



MORE QUALITY, LESS ENERGY



# $CO_2$ **OUR UNIQUE SOLUTION**



More efficiency and cost saving in ice cream

TEKNOFREEZE CO<sub>2</sub> Choosing CO<sub>2</sub> as refrigerant gas is the way of the future It boosts the performance of the Choosing CO, as refrigerant gas is the way ice-cream-making process, improves the quality thanks to smoother texture and **better color** separation in particular during the extrusion phase and increases the adaptability it offers for a diverse range of recipes.

WHY CO<sub>2</sub>



Eco-friendly: Zero Finest Ice Ozone Depletion Cream Quality



Hardening Time highly



Saving: high efficiency refrigerant

ice cream

→ more

Higher productivity

→ better Smaller ice crystals → greener

Eco-friendly refrigerant

→ safer Low global warning potential

# **TEKNOFREEZE CO<sub>2</sub>**

#### Many options, one goal

All TEKNOFREEZE are designed to grant the best results and meet customer's priorities and requirements.

# Capacity\* up to 4000 l/h (1057 US gal/h) with 100% overrun

The Teknofreeze CO<sub>2</sub> models can satisfy any ice cream producer's volumes.

#### **IT OFFERS**

- Easy installation
- Low production startup waste
- Low operational costs
- Low energy costs
- · Wide capacity range

#### + PLUS

- Low maintenance Lobe Pumps
- All motors driven by inverters
- 100% electronically controlled operations
- Improved product quality
- Reduced hardening time



TECHNICAL DATA   TEKNOFREE	ZE CO <sub>2</sub>	1 x 700	2 x 700	1 x 1000	2 x 1000	1 x 2000	2 x 2000				
PRODUCTION CAPACITY RANGE at -5°C (23°F)	l/h	50 - 700	50 - 1400	100 - 1000	100 - 2000	250 - 2000	250 - 4000				
	gal/h	13 - 185	13 - 370	27 - 264	27 - 528	66 - 528	66 - 1057				
AVAILABLE VOLTAGE CONFIGURATIONS		400 Volt   50 Hz   3 Phases (220 Volt   60 Hz   3 Phases, 480 Volt   60 Hz   3 Phases)									
REFRIGERANT GAS TYPE		R744 (CO <sub>2</sub> )									
REQUIRED REFRIGERATION CAPACITY (-30°C) (-22°F)	kW	17	34	26	52	54	104				
TOTAL INSTALLED POWER	kW	7	13.5	8	14	13	23				
NET DIMENSIONS I/w/h	mm	1850 / 820 / 2100	1850 / 820 / 2100	1850 / 820 / 2100	1850 / 820 / 2100	2500 / 950 / 2100	2500 / 950 / 2100				
	ft	6'06" / 2'69" / 6'88"	6'06" / 2'69" / 6'88"	6'06" / 2'69" / 6'88"	6'06" / 2'69" / 6'88"	8'20" / 3'11" / 6'88"	8'20" / 3'11" / 6'88"				
WEIGHT	kg	690	890	950	1090	760	1050				
	Lbs	1521	1962	2095	2403	1676	2315				

Allen Bradley version available. UL certified available.

Important: all technical data refer to the use of a standard recipe with at least 35% of solids, 100% overrun and inlet mix temperature at +4°C

Data may vary for double extraction lobe pumps option. All models are available with double extraction lobe pumps.

\*Performances are based on the following standard ice cream recipe: Fat: 8-10%. Skimmed milk powder: 10-11%. Sugar (sucrose): 12%. Glucose syrup: 5,5%. Stabilizer/emulsifier: 0,4 - 0,5%. Water: 64,1 - 61,0%. TOTAL: 100%. By changing the percentages of ingredients the result obtained could be different. Maximum recommended overrun on above recipe is: 100%.

# **Teknofreeze CO<sub>2</sub>**

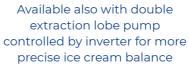
- > 2X700
- > 2x1000
- > 2x2000

### Twin Flavor

The use of double cilinders enables the simultaneous preparation of two distinct recipes or the enhancement of production speed by doubling the production of the same flavor, ensuring accurate and uniform distribution of product volume into each container.









Expand the range of recipes thanks to lobe pumps: feel free to add fibers, small seeds and other small inclusions up to 3mm.

# **CO<sub>2</sub> MODULAR APPROACH**

# Growing together and protecting your investment

Our modular approach provides a unique solution that allows small to medium operations to begin with standalone freezers without the need for an initial investment in a centralized freezing system.

Our unique offering includes a module to start with self-contained freezer, removable when scaling up to a centralized freezing

This module allows the freezer to work without a centralized CO<sub>2</sub> distribution in the

system.



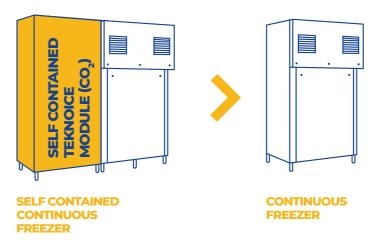


# TEKNOICE CO<sub>2</sub> MODULE a module to start

Without needing centralized CO<sub>2</sub> distribution

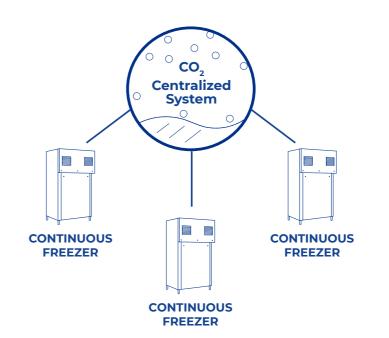
With our "Protect the Investment" philosophy, there's no need to replace the freezer as you expand.

