

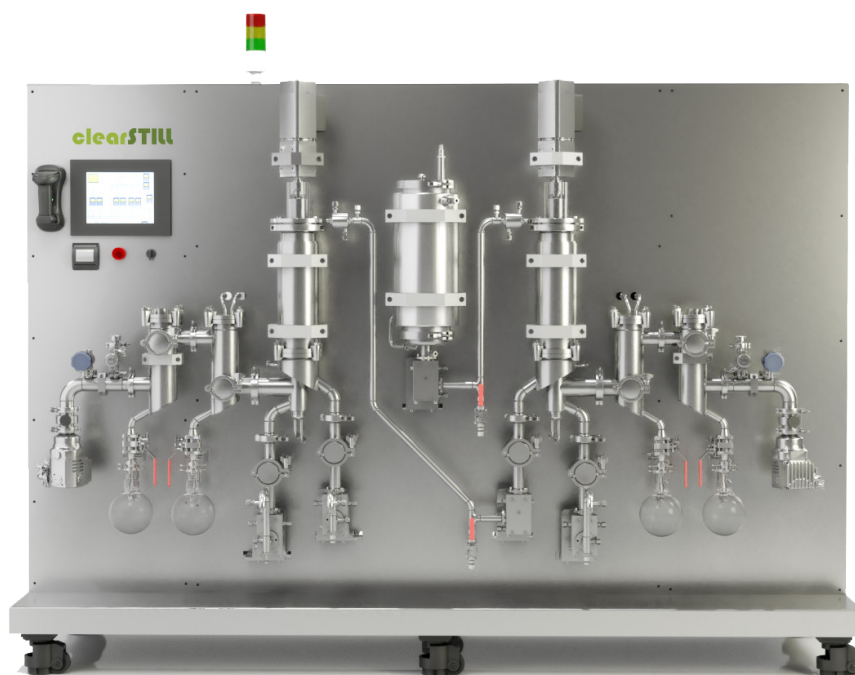
DESCRIPTION

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 GMP process control with reporting, and GMP certified stainless-steel materials support global market requirements.

FEATURES

-  **Continuous 2-stage Distillation**
-  **4-6 L/hour Capacity**
-  **Reduced labor and cleaning downtime**
-  **GMP Compliant**



EXTENDED

PROCESSING POWER

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

PROCESS CONTROL

- Containment between stages eliminates contamination risk
- Programmable methods with user authentication
- Complete hardware control
- Mass flow tracking of yields
- Data visualization and alarms
- WIFI enabled monitoring and control

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

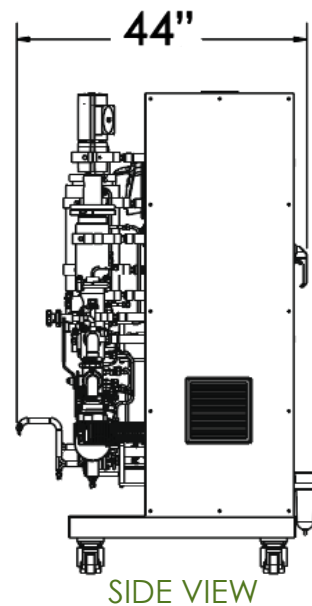
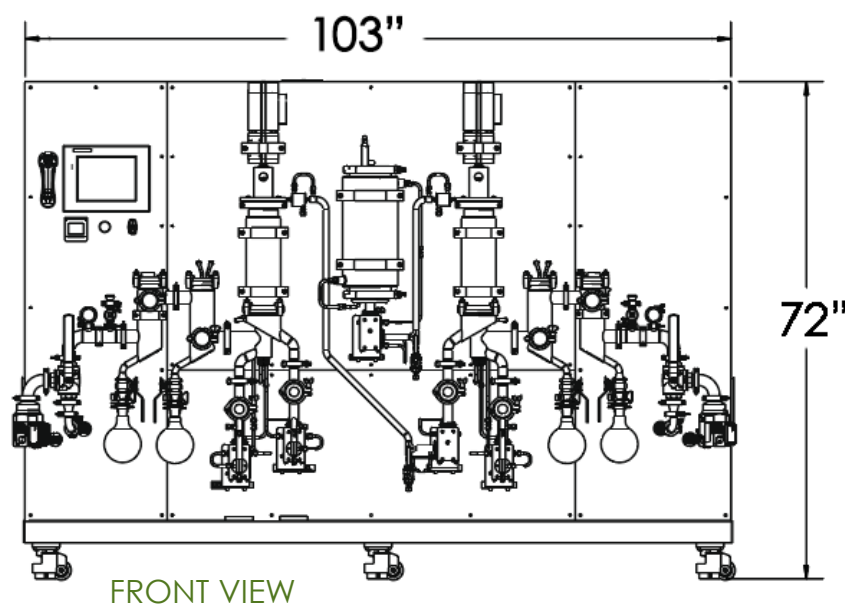
SPECIFICATIONS

ATTRIBUTE	VALUE
General Specifications	
Dimensions	L 103" x W 44" x H 72"
Shipping Weight	3500
Sound Pressure	<60 db
Electrical Specifications	
Voltage	208-240 volt
Frequency	60 Hz
FLA	80 amps
Phase	3
Certifications	UL 508A Listed
E-stop; Thermal Switches	Standard
Fluidics	
Feed Pumps	1
Condensate Pumps	2
Retentate Pumps	2
Feed Rate	up to 50 kg/hr
Control Interface	
Control Interface	HMI panel
Network Connectivity	Cat5e
Process Integration	igwLAB compatible
Data Logging	On screen
Mass Flow Monitors	Ultrasonic, mass
Alarms	Audio, Visual

ATTRIBUTE	VALUE
Installation and Training	
Included training & install	2 days
Warranty	
Quality and Labor	Parts & workmanship
Duration	3 years
Evaporators	
Distillation Vessels	2
Diameter	6"
Heating Jacket	All tubes, pumps
Power (kW)	9
Heating Range	38 – 260° C
Surface Area (cm2)	1819
Vacuum System	
Wiped Film Pressure (torr)	0.1
Short Path Pressure (torr)	0.001
Roughing Vacuum Pumps	2
Type	Oil-Free
Turbo Vacuum Pumps	2
Diffusion Pump	Optional
Condensers	
Number of Condensers	2
Condenser Surface Area (cm2)	606
Cold Finger	Yes, Inline

ATTRIBUTE	VALUE
Condensers (continued)	
Cold Finger Surface Area (cm2)	577
Cooling Range	-15 - -1° C
Chiller Fluid	35/65 glycol/water
Cooling Capacity	(1) 0.45kW at -35oC, (2) 0.5kW at 30oC
Feed Vessel	
Collection Vessel Volume	7L
Materials	
Metals	SS316
Speciality Polymers	Buna-N
	PTFE
	PEEK

LINE DRAWINGS



clearSTILL

extraktLAB

651-464-2822 | EXTRAKTLAB.COM 500 SIMMON DR. OSCEOLA, WI 54020

UNITED SCIENCE
www.uniscicorp.com