

Meet CiCi®

CiCi® enables customers to affordably capture carbon dioxide emissions with a patented purification technology that transforms a mixed gas waste stream to value, while simultaneously reducing greenhouse gas emissions.

Captured carbon dioxide can be returned to meet or exceed food and beverage standards at 99.9% purity or greater.

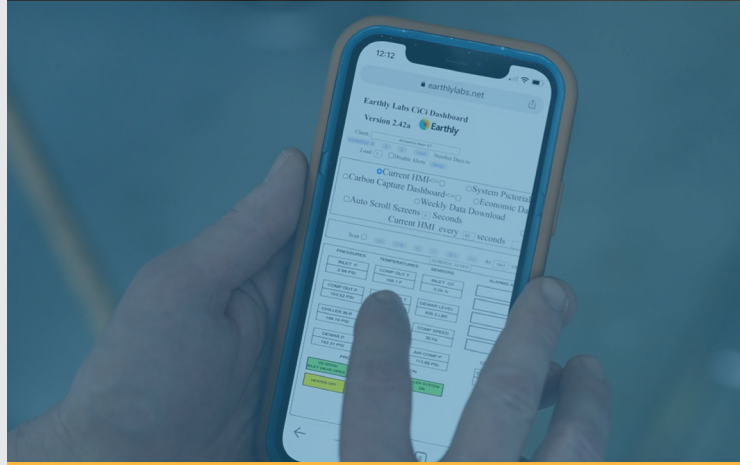
Three step process; gas is dried to remove moisture, scrubbing removes volatile organic compounds (VOCs) and other impurities, and chilling to below -34.7°C converts gas to liquid carbon dioxide for storage.

CiCi® is available in 3 models; **Teak**, **Oak** and **Elm** according to capacity and site requirements.

Turndown capability to match fluctuating production cycles.

Features

- Safe operating pressures
- Standard, modular designs fit into small spaces
- Rated for indoor or outdoor placement
- Sensors measure oxygen purity targets
- 24/7 unmanned operation
- Low energy and water usage
- Integrates seamlessly with Chart's liquid carbon dioxide storage and distribution product portfolio
- Proven technology with installations across 3 continents



Emissions Monitoring and Reporting Software

Leverages Earthly Labs real time carbon capture software to track, monitor and report carbon dioxide captured. The remote dashboard allows your team to access via smartphone or desktop and run reports offline.

Providing the Complete Carbon Capture Solution

- All inclusive pricing. No hidden costs. Finance options available
- Bundle pricing including Chart manufactured liquid CO₂ tanks and vaporizers
- UK assembly with pan European service centres
- Tree Tracker® and Howden Uptime® for CO₂ recovery dashboard, regulatory reports, tax credit reporting and marketing and tax credit reporting



Small-scale carbon capture solutions for craft breweries, wineries and distilleries.



Earthly Labs CiCi® technology creates a circular economy affordably capturing, purifying and liquefying carbon dioxide for re-use, improving sustainability, reducing costs and mitigating against supply chain issues.



www.earthlylabs.com

EarthlyLabsEurope@chartindustries.com

CiCi® Teak

Specifications

Most suited to **Brew Pubs** with annual production **2k to 6k hL**

Annual CO₂ recovery: 9 to 27 tonnes

Dimensions (width x depth x height):
97 x 125 x 197cm

CiCi® Oak

Specifications

Most suited to **Production Breweries** with annual production **6k to 30k hL**

Annual CO₂ recovery: 27 to 135 tonnes

Dimensions (width x depth x height):
152 x 122 x 213cm



CiCi® Elm

Specifications

Most suited to **Large Craft Breweries** with annual production **30k to >200k hL**

Annual CO₂ recovery:

- Elm-150: 135 to 600 tonnes
- Elm-300: 600 to 1200 tonnes

CO₂ Capture

- Elm-150: 40 to 68 kgs/hr
- Elm-300: 80 to 135 kgs/hr



CiCi Solution Components



Foam Trap & Smart Foam Trap

Capture CO₂ from fermentation vessel and maintain pressure



CO₂ Storage

Hold recovered CO₂ liquid and can be used to capture and carbonate at the same time



Vaporizer

Revaporize to boost CO₂ flow to meet carbonation needs



CO₂ Monitoring Software

Both within CiCi and via mobile, track real-time performance data and alerts while providing CO₂ volume data



Captured CO₂ can be used for tank purging, carbonation, conversion and dry ice production. Chart CO₂ storage solutions can be leased offering providing additional flexibility during the harvest season.