

GIF 600 & 1200
Self-contained continuous
ice cream freezers



- ice cream the way you like it

## 1

### **Gram** Equipment

### **Overveiw**

- Innovative design
- Small footprint
- Easy to install
- Design
- Product capacity
- Pumps
- Control system
- Production features
- Easy maintenance
- Main technical data



## **Innovative design**

Gram Equipment

- Reduced width (only 600 mm) to place the machines in line in a limited space.
- Very compact arrangement and very small footprint
- Two level front avoids the interference of the pumps with the operator
- Piping of the product does not interfere with the controls
- Flexible can be moved to several production lines
- No costly Ammonia plant required

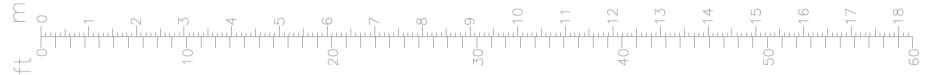


# **Small footprint**

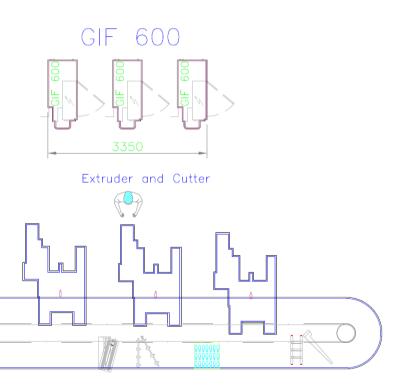


#### GIF 600 Footprint ≈ 0,9 m<sup>3</sup>

### GIF 1200 Footprint ≈ 1 m<sup>3</sup>



GIF 1200 Extruder and Cutter



### **Installation**

# Gram Equipment

#### **Easy installation**

- Rear connections for all the facilities
  - Tower water
  - Compressed air
  - Power
  - Ethernet (Datalog)
- Green zone on manometer, shows the correctness of condensation temperature/pressure
- Factory tested with ice cream, does not require any adjustment on site
- Correctness of rotation electrical controls
  - Dasher
  - Compressor
  - Pump motors

Avoid damage on the dasher and compressor



### Design



#### Industrial design

- Full stainless steel construction
- Very efficient refrigeration plant and freezing cylinder
- Low refrigerant charge
- Electrical box integrated in the top part of the frame, encloses all the controls
- Horizontally placed freezing cylinder
- Two gear pumps with independent drives in CIP design



### Design



#### **Industrial design**

- Sanitary filters, pressure booster and mass flow meter to control the overrun automatically
- Very compact and silent dasher drive

#### GIF1200:

- Two hermetic Scroll compressors in parallel
- Product temperature sensor on output pipe
- R404A direct expansion system with electronic valve
- Electronic KVS valve insure stable evaporation (GIF 1200)

