# **GGMC** Green Group Machinery Compact







green-group.eu

### About GGMC

GGMC is mobile machinery developed and manufactured by Green group, experts in industrial refrigeration since 2006. Talking with clients we noticed, that not all of them have possibility to build new compressor rooms. We suggest this solution, which is not requiring a lot preparation from client and can be easy integrated to any systems.

All equipment is builded in sections mounted inside of 45 ft shipping container and on the special platform, top of the container. According logistic issue platform with equipment can be dismounted and easily assembled again at the customer place.

### **Advantages**

- Simple installation
- \_\_\_\_ Saving footprint
- Reinforced frame \_\_\_\_
- \_\_\_\_ Liquid resistance floor
- Ventilation system \_\_\_\_
- \_\_\_\_ Inside temperature control
- Leakage sensor and other safety systems
- Water treatment system \_\_\_\_
- Fully insulated pipes and components \_
- \_\_\_\_ PED 2014/68/eu and CE approval
- Remote service support 24/7 \_\_\_\_

### Options

- Heat recovery
- Heat Pump \_\_\_\_
- Co<sub>2</sub>/NH<sub>2</sub> cascade solution \_\_\_\_
- Low charge ammonia volume

GREEN

Tropic version \_\_\_\_



#### **DRY COOLER EC**

EC motors provide better performance than AC motors, and use less electricity. They are also generally much more compact and speed can be easily controlled using the commutation electronics, for example via pulse width modulation.

#### LOW PRESSURE **VESSEL**

Pressure vessels are available for almost all refrigeration applications. Our technology guarantees reliable refrigerant separation with maximum operating refrigerant volume 5 m<sup>3</sup> per one unit.

#### **DANFOSS ICF STATION**

Lower Operating Refrigerant Charge Low Power Consumption Lower Operating Weight Small Plan Area ICAD precision dosing.

### EFFECTIVE VENTILATION

Each GGMC comes with a complete ventilation system, including exhaust air ducts and ventilation fans.

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#### **MYCOM/MAYEKAWA SCREW COMPRESSOR**

Innovative new motor profile and automatic Vi regulation ensuring energy efficiency with high COP (coefficiency of performance) at various loads.



#### **EVAPCO OR BAC** CONDENSER

Designed for industrial refrigeration, evaporative condensers lower system condensing temperatures thereby reducing compressor horsepower, saving up to 15% energy compared to traditional air-cooled systems.



#### **SIEMENS FREQUENCY CONVERTER**

Leading manufacturing electric drive technology perfectly regulating refrigeration el. motors in refrigeration application.



#### **SIEMENS CONTROL**

Simatic S7-1500 CPU controller with High resolution 12" touch screen control panel HMI. Remote monitoring. Safe and secure.



## **GGMC** modifications

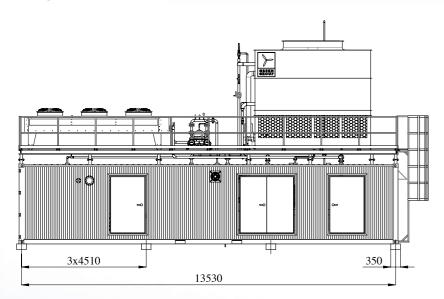
Model	FREEZING	COOLING	CHILLING
(ammonia)	Max kw at -40°C	Max kw at -10°C	Max kw at +2°C
GGMC 120	117	452	691
GGMC 160	153	580	881
GGMC 200	197	750	1146
GGMC 300	282	1028	1194
GGMC 400	370	1335	1537
GGMC 500	485	1735	2596

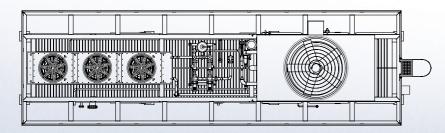
### **GGMC** dimensions and weight

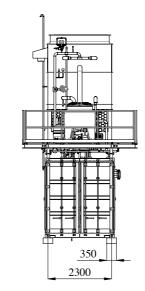
45ft HC (High Cube) container dimensions: L=13716; W=2438; H=2896. Overall characteristics shown in next table\*

Measurement	Dimension, mm	Weight, t
Length	14802	
Width	4130 (2065×2)	Up to 25 (18+7)
Height	6374 (3187×2)	

\* All dimensions can be specified according individual customer requirements.







### Modular design

Modular design keeps your options open and gives flexibility to expand operation by adding extra modules to the existing one.



**5** things for Installation

Water inlet





8 poles foundation Drainage



### Everything we need – few conditions for installation:



Electricity



Internet -Profinet cable

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### About Company

Joint stock company GREEN GROUP was founded in 2006 and it attracted people with a big experience in engineering and servicing of industrial refrigeration systems. The philosophy of the company based on harmony of environment with a new ecological technologies and our task to reach, that the words ENVIRONMENT, ECOLOGY and the GREEN GROUP should be related.

