AUTOMATIC DRAINAGE AND MATURATION SYSTEM WITH AUGER
DMC4

COSTRUZIONI MECCANICHE E TECNOLOGIA SPA
AUTOMATIC DRAINAGE AND MATURATION SYSTEM WITH AUGER DMC4

TECHNICAL FEATURES

- Structure in stainless steel AISI 304 (UNI X 5 Cr Ni 18 10)
- Max. containment capacity 1.200 kg of curd
- External vat shaped section and sloping bottom for discharge of drained whey
- Internal vat in perforated metal sheet for draining operations
- Jacket for curd heating with metal sheet (max pressure water/steam 8 bar)
- Whey and curd inlet chute assembled on the central part of the machine
- Rod level feeler for running of whey level inside the machine
- Advancement system of the curd operated by an auger with diameter 600 mm
- Electrical motor of the auger with speed electronic control (running with inverter) and possibility of intermittent advancement
- Curd cutter with rotary disc joint to the auger shaft
- Lateral inspection windows placed in the lower part (auger area)
- Pneumatic system with double cylinder to put into action the door of locking/exit of cut curd
- Arrangement to automatic CIP cleaning with rotary pipes and sprinklers (cleaning inlet DN65)
- Upper cover with hinged panels
- Automatic running with PLC

DESCRIPTION AND WORKING

The machine is made up of a holding external structure in stainless steel composed by a vat with rectangular plant and section, assembled on proper support legs; this external vat houses inside another vat built in perforated metal sheet for controlled curd drainage and maturation. The internal vat in perforated metal sheet is shaped in order to house an auger with diameter 600 mm able to transport the curd at the end of the maturation process. The external vat is completely closed on the sides while the upper part is equipped with hinged panels that can be opened; in the lower part of one of the lateral walls there are two slits equipped with windows to control and display the operations. To obtain just the curd drainage, the whey is drained through the perforated metal sheet and recovered in the lower part of the external vat, that slopes towards a discharge; then it is sent to the recovery lines. When the preliminary drainage of the whey is obtained it is possible to make also the maturation; by staying inside the machine during the wished time, the curd reaches the maturation degree necessary to the stretching operations; during this phase the auger turns at intermittence in the two sense so that the curd is moved forward and backward. At the end of drainage and maturation phases, the auger pushes the curd towards the cutter with rotary disk assembled directly on the shaft of the auger near to the machine outlet. One of the doors can be opened to let the cut curd exit from the machine; the door is put into action by a couple of pneumatic cylinders placed near to the cutters; during drainage and maturation the door closes the machine hermetically towards the outside. Both the external and the internal vats are arranged for automatic cleaning with external CIP plant. Rotary cleaning sprinklers are placed in proper points of the machine to grant an efficient and strong sanitizing action. To obtain just the curd drainage, the whey is drained through the perforated metal sheet and recovered in the lower part of the external vat, that slopes towards a discharge; then it is sent to the recovery lines.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DRAINER DMC4</th>
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<tbody>
<tr>
<td>DIMENSIONS</td>
<td>5.2x1.3x2.5 m</td>
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<tr>
<td>MASS</td>
<td>2,500 kg</td>
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<tr>
<td>CIP CAPACITY</td>
<td>25,000 l/h</td>
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<tr>
<td>RATED POWER</td>
<td>7 kW</td>
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<tr>
<td>VOLTAGE</td>
<td>380 V - 3ph</td>
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<tr>
<td>FREQUENCY</td>
<td>50 Hz</td>
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</tbody>
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