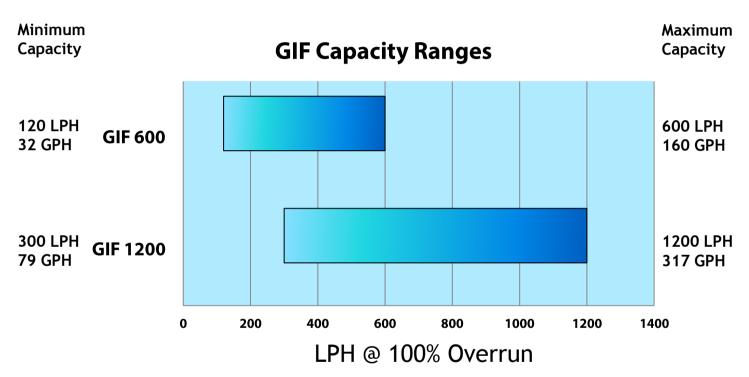






## **Product Capacity**



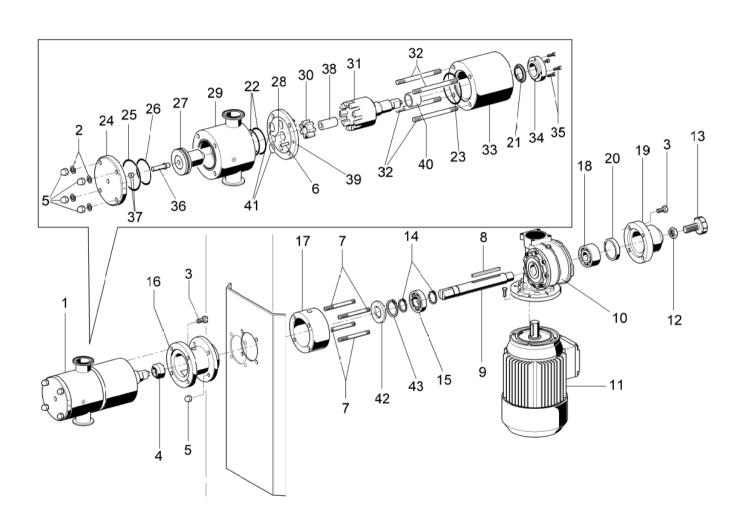


Ice cream outlet temperature -5,0°C (23°F)
Depending on the mix formulation

### **Pumps**

- Fully CIP -able
- CIP Indicator
- Easy adjustment
- Simpel maintanece
- Pumps kits

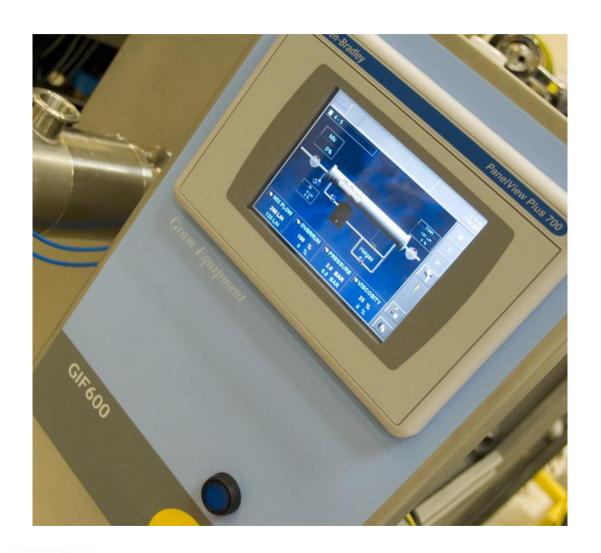




### **Control system**



- User friendly interface with pushbuttons and color touch display with graphical overview of valves, motors and compressors
- Messages on the display shown in most common languages
- Visualisation of operating data on the display
- Saving-memory of working parameters (up to 100 recipes)
- All working parameters are computer-controlled
- Allen Bradley CompactLogix PLC



### **Production features**



Automatic start up with low product loss

GIF 600 Screen

- High & constant ice cream quality
- Automatic pause and stop procedure with minimum product waste
- Automatic, user settable CIP cycle
- Closed loop viscosity control by hot gas injection (GIF 600)
- Condenser water flow controlled by automatic pressure valve

GIF 1200 Screen

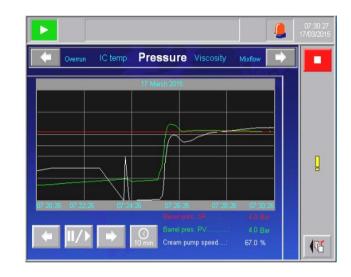




### **Production features**



- Electronically controlled pump speed by VFD
- User friendly Trend screen
- Closed loop mix flow control with volumetric mix flow meter
- Closed loop overrun control with air mass flow meter
- Closed loop cylinder pressure control
- Adjustable dasher rotation speed by VFD (GIF1200)
- Strong maingear solution



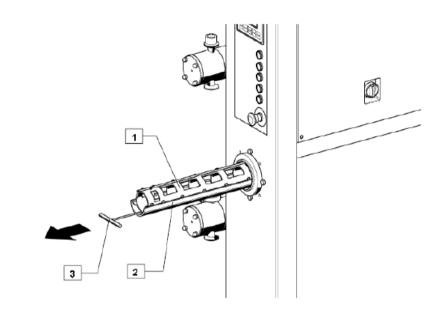


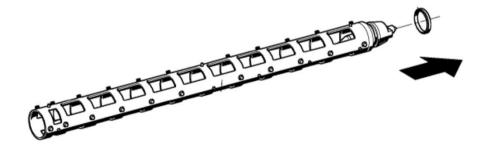


### **Easy to maintain**

Gram Equipment

- The Display explains all the alarms
- The convenient position of the cylinder allows a safe pull out of the dasher
- Simple, cost saving and easy to replace seal on the dasher shaft. No spring installed
- Long life and maintenance free compressor
- Brazed plate heat exchangers
- Easy accessibility to all the components
- Maintenance Screen with count down for next inspection (GIF 1200)





