



DESCRIPTION

The E2W dewaxing skid provides an automated way to dewax extracts. The system is intended to interface with the E2Di system which will introduce conditioned extract into the E2W apparatus. The E2W skid features an automated ethanol mixing and dilution tank that is insulated and chilled with a recirculating glycol chiller. The filtration system features a two stage filtration housing with single stage falling film solvent recovery.



FEATURES



Interfaces with E2Di Skid



Automation of Batch Dewaxing of Extracts



Two Stage Vacuum Filtration



Integrated Falling Film Solvent Recovery



Optional Solid Phase Extraction Module



CIP Connections

EXTENDED

GMP COMPLIANCE

- Intended for use with ethanol and botanical extracts.
- Process: Dissolution, Mixing,
 Precipitation, Filtration, Solvent Recovery
- · Containment: Contained process
- Lubricants: None in direct contact. No contact with process fluids.
- PLC GAMP5: Category 3
- Materials Traceability & Manufacturers' DOC for Contact Materials
- Elastomeric Seals: PTFE, FEP, PEEK

SYSTEMS CLASSIFICATIONS

Dewaxing Skid

- Components: Vessels, Pumps, Vacuum Pumps, Falling Film Evaporator, Filter
- · Type: Direct Impact
- Documentation: GEP Startup, Commissioning, Qualification

Off Skid Components

- Chiller 1
- Chiller 2
- Heater 1
- · Type: Direct Impact
- Documentation: GEP Startup, Commissioning, Qualification

CLEANABILITY

- Surface Finishes: 0.8 µm or better on all contact surfaces
- · Welds: Ground, Argon Purged
- · Fittings: Sanitary
- · CIP: Sprayball, Low Point Fluid Exit
- · CIP: External

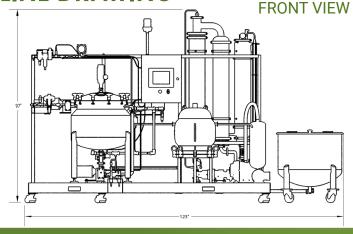
SPECIFICATIONS

ATTRIBUTE	VALUE	
General Specifications		
Dimensions (in)	L36" x W123" x H97"	
Unit Weight (lbs)	882	
Footprint (sq ft)	25	
Heat Load (kW)	0.9	
Mobility:	Leveling Casters	
Electrical Specifications		
Voltage (VAC)	208-230/380	
Full Load Amps (amps)	25A for 240V 35A for 380V	
Phase	3	
Frequency (Hz)	50/60	
Bonded & Grounded to all ex	xternal vessels required	
Off Skid Utilities Required		
Heater/Chiller 1, 1 zone	6kW @ 200°C 10.2 kW @ -40°C	
Chiller 2, 1 zone	5hp	
Heater 2, 1 zone, Recirculation, 1 zone	18kW	
Compressed Air for z purge, 80 psi, clean dry de oiled air		
CIP	off skid	
Compressed air for pump 32 cfm (psi)	80-150	
Off Skid Vessels Required		
Ethanol Source/Recovery Vessel		
Ethanol & Wax Waste Vessel	External	
Winterized Oil Containment		

ATTRIBUTE	VALUE	
Filter Housing		
Material	SS316	
Seal Type	PTFE	
Volume (GL)	5	
Quantity	1	
Filter Media Type 1	PFTE + Cellulose + Carbon Lenticular	
Bypass Valves	Sanitary, Manual	
Pressure Max/Min		
Pressure Transducer	Inlet, Outlet, Sanitary	
Chilled Vessel		
Volume (GL, max)	13	
Quantity	1	
Max Pressure (psi)	20	
Insulation	Vacuum Jacketed	
Mixer	Shear Mixer	
Solvent Ratio Control	Weigh Cells	
Inlet Tubing Connection	Compression	
Outlet Valve	Sanitary, Air Actuation	
Outlet Pump	Gear Pump, SS316	
Dilution Pump	Gear Pump, SS316	
CIP		
Type	External	
Connection	Sanitary	
Туре	Spray Ball	
Drain, Manual	Lowpoint, Drain	
Pump, Manual	Lowpoint, Drain	

ATTRIBUTE	VALUE	
Vessel to Filter		
Insulated 1.5"		
Sanitary Spool		
Falling Film		
Heat Exchnager	Tube, Shell	
Falling Film Pump	Gear	
Falling Film Condenser	Tube, Shell	
Falling Film Valves, Outlet	Manual On/Off	
Vacuum Pump	Recirculating	
Controls & Methods		
Transmission (mAmp)	4-20	
Recirculation Level Sensor		
Vessel 1	Vessel Level Sensor	
Vessel 1	Pressure Sensor	
Filtration	Pressure Sensor	
Falling Film	Pressure Sensor	
PLC-VFD Control of Pumps & V	alves	
Density Sensor		
Classification		
Class	Ex d e m IIA Gc, II 2G IIB T4	
Motors	Ex, ethanol	
Z Purge	Ex, Yes, Air Connection Required	
Sensors	Ex	
HMI Panel	Ex	
Certification		
ETL, UL 508A, CE, PED, NA		

LINE DRAWING



REQUIRED, SOLD SEPARATELY:

e-140 #10-0063 (240V) | #10-0099 (380V) *OR* e-180 #10-0010 (240V) | #10-0147 (380V)

E2Di #10-0174 (240V) | #10-0175 (380V)

Interface Vessel #10-0199 (240V) | #10-0200 (380V)

ALSO AVAILABLE, SOLD SEPARATELY:

#80-9621 | Factory Acceptance Test

#80-9622 | Site Acceptance Test

#80-9636 | Design Qualification

#80-9611 | Installation Qualification

#80-9612 | Operational Qualification

#80-9608 | GMP Equip. Commissioning & Training

#80-9606 | GMP Equip. Documentation Package

#80-9609 | Maintenance Package (12months)

Configuration & specifications may change. Please confer with your sales specialist for the latest version.

To Order: Extraction to Winterization Skid #10-0195 (240V) | #10-0196 (380V)

Recommended, Sold Separately:

Heater/Chiller, 1 zone: 6kW/10.2kW #80-4423 (240V) | #80-4424 (380V)

Chiller 2: 5hp, 35.2A #80-4018 (240V) | #40-4097 (380V) Heater 2: 36kW, Recirculating Oil #80-4096 (240V, 380V)

CIP Unit #10-0197 (240V) | #10-0198 (380V)