Simply remove the module and the freezer is ready for connection to a centralized



# **Centralized CO<sub>2</sub>** system

As your business grows, moving to a CO<sub>2</sub> centralized refrigeration system becomes economically viable: your freezer is ready for that, just remove the module and connect to the centralized system.



#### + PLUS

- Flexibility
- Lower initial investment
- Easy to relocate

# **TEKNOFREEZE FREON**

Capacity\* up to 2000 l/h (528 US gal/h) with 100% overrun

#### + PLUS

- All motors driven by inverters
- 100% electronically controlled operations
- Semi-hermetic compressors
- Adjustable refrigeration capacity
- Low maintenance Lobe Pumps
- · Improved product quality
- High hygiene and sanitation standard compliant





Expand the range of recipes thanks to lobe pumps: feel free to add fibers, small seeds and other small inclusions up to 3mm.



Electromechanical version available

## **Teknofreeze freon**

### > Deep ice

#### + PLUS

- Works with all mixes
- Finer ice crystals
- Increased creaminess





#### **Double freezing barrels**

TEKNOFREEZE DEEP ICE is provided with two freezing barrels: the first for pre-freezing and the second for final freezing of ice cream. The double stage freezing grants a fine structure with smaller ice crystals, resulting in a final better quality.

TECHNICAL DATA   TEKNOFREEZ	E FREON	TF 450	TF 700	TF 900	TF 1800	Deep Ice			
PRODUCTION CAPACITY RANGE at -5°C (23°F)	l/h	90 - 450	150 - 700	200 - 900	250 - 1800	400 - 2000			
	gal/h	24 - 119	40 - 185	53 - 238	66 - 476	106 - 528			
AVAILABLE VOLTAGE CONFIGURATIONS		400 Volt   50 Hz   3 Phases (220 Volt   60 Hz   3 Phases, 480 Volt   60 Hz   3 Phases)							
REFRIGERANT GAS TYPE		All type of Freon							
REQUIRED REFRIGERATION CAPACITY (-30°C) (-22°F)	kW	9,35	12,7	18,2	32.6	54.6			
TOTAL INSTALLED POWER	kW	13,1	19,4	24,4	43,5	63			
NET DIMENSIONS I/w/h	mm	1600 / 700 / 1775	1600 / 700 / 1775	1600 / 700 / 1775	2375 / 1045 / 2065	2900 / 900 / 2000			
	ft	5'24" / 2'29" / 5'18"	5'24" / 2'29" / 5'18""	5'24" / 2'29" / 5'18"	7'79" / 3'42" / 6'77"	9'51" / 2'95" / 6'56"			
WEIGHT	kg	580	615	705	1300	2200			
	Lbs	1279	1356	1555	2867	4851			

#### Important: all technical data refer to the use of a standard recipe with at least 35% of solids, 100% overrun and inlet mix temperature at +4°C in the contract of the use of a standard recipe with at least 35% of solids, 100% overrun and inlet mix temperature at +4°C in the contract of the use of a standard recipe with at least 35% of solids, 100% overrun and inlet mix temperature at +4°C in the contract of the use of a standard recipe with at least 35% of solids, 100% overrun and inlet mix temperature at +4°C in the contract of the use of a standard recipe with at least 35% of solids, 100% overrun and inlet mix temperature at +4°C in the contract of the use of a standard recipe with at least 35% of solids, 100% overrun and inlet mix temperature at +4°C in the contract of the use of a standard recipe with a standa

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## 100% IN-HOUSE DEVELOPED SOFTWARE



Available in 14 languages



Stores up to 100 recipes



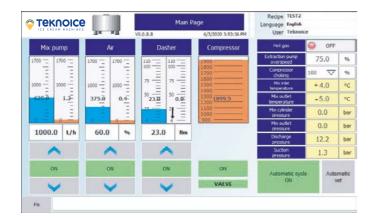
## **Interactive**

Control of all performances and adjustment of main settings:

- Ice cream temperature
- Refrigeration
- · Mix and extraction pumps
- Overrun
- · Capacity min/max.

Full control of the pumped mix and of remaining quantity in the tank.

Expansion valve electronically adjustable from PLC with possibility of saving relevant settings in the recipe.



## **OUR ASSISTANCE**

All Teknoice's machines are built with high quality materials and parts however at some stage all equipments requires maintenance.

We understand the importance of optimizing costs and downtime during these times.

Should a problem arise, all our customers can be assured that our support team is ready and available to assist.

A Teknoice team member will be closer than you think!



## **Full time support**

Our dedicated team is always contactable to assist you with prompt and precise solutions.



## **Always connected**

Thanks to our Teleservice, many issues can be solved in no time and without waiting for a team member to be in your region. You can connect with our support team remotely, so they can check all settings and values, as well as errors highlighted by the machine and find a solution.



### **Spare parts**

determine the part you need.

Our spare parts team provide timely feedback and special offers that can prevent problems or help with general maintenance. We always aim for 100% customer satisfaction. Specific catalogues are available to easily





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