## **Equipment features**



#### **Standard features**

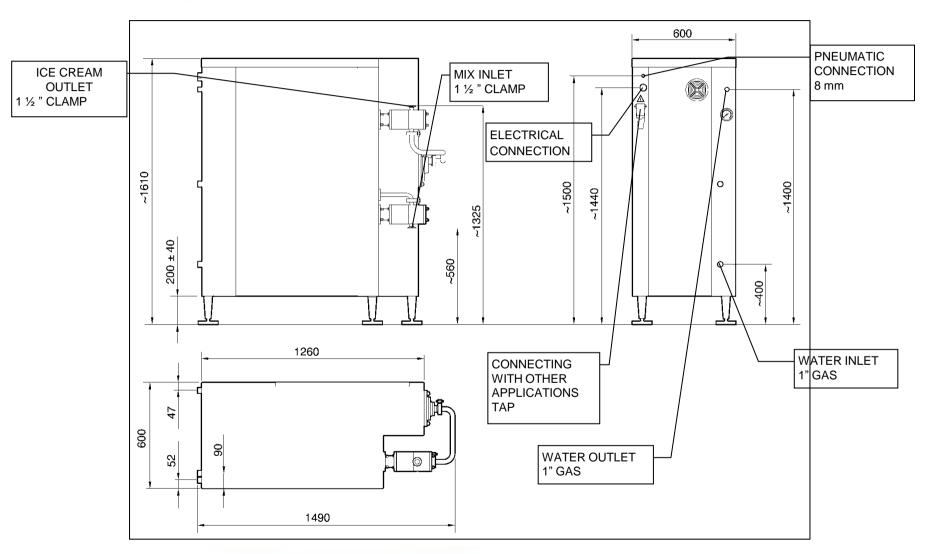
- Volumetric mix flow meter with display
- Network operation with filling machines



# **Technical specifications 1 of 2**

Performance	GIF	600
Capacity		
(ice cream at 100% overrun; standard mix with Fat 8.0%. Msnf 12.0%. Sugar 10.0%. Glycose 8.0%. Stabilizer 0.5%; inlet t. +4 °C; outlet t. up to -5,0 °C)	120-600 lt/h	
Freezing circuit		
Freezing capacity (condensation at 15 bar)	14 kW	
Refrigerant	R404A	
Quantity of refrigerant	4,1 kg	
Consumptions	400 V / 50 Hz	230 V / 60 Hz
Compressor	10 kW – 16 A	10 kW – 35 A
Dasher motor	7,5 kW – 15 A	5,5 kW - 22 A
Pumps motor	2 x 0,75 kW - 1,5 A	2 x 0,75 kW - 3,3 A
Condensing water (tower water, 27 °C) – Condenser pressure drop	3,5 m <sup>3</sup> /h – 1,2 bar	
Condensing water (town water, 18 °C) –		
Condenser pressure drop	2 m³/h - 0.9 bar	
Air (ice cream at 100% overrun)	Max 400 lt/h	
Required air pressure	Min. 5 bar	
Dimensions		
Height	1600 ± 40 mm (1850 mm stand)	
Length	1490 mm (1800 mm stand)	
Width	600 mm (800 mm stand)	
Weight		
Gross weight	~ 750 kg	
Net weight	~ 560 kg	
Connections		
Mix inlet	1 ½" clamp	
Ice cream outlet	1 ½" clamp	
Air inlet	8 mm	
Condensing water inlet	1" gas	
Condensing water outlet	1" gas	

