



Intelligent Control System Batch Freezer

Model number: TG 27R1



Model number: TG 42M, TG 48R2, TG 72R3



WHY DO WE NEED INTELLIGENT BATCH MACHINE?

The traditional batch freezer were controlled by timer or temperature, but

1. Different input temperature of mix needs different freezing time.
2. Different weather needs different freezing time.
3. Different recipe needs different freezing time.
4. Different quantity of mix added into barrel needs different freezing time.
5. The product will be over freezing or under freezing if the time setting is not correct.

6. The consistency of product could not maintain the same consistency when the operator did not extrude out the finished product in time. The product will be over freezing.

OUR SOLUTION:

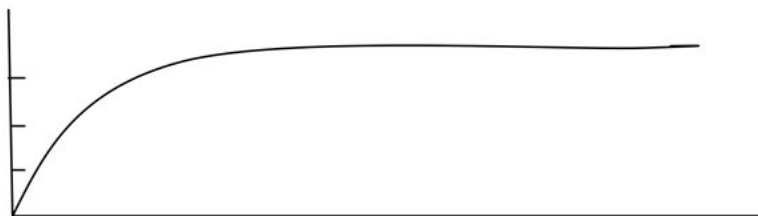
1. Tech Gelato Intelligent Batch Freezer is controlled by the consistency of product, so the operator could ignore the different input temperature, different weather, and different recipe.
2. With four memory push pad could save four different quantities of mix added into the barrel.

Target consistency could be easier pre-set and could be re-set any time by just push saving push pad. Adding the mix into the batch freezer and then just select and push the memory pad could produce high quality product without any headache to set different timing or set different temperature for so many situations. Also there is no need to extrude small sample to evaluate if it is the right time to extrude ice cream out or might wait for few minutes more.

Consistency Control System:

There is one consistency control system to control the consistency of ice cream or gelato to the same consistency and will not be over freezing when the operator was absent or too busy to extrude out the ice cream. This device could let the operator to be a multi-task operator to do several works at the same time.

consistency



freezing time

Defrost button:

When gelato / ice cream was over frozen and freezing cylinder was freeze up, the beater was locked, just push this the defrost button for 10 second could melt down the outer layer of gelato / ice cream, and could extrude ice cream immediately, no more waste time to scoop out manually.



Beater (dasher):

- Three arms stainless steel made beater, equipped with spring supported movable food grade plastic blades. High efficient shaving, blending and extruding.
- Easy to put in and take out.



Clear Extrusion:



Almost no gelato left on beater or cylinder after extrusion, no loss when changing flavor.

Extruding door handle was carefully made by Stainless steel with bronze bush inside to ensure more than many years operation.



TG27R1 FEATURES:

- Capacity of freezing cylinder: 4 liter
- Adding mix range: from 1 liters to 2.5 liters
- Refrigeration: 1.5 hp Compressor made in USA by Copeland
- Beater motor: 1 hp for low speed, 1.5 hp for high speed.
- 220/ 3 /60Hz or 380V/ 3 / 50HZ or 220V/ 1 / 60Hz or 50Hz (water cooled)
- Width: 370 MM Depth: 810 MM Height: 760 MM
- Cooling by water
- Net Weight: 140 Kg
- Refrigerant: R404A or others
- Double speed beater mold

TG 42M FEATURES:

- Capacity of freezing cylinder: 6 liter
- Adding mix range: from 2 liters to 4 liters.
- Refrigeration: 3 hp Compressor made in USA by Copeland
- Beater motor: 2 hp for low speed, 3.2 hp for high speed.
- 220/ 3 /60Hz or 380V/ 3 / 50HZ or 220V/ 1 / 60Hz or 50Hz (water cooled)
- Width: 406 MM Depth: 1050 MM Height: 1400 MM
- Cooling by air
- Net Weight: 180 Kg
- Refrigerant: R404A or others
- Double speed beater mold

TG48R2 FEATURES:

- Capacity of freezing cylinder: 10.5 liter
- Adding mix range: from 3.5 liters to 6 liters.
- Refrigeration: 4 hp Compressor
- Beater motor: 2.2 hp for low speed, 3.3 hp for high speed.
- 220/ 3 /60Hz or 380V/ 3 / 50HZ
- Installed power: 6.3kw
- Width: 530 MM Depth: 1170 MM Height: 1370 MM
- Cooling by air (surcharge for air cooling system)
- Net Weight: 295 Kg
- Refrigerant: R404A or others
- Double speed beater mold

TG 72R2 ITS FEATURES:

