

## ALMATEC CHEMICOR PUMPS FOR HIGH VISCIOUS CANNABIS OIL TRANSFER

### THE CHALLENGE

A new cannabis processing facility in Southern BC needed a pumping solution to move highly viscous cannabis oil throughout their processing equipment. The pump needed to lift the oil with a low flow rate of < 2 l/m and handle the high viscosity and high temperature of 8,000 cSt @ 110°C - 10,000 cSt @ 80°C.

### THE SOLUTION

Our application experts—Alex Tarahomi and Stephen Sinclair—considered three different pump technologies that could all meet the application’s requirements: gear pumps, peristaltic pumps, and AODD pumps.

After discussion with our Customer and with careful consideration of time and budget constraints, an Almatec Chemicor AODD pump was selected.

The Almatec AODD pump isn’t as expensive as the FDA compliant gear pump and there are fewer replacement costs, e.g., there is no need to replace a hose due to high temperature wear like there is on a peristaltic pump.

The Almatec AODD Pump is quick and easy to install and safe for Area Classification C1D2.

Also, since there are no drives, rotating parts or shaft seals in the pump, there is reduced maintenance time and costs. And, thanks to the optimized flow pattern that decreases air consumption and noise, there would be additional energy cost savings.

### THE RESULTS

- ▶ Reduced Maintenance Downtime
- ▶ Increased Energy Savings
- ▶ Increased Production

**For more information on this solution or if you have a fluid handling challenge of your own - Contact a John Brooks Company Application Expert today!**



## CANNABIS PRODUCTION | VISCIOUS OIL TRANSFER ALMATEC AODD PUMP SAVES MONEY ON MAINTENANCE COSTS AND REDUCES DOWNTIME

### TECHNOLOGY UTILIZED

Almatec CHEMICOR Series - Model AD20STT-E-T

- ▶ Dimensions (mm): Length 154 | Width 150 | Height 241
- ▶ Nominal Port Size (BSP): 3/4"
- ▶ Air Connection (BSP): 1/4"
- ▶ Weight (kg): 6
- ▶ Suction Lift, Dry (mWC): EPDM Ball Valves: 2 | PTFE Ball Valves: 1
- ▶ Suction Lift, Wet (mWC): 9
- ▶ Max. Driving and Operating Pressure (bar): 7
- ▶ Max. Operating Temperature (°C): 130
  - ▶ With Center Block in Conductive PE (X): 80
  - ▶ With NBR Equipment: 80
- ▶ Theoretical Displacement Volume Per Single Stroke (l): 0,1
- ▶ Sound Pressure Level Acc. to DIN 45635, Part 24, Depending on Operating Data [dB (A)]:
  - ▶ Driving Pressure 3 bar: 68-71
  - ▶ Driving Pressure 5 bar: 73-75
  - ▶ Driving Pressure 7 bar: 74-78

### HOW THE ALMATEC AODD PUMP WORKS

- The basic configuration of an Almatec® air-operated double-diaphragm (AODD) pump consists of two external side housings with a center housing between them.
- Each of the side housings contain a product chamber separated from the center housing by a diaphragm, which are interconnected by a piston rod.
- Governed by an air control system, the diaphragms are alternately subjected to compressed air so that they move back and forth.