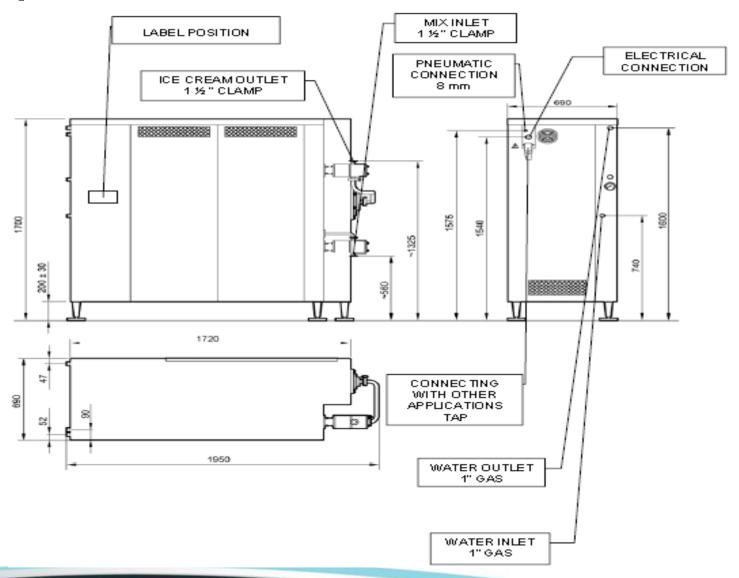
## **Technical specifications 2 of 2**



# **Technical specifications 1 of 2**

Performance	GIF	GIF 1200	
Capacity			
(ice cream at 100% overrun; standard mix with Fat 8.0%. Msnf 12.0%. Sugar 10. Glycose 8.0%. Stabilizer 0.5%; inlet t. +4 °C; outlet t. up to -5,0 °C)		300-1200 lt/h	
Freezing circuit			
Freezing capacity (condensation at 15 bar)	30	30 kW	
Refrigerant	R4(	R404A	
Quantity of refrigerant	7,5	7,5 kg	
Consumptions	400 V / 50 Hz	230 V / 60 Hz	
Compressor	26 kW - 38 A	26 kW – 72 A	
Dasher motor	11 kW – 22 A	11 kW – 38 A	
Pumps motor	2 x 1,25 kW – 2,5 A	2 x 1,25 kW - 4,5 A	
Condensing water (tower water, 27 °C) – Condenser pressure drop		3,5 m <sup>3</sup> /h – 2,0 bar	
Condensing water (town water, 18 °C) –			
Condenser pressure drop	1,5 m <sup>3</sup> /h	1,5 m³/h - 0.8 bar	
Air (ice cream at 100% overrun)	Max 8	Max 800 lt/h	
Required air pressure	Min.	Min. 5 bar	
Dimensions			
Height	1700 ± 30 mm (	1700 ± 30 mm (2000 mm stand)	
Length	,	1950 mm (2070 mm stand)	
Width	690 mm (87)	690 mm (870 mm stand)	
Weight			
Gross weight		~ 1220 kg	
Net weight	~ 10:	~ 1050 kg	
Connections	4.478		
Mix inlet		1 ½" clamp	
Ice cream outlet		1 ½" clamp	
Air inlet		8 mm	
Condensing water inlet		1" gas	
Condensing water outlet	1 "	1" gas	

## **Technical specifications 2 of 2**





# For further information please do not hesitate to contact:

#### **Gram Equipment A/S**

Head office Aage Grams Vej 1 DK-6500 Vojens, Denmark Tel: +45 7320 1700 Fax: +45 7320 1701 info@gram-equipment.com

### WCB Ice Cream ApS Part of Gram Equipment group

Graham Bells Vej 6 DK-8200 Aarhus N Tel: +45 8741 2000 Fax: +45 8741 2001 wcbice@wcbicecream.dk

#### Italy

Gram Equipment Italia Srl Via Fabio Filzi 37 I-20032 Cormano MI, Italy Tel +39 02 66307120 ext. 1 Mould Tel +39 02 66307120 ext. 2 Spareparts

#### **Philippines**

Gram Equipment
27 Antonia St. Centerville Subdivision
Pasong Tamo, Quezon City 1107
Philippines
Tel +63 918 9420745
gram-eqpt@pacific.net.ph

#### USA

Gram Equipment of America Inc.

1212 N. 39th. Street, Suite 438 Tampa, Florida, 33605, USA
Tel +1 813 2481978
Fax +1 813 2482314
sales@gramequipment-usa.com

#### Italy

WCB icecream italy Via Jenner 13 26837 Mulazzano Lo Tel.: +39 02 98875074 or +39 02 98875705 Fax: +39 02 98875066 sranieri@gowcb.it

#### **USA**

Gram Equipment of America Inc. WCB Office Northvale 267 Livingston Street Northvale, NJ 07647 USA Tel.: +1 201 784 1101 Fax: +1 201 784 1116 sales@gramequipment-usa.com

#### Russia

Gram & CFT S.p.A. Moscow Office Petrovka Street 17/4, 53 Moscow, Russia Tel +7 985 101 8319 sbl@gram-equipment.com