



AMC Chocolate Storage Tank

ACST-130U



Instruction Manual

July.2018

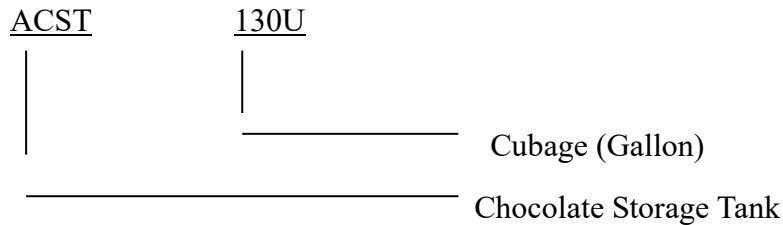
AMC SYSTEM TECHNOLOGY USA INC



Thanks a lot for choose AMC chocolate storage tank! :)

1. Product Type and Technical Parameters

1.1 Product Type



1.2 Main Technical Parameters

No.	Denomination	Unit	Technical Parameter
1	Motor power	KW	1.1
2	Agitator Rotational Speed	r/min	24
3	Agitator Rotational Direction		Clockwise (Viewed from above)
4	Electric Heating Power	KW	4
5	Water Temperature	°C	55 (Warm-up temperature of chocolate mass)
6	Capacity	L	500
7	Dimensions	mm	Φ 1000 × 1380
8	Machine Weight	Kg	600

2. Structural Characteristics and Operational Principles

2.1 Main Structure

Chocolate storage tank is basically comprised of inner cylinder, outer cylinder, agitator, dynamic driver, electric heater, temperature controller with numeric display and other supporting parts.



2.2 Structural Characteristics

2.2.1 A diathermanous interlayer exists between inner and outer cylinders. On the upper cylinder body is set an overflow pipe; any attempt of turning off this tube is strictly not allowed. The intake pipe is located on the lower part of cylinder. Inside the interlayer, water is used as heat carrier; electricity is used to heat up; temperature controller with numeric display will adjust automatically the temperature as is set previously, so that the chocolate paste in the container can be kept at a fixed temperature.

2.2.2 A framed agitator with double vanes is installed in the middle of the cylinder body and may be used to stir materials to promote the heat exchange speed and finally to achieve the goal of evenly mixing and evenly heating.

2.2.3 The in-line installation structure is adopted to connect agitator axis with decelerator in order to make installation, dismantlement and cleaning easier.

2.2.4 The butterfly valve made of stainless steel acts as discharge valve and is installed on the lowest part of the cylinder body to ensure the discharge of materials from the container.

2.2.5 The inner cylinder, the cover board (including bearing of decelerator) and the agitator of the product are all made of stainless steel so they can resist corrosion and ensure hygiene of processed



food.

2.3 Operational Principles

Lead the finely grinded chocolate paste into the container through the cover board on one side of the upper cover (opened before work starts) of cylinder body or through a chocolate pump. Pipe cold water into the interlayer of cylinder body by using the intake pipe on the lower part of cylinder. The cold water in the interlayer will then be heated by electric heater and the temperature controller with numeric display will adjust automatically the temperature as is set previously so that the water temperature in the interlayer can be kept invariable and finally the chocolate in the container can be kept at the fixed temperature. Meantime, the agitator, driven by the motor and the decelerator, rotate around the axis of cylinder to stir the chocolate paste. Since the blade is 45° tilted, the chocolate paste in the cylinder is turned over in the radial direction and the direction of axis, and can thus have a relatively higher heat exchange speed and better homogeneity of mixture. Once the chocolate paste is well stirred, the discharge valve should be opened to let the chocolate paste out from the discharge hole.

3. *Applications and Functions*

3.1 Applications

Chocolate storage tank is the absolutely necessary equipment in the



chocolate production, and is mainly used in the thermal and storage of finely grinded chocolate paste to satisfy the technical requirement and continuous chocolate production.

3.2 Functions

Apart from the functions of cooling, heating and thermal, the product has other functions like degassing, deodorization, dehydration and preventing chocolate from fat separation.

4. Operations and Usage

4.1 Operations

4.1.1 Pipe cold water into the interlayer of cylinder body through the intake hole on the lower part of cylinder until water flows out from overflow pipe.

4.1.2 Start electric heating. Set temperature on the temperature controller.

4.1.3 When temperature reaches at set value, open the cover board on one side of the upper cylinder body and pour or pump in the chocolate paste.

4.1.4 Ensure that chocolate paste is liquid. Then start agitator.

4.2 Usage

4.2.1 The agitator can only be turned on when the chocolate paste is all put into the cylinder. Note that the agitator should rotate in the clockwise direction (viewed from above).

4.2.2 The electric heater can only be turned on when the interlayer of



cylinder is all filled with water. Heating without any water in is strictly not allowed.

4.2.3 When the stored chocolate inside cylinder is frozen, the electric heater should be turned on first. The agitator can not be turned on until the temperature of water in the interlayer reaches 55°C and the heated chocolate is liquidized. Before all chocolate is liquidized, the electromotor should not be turned on so that the agitator or the electromotor itself can be prevented from being damaged.

4.2.4 In the process of normal work, the temperature of water in the interlayer can be adjusted to make sure the chocolate paste in the middle of cylinder body is kept between 35°C and 40°C

4.2.5 The dustproof cover must be well closed in order to prevent foreign matter from dropping into cylinder and damaging blade.

4.2.6 The base where the equipment is put should be flat and level.

5. Maintenance

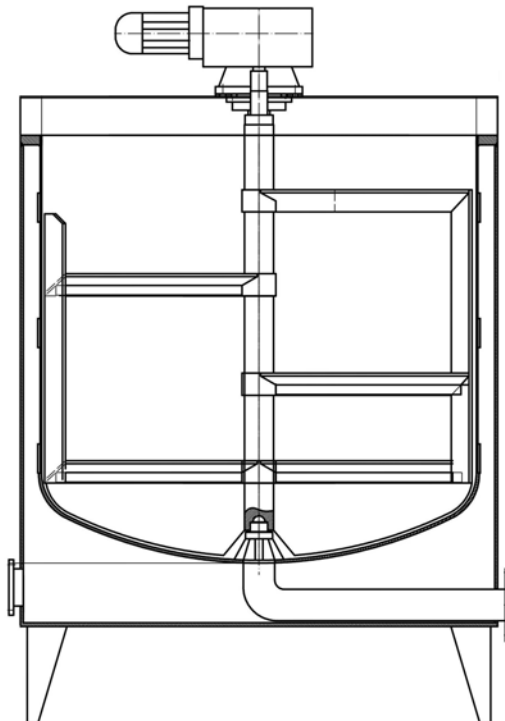
5.1A proper amount of lubrication oil should be added into the gear case of the decelerator when in use. The oil should then be renewed every 6 months. Please choose gear oil (SY1103-77).

5.2Check regularly the components of electric heater. Cleaning work should be done in time when water incrustation or coke is found on the surface of heating pipe, so as to prevent the usage life from being shortened due to less efficient heat dissipation.



5.3 For axletree lubrication, please choose Anticorrosive Lubrication Grease CG2.

5.4 Boiling water or water containing soda can not be used when cleaning cylinder body. Use edible oil to clean the cylinder.



AMC at your service!