

# **Tetra Tebel Blockformer® 6**

The heart of cheddar blockforming solutions



## **Highlights**

- Excellent, uniform product quality
- Proven high capacity
- High and consistent weight accuracy
- Minimal product losses
- Robust, durable construction
- Simplified, reliable operation
- Designed for safety
- Open, easy-to-clean design
- Low maintenance cost
- Reduced environmental impact
- Future-proof investment

## Working principle

Curd is compacted in a series of vacuum and pressure relief cycles, gradually removing air and whey as the curd column moves down the tower by gravitational force. The fused curd is cut into blocks of highly uniform size and weight, and then gently ejected into plastic bags and onto a conveyor. Meanwhile, new curd is added to the top of the tower by vacuum-induced airflow.

## Capacities/models

- 750 kg/h (Standard model)
- 1,000 kg/h (Extended model)
- 1,600 kg/h (TwinVac model)
- Cheese blocks
  - Size:  $280 \times 356 \times 162$  (min) 202 (max), +/- 4 mm
  - Weight: 20.8 kg (max)
  - Optional round shape

#### Standard scope of supply

- Base units welded, featuring unique new guillotine system for outstanding hygiene and reliability, with a replacement time of as little as 20 minutes. A doubleaction drop-down door system gives gentler product handling and reduced product loss.
- Towers thicker, fully welded liner with conical perforations for faster cleaning and special surface treatment that gives a uniquely smooth block with lower risk of breakage. Also new is integrated separation with no need to clean valves, as no valves are needed here.
   A unique new elevator cylinder cuts wear and tear while giving more accurate and reliable height adjustment.
- Vacuum pumps now with frequency controllers so that pumps consume only the energy required at any given moment
- Control system choice of Siemens or Allen Bradley automation platforms, offering line control from a single screen.
- Modular pre-assembled (piping and cabling) equipment, minimizing installation time.

#### Most common options:

- USDA version
- Inditop or Thinktop
- Automatic bag loader system, e.g. Formloada
- Noise reduction to 75 dB
- Cheese block weighing and weight control system
- Main conveyor for cheese blocks and control system with sequenced ejection

#### **Consumption data**

- Electrical consumption: 230/400 V, 50 Hz, 0.5 kW
- Air consumption: 220 500 NI/min, depending on capacity
- CIP solution for S and E versions 20 m<sup>3</sup>/h TV version 25 m<sup>3</sup>/h
- Vacuum pump: S and E versions 1 x 15 kW TV version 2 x 18,5 kW (additional pump shared between up to 4 towers)
- Water consumption 140 l/hr

#### **Material**

AISI 304 stainless steel and FDA-approved plastic and rubber.

#### Required ceiling height

• Standard model: 8.5 m

• Extended model: 10.5 m

• TwinVac model: 12 m

#### **Environmental indicators**

#### Figures per 1000 kg of product

• Electricity <sup>1</sup> , kWh	10.3
• Heat energy², kWh	0.1
• Carbon footprint <sup>3</sup> , kg CO <sub>2</sub>	5.2
Fresh water, litres (incl. CIP)	180
Product loss, kg	0.1
<ul> <li>COD effluent load from product loss<sup>4</sup>, kg O<sub>2</sub></li> </ul>	0.15

Based on 1600 kg/h capacity. 1. Direct electricity use plus estimated electricity for air compressors servicing the equipment. 2. Related to CIP. 3. Indicative value based on world average  $\mathrm{CO}_2$  emissions from electricity generation and natural gas for steam production. 4. Indicative COD (chemical oxygen demand) value based on food product loss composition.



