



# Beverage Equipment

Call for your obligation free quotation:

AU: 1800 209370 NZ: 0800 284647 info@viniquip.co.nz www.viniquip.com



# Secure Own Food Grade CO<sub>2</sub> Supply

High quality CO<sub>2</sub> from your own controlled source

Stainless Steel and Oil Free Compressor Technology

No Refrigerants in Unit

**Food Contact Materials Used** 

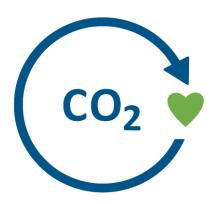
Easy to use and maintain From 1.000 barrels/Y





# Craft Scale CO<sub>2</sub> Recovery

Sustainable and natural CO<sub>2</sub> for your beer



**Environmentally Friendly Financially Feasible** 

# DALUM CO2 recovery plant

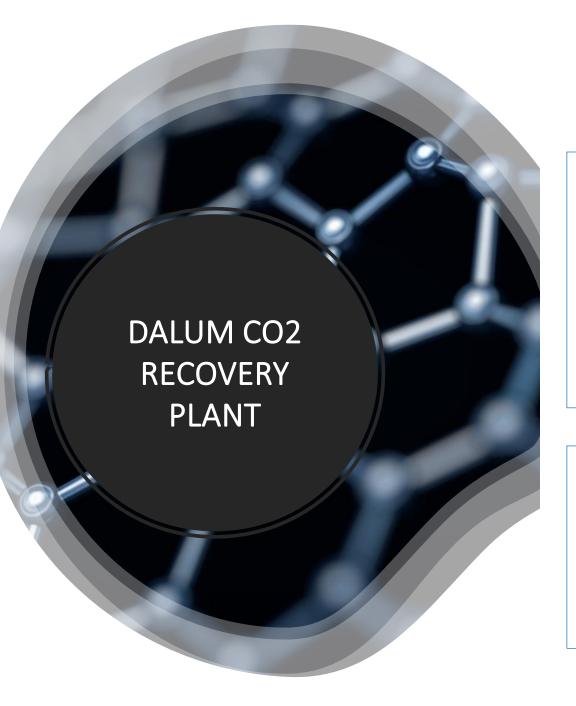


### **Top Quality CO2 and Delivery Safety**

- No Oil, Chemicals filters or refrigerants in CO2 Unit
- Stainless Steel and Oli Free DALUM Compressor
- Only Food Contact Materials in contact with CO2
- 99,98% purity and no detectable odor in product
- Oxygen traces in ppb
- Own control of CO2 source and security of supply

### Plug and Play unit ready to go

- Fully assembled and tested unit ready to plug inn.
- Water, electricity, coolant and drain to be connected.
- No vendor installation and commissioning hours needed.
- No PED or ASME needed for plant
- \*\* Storage tanks for liquid CO2 needs approvals and inspections.





### Easy to fit in

- Very small footprint of plant(1m²)
- Low noise level (65 dB) and can be placed anywhere in the brewery
- No balloon due to DALUM Compressor with 100% variable speed
- No hazardous ammonia or CFC refrigerants as external cooling source is used

### **Environmentally friendly**

- Low consumption of power and water
- Improving working environment in brewery
- Eliminates breweries possible largest CO2 emission source, 2 tons less emission per tons recovered
- Eliminates breweries purchase and transport of CO2





### Easy to use and maintain

- Simple and fully automatic operation with self diagnosing software
- Adapts automatically capacity to fermentation cycles
- No consumables to be replaced regularly
- Dashboard on Smartphone and remote access

### **Financially Feasible**

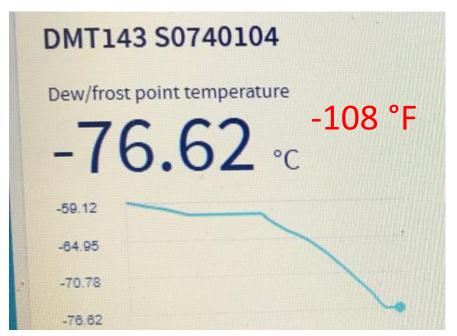
- Low capex and short return on investment for 2.000 40.000 hl breweries
- Reduces cost of CO2 considerable and secures supply
- Increase surplus CO2 value by cylinder filling for beer dispensers for draft beer.



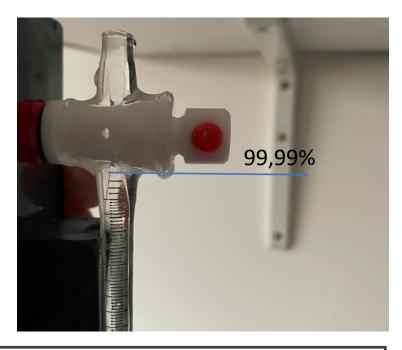




# DALUM CO2 Unit Overview







### Eddie Gadd, Ramsgate Brewery:

collection system (generally 16 hours from yeast pitching). Some  $CO_2$  is lost through the initial stage of fermentation, due to high  $O_2$  content, and some remains in the beer at the end. With good management, 75% yields have been achieved, with an oxygen content of <6 ppb, measured with an Orbisphere (wholesale liquid  $CO_2$  at the bottling site measures 16 ppb  $O_2$ ). A burette is used to demonstrate purity >99.99%.

