



## **Supercritical CO2** Extraction Pump System

# e710

In response to the burgeoning market demand for environmentally friendly extraction processes for a wide range of natural oils and foods, High Pressure Equipment Company has developed the **e710** supercritical **CO2** extraction pump system.

This ATEX, FM, and IECEx certified system features an electric CO2 extraction pump specifically designed for CO2 circulation to recover 100% of the CO2 vapor when used with recovery tank cooling. The e710 offers a small footprint (17.0" x 20.4" base x 58" high) with the electric motor providing quiet operation. HiP's patented pump/drive technology is the industry's first high pressure electric pump system that does not require an air compressor and uses an explosion-proof motor rated for C1D1 areas. The e710 pump can provide a continuous 100% duty cycle for 24/7 operation with constant pressure or constant flow control. The system is designed to process liquid condensation without damage and to pull vacuum back through the pump when evacuating a system.

### e710 Supercritical CO2 Extraction Features:

- Environmentally friendly extraction process
- Ideal extraction process for natural oils, foods and cannabis
- ATEX, FM and IECEx Certified supercritical CO2 extraction pump system
- Positive displacement CO2 extraction pump
- Designed specifically for CO2 circulation
- Recovers 100% of CO2 vapor when used with recovery tank cooling
- Pull vacuum back through the pump when evacuating a system
- Passes liquid condensation without damage

# **EXTRACTION Pump System**Supercritical CO2 Extraction Pump System

### e710 Electric Pump System Features:

- Explosion-proof motor rated for C1D1 areas
- Control technology drives the pump to a constant pressure or flow
- Three-phase and single-phase models available
- Continuous 100% duty cycle run 24/7
- No air compressor needed
- Patented pump drive technology
- Stall under pressure without damage
- Start against full load and pressure
- No driving air used, cannot leak air into the system
- Maximum pumping pressure output and/or flow is adjustable
- No lubrication in the pump heads; no contamination of product
- Compliant with ATEX, FM and IECEx standards for C1D1 motors
- Meets Class 1 Division 1 hazardous area facility requirements (when installed correctly)
- PLC control for remote operation

| Dura Flo Pump     |         |                     |                     |
|-------------------|---------|---------------------|---------------------|
| E Flo<br>DC Motor |         | 220 cc              | 145 cc              |
|                   | 240 VAC | 1.16 GPM @ 2030 psi | 0.77 GPM @ 3040 psi |
|                   |         | 4.4 LPM @ 140 bar   | 2.9 LPM @ 210 bar   |
|                   | 480 VAC | 1.16 GPM @ 2741 psi | 0.77 GPM @ 4104 psi |
|                   |         | 4.4 LPM @ 189 bar   | 2.9 LPM @ 284 bar   |





#### **C1D1 Certifications**

ATEX/FM/IECEx

#### **Motor Controls**

- Constant Pressure
- Constant Cycle Rate/Flow

#### **Motor User Interface**

- · Basic (knobs)
- Advanced (pendant or PLC)

#### **Motor Output Options**

240 VAC Eflo DC

- 2520 lbf
- 20 cpm

480 VAC Eflo DC

- 3392 lbf (1.35x)
- 20 cpm

#### Fluid Pump

Dura Flo 2-Ball Piston

- Sizes: 145, 220 cc
- Packings: PTFE/UHMWPE
- Check Seat: Tungsten Carbide
- Check Ball: 440 SST
- Rod: 17-4 PH SST w/Hard Chrome
- Cylinder: 304 SST w/Hard Chrome
- Housings: 17-4 PH SST

To learn more about the **e710 supercritical CO2 extraction pump system**, visit us online, email pumps@highpressure.com or give us a call today at **800-289-7447**.



www.HighPressure.com/e710