

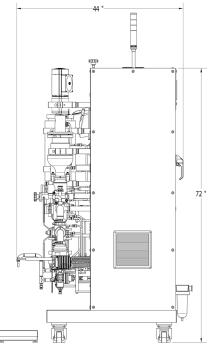
SOLD SEPARATELY:
GMP Documentation Package
Maintenance Package (12 months)

LINE DRAWINGS





SIDE VIEW



To Order: clearSTILL-400 #10-0081 (208-230V), #10-0081 | (380V), #10-0143



