

## **Mobile Lab 2.0 Specifications**

## **Weight & Dimensions**

#### MOBILE LAB SPECIFICATIONS

#### Equipment

- Closed-loop cryogenic ethanol extraction system
- Ethanol recovery system
- Distillation system

The mobile lab consists of 3 separate rooms, which contain the mechanical, extraction and distillation areas.

### **Current Capabilities**

- Crude oil extraction
- Ethanol elimination
- Decarboxylation
- Distillation



## **Utilities (Electrical & Water)**

- Two 200-amp supplies (Total 400 amps), 240V (3-phase)
- 240v 3-phase shore power capability and proprietary custom designed, fully automated panel
- C1D2 lighting, plugs, cameras, warning lights, exit lights and air-sensors
- Two 200-amp 3 phase UL approved electrical panels
- Genset capabilities for self-contained power
- CSA / UL approved
- Equipped with 1/2" / 1.27 cm water line for cold water supply
- Equipped with a 1  $\frac{1}{2}$  / 3.8 cm drain for discharge



#### MOBILE LAB SPECIFICATIONS

## **Clean Room Construction C1D2 Spec**

- C1D2 clean room mobile processing facility designed to meet GPP, cGMP and EU-GMP standards
- FDA approved food grade flooring with seamless coved 6" | 15.24 cm baseboards
- Seamless waterproof wash-down fiberglass panel walls



## Heating Ventilation Air Conditioning System (HVAC)

- C1D1 oxygen displacement sensors & C1D1 air flow sensors
- In alignment with Health Canada GPP requirements for air quality and filtration
- Positive pressure, temperature-controlled processing room
- Alarm activated, automatic emergency air exchange that can cycle air in 30 seconds
- HEPA air filter that cleans air intake to the lab, equipped with real-time air quality monitoring and data logging
- · Carbon filters that clean exhausted air, reducing odors



# **Fire Safety**



FIRE SAFETY

#### **Overview**

- C1D1 integrated automatic fire suppression system is installed throughout the lab
- All building materials are non-combustible
- Built to meet North American AHJ (Authority Having Jurisdiction) fire regulations
- Doors are all fire rated steel doors and are equipped with triggered automatic door closures
- Fire-rated sliding door separating extraction and distillation rooms
- There are three different room within the unit. All electrical transits are sealed with a 4 hour burn rating
- Dampers are installed in HVAC system reduce the spread of fire
- Mobile lab can contain up to 75 gal | 284 L of food-grade ethanol, in a closed loop, cryogenic system that takes the ethanol below -40 Fahrenheit | -40 Celsius

\*Available to assist partners on requirements to meet regulatory standards / codes

#### **Ethanol Detection**

- Extraction and distillation room contains 2 C1D1 ethanol sniffers that will detect unsafe level of ethanol triggering a 'process stop' that will;
  - Signal alarm & stop all equipment
  - Release all door locks
  - Start emergency air exchange

### **Integrated Fire Suppression System**

- Each of the 3-rooms in the lab are equipped with integrated automatic fire suppression that meets the following certifications.
  - MED, NEC, OSHA
  - NFPA 58 and 70 2014
  - International Fire Code 2015
- Smoke detectors and manual pull stations are in each area.



#### FIRE SAFETY

#### **Integrated Fire System Information**

- The system uses multi-purpose Dry Chemical Fire Extinguishing Agent.
- The integrated system holds UL listings and FM Approvals as a pre-engineered system.
  Systems designed and implemented according to the following:
  - NFPA Standard 17, "Standard for Dry Chemical Systems"
  - NFPA Standard 33, "Standard for Spray Applications Using Flammable or Combustible Material"
  - Other applicable NFPA standards as required for a particular application and design, including, but not limited to, NFPA 70 (NEC) and NFPA 72, Fire Alarm Standard.
  - The Design, Installation, Operation, and Maintenance Manual indicated on the cylinder nameplate.
  - Any other standards enforced by a local AHJ (Authority Having Jurisdiction).

# Security

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#### SECURITY

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- Our security systems were developed in collaboration and guided by the world's leading authorities, Cannabis Global Consultants (Hyde Advisory & Investments Inc), and Eurofins.
- The lab is equipped with a 24/7 monitored alarm system for fire, theft, and break-in, plus a wearable panic alarm for operators -- *continually monitored alarm system contracted by 3rd party vendor.*
- Five external cameras and internal C1D1 cameras and monitors that are recorded to cloud storage.
- Entry doors are locked both with standard manual door locks, plus both internal and external swipe-access electronic mag locks, integrated into the fire system to unlock in the event the fire alarm is triggered.



#### **Single Lab Floor Plan Sample**





## Single Lab Layout

Note:

It is ideal to have a minimum of 60" / 152cm around to lab to allow for ease of movement



#### **Mobile Lab Configuration Measurements**

*Note:* The casters used to move the lab into place add 12" / 30cm of height to the unit



#### **Minimum Door Height Requirements**

Outside roll-up door at extractX partner facility



# Thank you for your consideration



Disclaimer: This Presentation is for informational purposes, extractX is continually improving its capabilities the content of this document is subject to change