- Capacity of freezing cylinder: 18 liter
- Adding mix range: from 5 liters to 12 liters.
- Refrigeration: 6 hp Compressor
- Beater motor: 3 hp for low speed, 4.5 hp for high speed.
- 220/ 3 /60Hz or 380V/ 3 / 50HZ
- Installed power: 9kw
- Width: 530 MM Depth: 1170 MM Height: 1370 MM
- Cooling by air (surcharge for air cooling system)
- Net Weight: 305 Kg
- Refrigerant: R404A or others
- Double speed beater mold

Brand of component:

Compressor: made in France or USA or Germany

Refrigerant controller: made in Denmark

Electrical component in control box: made by Siemens

2.8 inch X 1.6 inch LCD Displaying the Status of Machine

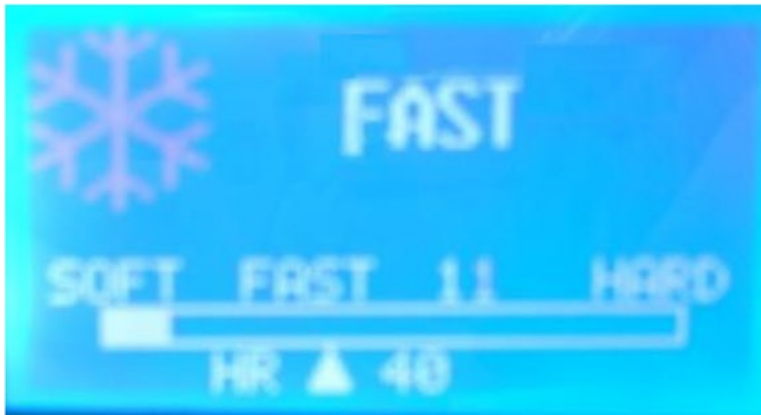
- LCD displaying Status
 - Fast Speed Freezing
 - Low Speed Freezing
 - Consistence digital number
 - Self diagnose and help message



LCD shows machine stop working. Consistency is set to 45. Current consistency is 0.



- LCD shows the machine is freezing ice cream and beater is at slow speed mold for low overrun gelato....
- The target consistency is set to 70 and the current consistency is 51. So the machine is working to freeze the ice cream in the barrel, the snow sign of left hand side of LCD showing the status of Freezing.
- One audio signal will be on and the compressor stops working when consistency achieve 70.
- Ice cream should be extruded out when consistency achieve the setting point. If the operator did not extrude ice cream out of freezer when consistency achieve the setting point, and then control system will check the consistency and compressor will be kicked in and out accordingly working for right consistency.
- The control system will check and maintain ice cream has perfect consistency all the way until the operator extruding out the ice cream.

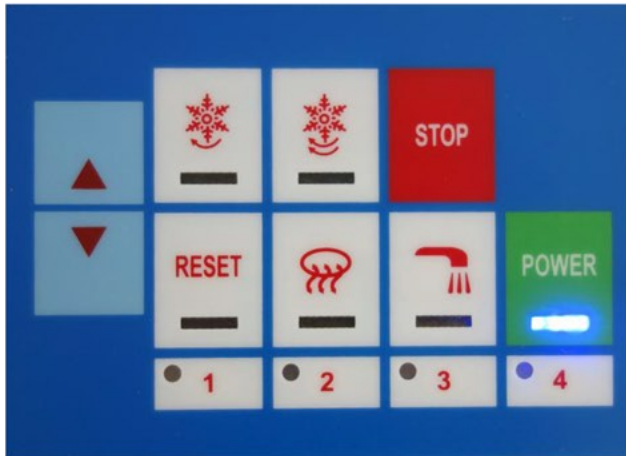


- LCD shows the machine is freezing ice cream (the snow sign on left hand side) and beater is at fast speed mold (center of LCD) for high overrun ice cream....
- The target consistency is set to 40 and the current consistency is 11.
- One audio signal will sound to inform operator, while consistency achieve 40 (setting point).
- Ice cream should be extruded out when consistency achieve the setting point. If the operator did not extrude ice cream out of freezer when consistency achieve the setting point, and then control system will check the consistency and

compressor will be kicked in and out accordingly working to maintain the right consistency.

CONTROL SYSTEM INTRODUCTION:

Operator Friendly IT Control System, With Four Memories of Different Consistency for four different products.



Easy To Set the 4 Consistency Memories

- Use the two Consistency adjusting triangles push pad (upper image) to adjust the Consistency Indicator, the triangle below the horizontal bar (below image) will move to right direction and the number of consistency will increase if the “up triangle pad” was pushed. And if the “down triangle pad” was pushed, the consistency indicator will move to left direction and the number of consistency will decrease.
- To Right direction, the ice cream is made harder, and to left direction is made softer.
- Digital consistence from 0 to 100, easy to set any desire consistencies.
- Push one of four memories push pad to save the consistence.
- There are 4 different Consistency memory push pads to save 4 different consistencies. Just push the other push pad to change the consistency while produce other different products.