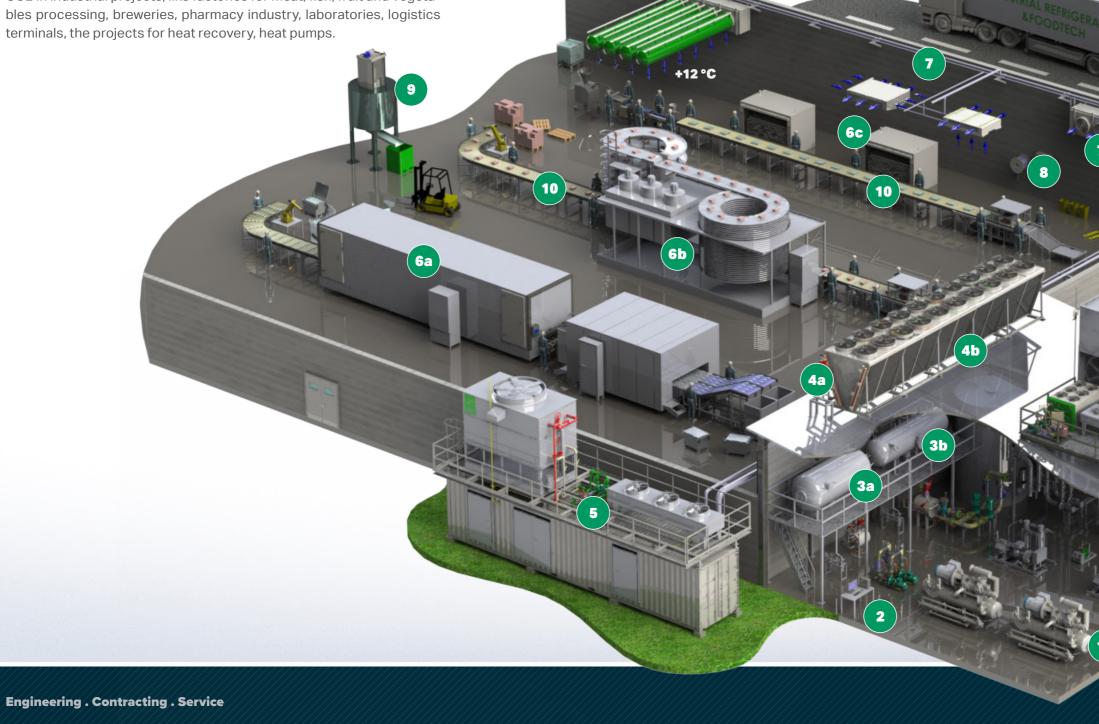
The main activity of the GREEN GROUP is refrigeration, air treatment, renewable energy systems designing, automatization of technologic process and contracting. We have experienced our team with NH3, CO2 in industrial projects, like factories for meat, fish, fruit and vegetables processing, breweries, pharmacy industry, laboratories, logistics terminals, the projects for heat recovery, heat pumps.

## Equipment

- Machinery: a) NH<sub>3</sub> screw compressor, b) CO<sub>2</sub> reciprocating compressor, c) NH<sub>3</sub> heat pump
   Monitoring
- Monitoring
  Low pressure v

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- **Low pressure vessels:** *a*) CO<sub>2</sub>, *b*) NH3
- **Condensers:** *a)* Heat recovery (desuperheating), *b)* Dry, *c)* Adiabatic



#### **Mobile Machinery**

Freezers/Chillers: a) Tunnel/IQF,

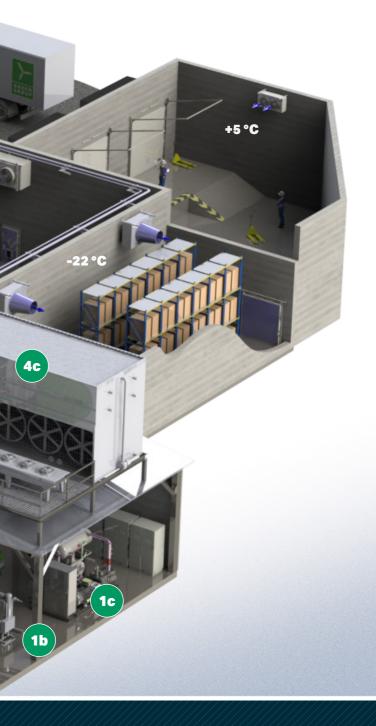
b) Spiral, c) Plate

**Coolers/Evaporators** 

**Washing solutions** 

Ice machine with a storage

Conveyors





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