

## **CRAFT BEVERAGE SOLUTION**<u>Small scale carbon capture technology.</u>

## CiCi<sup>®</sup>Elm



Reduce CO<sub>2</sub> costs, delivery fees, surcharges, force majeure pricing



Reduce risk of revenue loss due to CO<sub>2</sub> shortages and supply chain volatility



Reduce CO<sub>2</sub> emissions and advance carbon net zero goals



Improves safety of operations

### CO<sub>2</sub> Capture Potential by Elm Model Type

Models	Total CO <sub>2</sub> Volume Est.	Range CO <sub>2</sub> Capture per Hour
CiCi® Elm (5X)	657,000 lbs	45-75 lbs/hour processing rate
CiCi® Elm (10X)	1,310,000 lbs: 90	150 lbs/hour processing rate)
CiCi® Elm (15X)	1,971,000 lbs	135 -225 lbs/hour processing rate
CiCi® Elm (20X)	2,628,000 lbs	180 – 300 lbs/hour processing rate

\*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 CO<sub>2</sub> Emissions



Capture CO<sub>2</sub> 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 CO<sub>2</sub> gas flow and vent processes
- Leverages Earthly Labs real-time CO<sub>2</sub> capture software to track, monitor and report CO<sub>2</sub> captured
- CO<sub>2</sub> Purity Capabilities: Yields beverage grade CO<sub>2</sub> 99.9% or better



# CICIEIM Carbon Capture Technology

### Ways to Accelerate a Total Return on Investment (ROI)



Tie into existing automation

- Pre-fabricated components and standardize solution offers shorter delivery and installation time
- Regeneration of scrubbing media to reduce operating costs (OPEX)
- Leverage existing stainless piping, smart foam traps and CO<sub>2</sub> Automation and CO<sub>2</sub> storage tanks
- Green Incentives Report to identify federal, state, local, city R&D tax incentives, rebates, property and sales tax incentives, and grants (US Focus)
- Open skid design enable access for maintenance
- Lock-in Frame Cartridges enable ability to scale gas processing with growth
- Chart's vertically integrated pressure vessel welding and manufacturing capabilities ensures quality to ensure long-lasting value



Leverage existing or new Chart bulk CO2 tanks



Leverage existing smart foam traps

#### Utilities to be provided by client:

- 480V 3-phase Power
- Glycol
- Instrument Air
- Deoxygenated Water

In 2021, Chart Industries set ambitious goal to reduce greenhouse gas intensity across company owned operations by 30% by 2030 and achieve carbon neutrality by 2050. We are committed to meeting the world's need and that of our customers.

For latest news and product details visit: chartindustries.com/earthlylabs



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