BEAKER & WRENCH

Spec Sheet

12" Wiped-film

Skid Frame:

- + Dimensions (LxWxH): 76"[1.9m]
- x 30"[0.762m] x 85"[2.16m]
- + Weight:1,000 lbs [450Kg]
- + Material: Extruded Aluminum
- + 6" castors w/ brakes

Shipping Information:

- + Dimensions (LxWxH):
- 82.5"[2.01m] x 36.5"[0.93m]
- x 87.5"[2.22m]
- + Total Weight: 1200 lbs [545Kg]

Electrical Power Distribution Box:

- + Plug: SCAME SCM563P6W
- + Input Voltage: 240VAC 3 Phase with Neutral 60 Hz
- + External Circuit breaker: 60 amp
- + Nominal current: 24 amps
- Control Interface
- + Custom 27" high definition touch screen interface
- + automated controls
- + recipe folder
- +automated sensors and safeties
- +Error reporting
- +Software controlled Emergency shutdown

Feed Tank:

- + Volume: 200 Liter
- + Material: 316 Stainless Steel
- + double jacketed
- + Max Temp: [95°C]
- + Heater: water jacket with 2500kW heater

Feed Hose:

- + Length: 7'-0" [2.13m]
- + Voltage: 120VAC
- + Amps: 4.5 Amps
- + Max Temp: 450°F[220°C]
- + K-type sensor



Rotor:

- + Wipers: PTFE (Polytetrafluoroethylene)
- + Mesh Baffles: 316 Stainless Steel
- + Motor Voltage: 240VAC
- + Motor Amps: 4(Max)
- + Motor Watts: 1kw (Continuous)
- + Speed: 0-400RPM
- + Dust and Splash Resistant

Still Body / Wiped Film Evaporator: Residue heater:

- + Evaporation Surface Area: 1.1m²
- + Materials: 316 Stainless Steel
- + Heat Source: multi-zone Heat Band with independent thermocouples and control
- + Maximum Power: 12kWatts
- + Feed Inlet: KF25
- + Top and Bottom Connections: 12" sanitary flange

- + Insulation jacket included Internal condenser:
- + multi-finger hairpin condenser
- + Materials: 316 Stainless Steel
- + Vacuum port: NW80
- + Distillate port: KF25
- + Residue port: 1.50" Tri-clamp
- + 2.500w heater
- + Cooling capacity 8,000w @80c

120VAC, 0.78 amp, 150°C Max

K-type sensor

90W, UR Recognized Heat Pad Residue Outlet

Conical shaped Mesh cleanable filter Dual heat pads Clog Sensor

FALL 2023

Liquid level sensor Led lights

Condenser Circulator:

- + Model: BWC-A120
- + Bath Volume: ~12L
- + Bath Fluid: Beaker Kool
- + multi-fan & Radiator cooling system
- + Temperature range: 25 to 90°C
- + Temperature stability: ±1 °C
- + Heating capacity: 2.5 kW
- +Cooling capacity: 8kw @80c

Gear Pumps:

- + Voltage: 48VDC
- + Amperage: 5A
- + Max Rate: 50.0 L/Hr
- + Heater: 120v, 0.5amp, 120°C
- Max Temp, K-type sensor
- + 45w. UL Recognized Heat Pad
- + Check Valve Included

Dual Stage Cold Trap:

- + 2 stage cold trap optimized for maximum vacuum protection
- + Model: Huber TC100 & -100C + CC 508 -50C (1.5kw cooling @ 0c)
- + Temperature Range: -100 to 100°C
- + Model: KJ Lesker

Vacuum Gauge:

- + Calibrated traceable to NIST
- + Test for deep vacuum applications
- + Measurements Torr
- Min: 1.0×10-3
- Max: 1.0×103
- + Typical Accuracy: +3.0, -0.1mtorr
- 0.1 mTorr resolution
- ±10% of reading
- (1.0×10-3 to 400 Torr)
- ±2.5% of reading (400 Torr to atm)
- + Input Power: 12VDC, 0.04Amps
- + Communications (standard): Analog, RS232
- + Vacuum manifold Connection: (KF-16)

Vent Valve

120VAC Solenoid valve Stainless steel

100% duty cycle

Muffler included

Diffusion Pump:

- + Model: Agilent Varian HS-4 Water Cooled Diffusion Pump
- + Voltage: 240VAC-
- + Optimum Operating Range: $2 \times 10 - 3$ Torr (2.7 mbar) to $< 5 \times 10 - 10$
- 8 Torr (6.7 mbar) + Maximum Pumping Speed: 750 L/S. Air
- + Power Required (Approximately):

- 1450 W
- + Warmup Time: 20 minutes
- + Cooldown Time:
- Less than: 20 minutes to vent
- + Fluid: 300mL, all conventional
- and high performance pump fluids
- + Equipped with Diffusion Cooling System

Mechanical Vacuum Pump:

- + Model: ACS 100
- + Air Displacement: 57.0 CFM
- + Ultimate Pressure: 2×10-3 Torr
- + Motor Power: 2.22 kW (3.0 HP)
- + Voltage: 240vac
- + Power: 8 Amps





