

# IO EXTRACTOR

## FOOTPRINT ( L x W x H)

Skid: 50" x 56" x 70"

Chillers (2): 39.25" x 37.25" x 68.5"

Control Box: 20" x 9" x 24"

Water Pump Skid: 23" x 17" x 11"

Water Heater: 22" x 22" x 59"

Outdoor Cooling Tower: 54.375" x 54.375" x 63"

## DRY WEIGHT

Skid: 1065lbs

Chillers 1: 1036lbs

Chillers 2: 838lbs

Control Box: 42 lbs

Water Pump Skid: 35 lbs

Water Heater: 121 lbs

Outdoor Cooling Tower: 190 lbs

Total: 3322 lbs

## COOLING

(2) PID controlled recirculating chillers (-80°C)

-40°C	12kW
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-60°C	10kW
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-75°C	5kW
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Jacketed and insulated reactor and solvent tanks

## AUTOMATED CONTROLS

(16) pneumatically actuated valves

(6) temperature sensors

(4) pressure transducers

(10) liquid level switches

Pressure Safety Devices: (6) ASME Pressure Relief Valves

Solvent Pump: Electric Diaphragm (C1D1)

Vacuum Pump: 2.0CFM peak, 29.92in Hg

Hot Water Circulation: 1GPM at 140°F, 9kW

## ELECTRICAL SUPPLY

Control Panel	120V	Single Phase	2A
Hot Water Pump	120V	Single Phase	4.5A
Water Cooling Tower	240V	Single Phase	5A
Water Heater	240V	Single Phase	23A
Solvent Pump	240V	Three Phase	3.3A
Chiller 2	240V	Three Phase	50A
Chiller 1	240V	Three Phase	60A



HEATING: Recirculating Water Heater 9kW

PROCESS TEMPERATURE RANGE: -65°C to 0°C

PRESSURE RATING: 250PSIG

REACTOR CAPACITY: 32L liquid (43L total)  
28L plant feedstock

CYCLE TIME: 50 minutes (recipe dependent)

THROUGHPUT: 18 lbs dry feed stock, 25 lbs wet



SOLVENT: 100% Butane  
100% Propane

INTERFACE: 10.1" Touchscreen monitor

DISTILLATION COLUMN CAPACITY: 60L liquid (70L total)

VESSEL CERTIFICATION: ASME BPVC Sect. VIII U, UM

ELECTRICAL

CERTIFICATIONS: Control Box: UL508A

Skid Assy: Class 1 Division 1,  
FM/UL Intrinsic Safety