

CRAFT BEVERAGE SOLUTION

Small scale carbon capture technology.

CiCi[®]Elm



Reduce CO₂ costs, delivery fees, surcharges, force majeure pricing



Reduce risk of revenue loss due to CO₂ shortages and supply chain volatility



Reduce CO₂ emissions & advance carbon net zero goals



Improves safety of operations

CO₂ Capture Potential by Elm Model Type

Models	Total CO ₂ Volume Est.	Range CO ₂ Capture per Hour
CiCi® Elm-150	600 tonnes	40-68kgs/hour processing rate *capable to turn down to 30 kgs/hr
CiCi® Elm-300	1,200 tonnes	80-135kgs/hour processing rate *capable to turn down to 70 kgs/hr

^{*}If needs exceed this range, Earthly Labs can customize ${\rm CO_2}$ capture solutions to meet a clients needs.

Modular Design for Leaders Seeking to Reduce, Reuse, and Recycle CO₂ Emissions



Capture CO₂ from your fermentation and brite tanks

- Modular, standard skid design fits in small spaces and can be co-located or placed in multiple cellars
- Stainless steel design rated for indoor or outdoor placement
- Low energy and water usage to reduce other utilities and ensure carbon positive results
- Sensors measure oxygen, moisture, purity targets
- Automation to control CO₂ gas flow and vent processes
- Leverages Earthly Labs real-time CO₂ capture software to track, monitor and report CO₂ captured
- CO₂ Purity Capabilities: Yields beverage grade
 CO₂ 99.9% or better





Ways to Accelerate a Total Return on Investment (ROI)



Tie into existing automation

- Pre-fabricated components and standardized solution offers shorter delivery and installation time
- Regeneration of scrubbing media to reduce operating costs (OPEX)
- Leverage existing stainless piping, smart foam traps, CO₂ automation and CO₂ storage tanks
- Open skid design for routine maintenance access
- Lock-in Frame Cartridges enable ability to scale gas processing with growth
- Chart best in class pressure vessel design, manufacturing and welding



Leverage existing or new Chart bulk CO2 tanks



Leverage existing smart foam traps

Utilities to be provided by client:

- Mains power supply
- Glycol
- · Instrument Air
- Deoxygenated Water

Chart has an ambitious goal to reduce Greenhouse Gas (GHG) intensity by 50% before 2030 and achieve carbon neutrality by 2050. For latest news and product details visit: chartindustries.com/earthlylabs