# High purity and very low Oxygen content

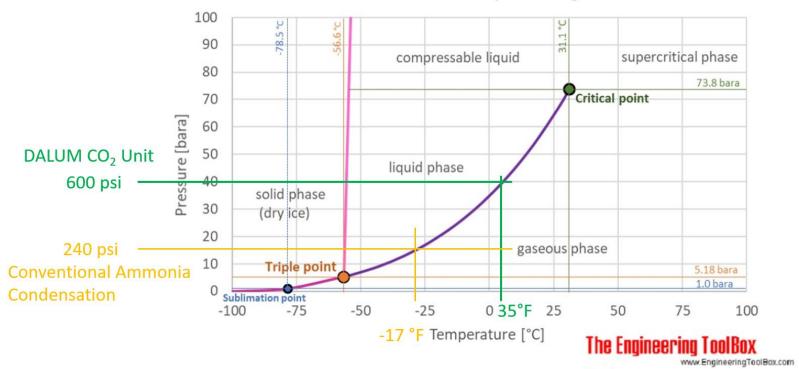






Oil Free, sanitary, variable speed, low noise

### Carbon dioxide phase diagram

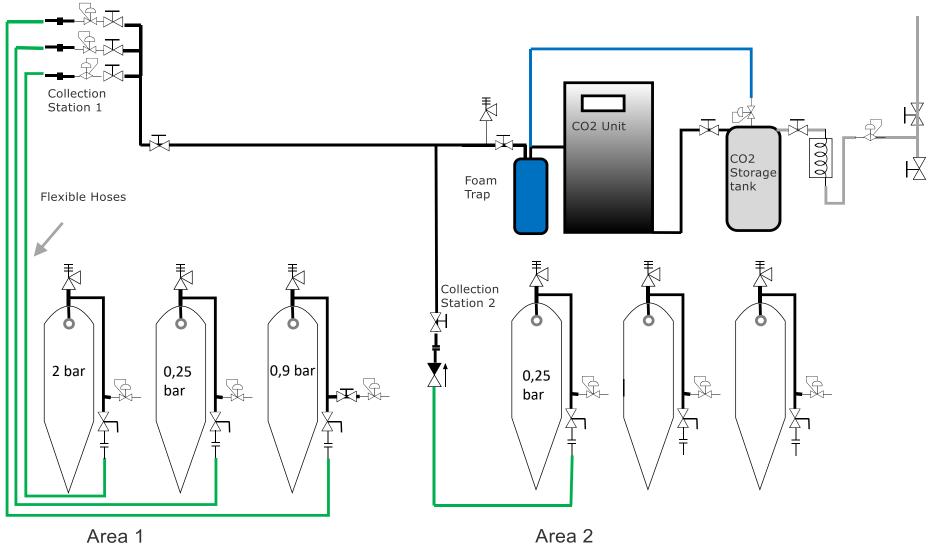


No Refrigerants in CO<sub>2</sub> Unit Three stage compressor produces 690 psi condensation pressure

# **System overview**



CO2 to Users





# DALUM 10 kg/h CO<sub>2</sub>-Unit





CO<sub>2</sub> gas max 1% O<sub>2</sub> / 96% CO<sub>2</sub>

3x 400 V, 50 Hz, 3 kW installed

Water ca. ¼ – 14 gallon/h 40 - 55 °C

Cooling -4 to 2 °C, 12 l/min, 2 kW cooling energy (0,5 kW)



99,98% liquid CO<sub>2</sub>, 1 – 10 kg/h, 0-30 °C

Cooling return

Drain Water 20 °C

Incondensable gasser

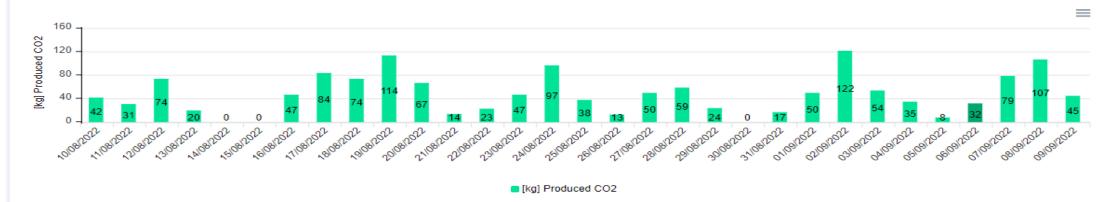
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Control System with Unitronics Vision Combi PLC





Compressor Temp







# Tank solutions for all needs







# Collection Stations





## Pressure relief valve

- Excess CO2 vent
- Tank Flash gas return

Sold, serviced and supported in Australia and New Zealand by:



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