



CheddarMaster System Datasheet

Working principles

The curd is pumped from the cheese vats to the curd inlet of the drain belt. Here the curd is evenly distributed before entering the adjustable whey screen for separation of whey. The curd slides onto the drain belt where pin stirrers stir the curd according to recipe. An ultrasonic level transmitter regulates the curd depth on the drain belt. The curd is then transferred to cheddaring belt 1 where half pin stirrers are located that can be switched on according to recipe requirements.

After completed retention time on cheddaring belt 1, the curd mat is gently turned over to cheddaring belt 2 via a turnover plate. Cheddaring belt 2 also features half pin stirrers. The double cut curd mill is located at the end of cheddaring belt 2. After cutting the curd mat, the resulting chips fall on to the salting/mellowing belt where two salt booms distribute dry salt onto the curd chips – typically 40 and 60%. Each salt boom is controlled by an ultrasonic level transmitter that measures the curd depth and controls the amount of dry salt distributed onto the curd chips. Pin stirrers are also located on the salting/mellowing belt, at the end of which is the discharge auger that transports the curd chips to the outlet on one side of the machine. Here they fall into a curd distributing tank ready to be transported further in the process.

Standard design

The drain belt and cheddar belt 1 and 2 shells are all made in 3 mm ($\frac{1}{8}$ in) sheet metal - AISI 304 (EN.1.4301) stainless steel. An end door with the same width as the machine is located at each shell end. Each belt is made of polypropylene and rides on a stainless steel herring bone bed support. Each unit is adequately equipped with the no. of stirrers required, manholes for easy access, and belt spray bars below, between and above for effective cleaning. The machine is also equipped with stainless steel platforms and staircases enabling easy daily access.

The salt/mellowing is identical in setup as the other units but completely made in AISI 316 (EN.1.4404). Two salt booms are placed on top of the shell for distribution of dry salt. At the end of the belt the discharge auger discharges the curd chips to the side of the machine.

CheddarMaster finish

The inside surfaces of the shell are in cold-rolled 2B finish with smooth ground welds – grain 180, max. 1.0 μm . All others surfaces in contact with product are max. 1.0 μm . The outside surfaces of the shell are in cold-rolled 2B finish with brushed/acid passivated welds – max. 1.6 μm .

All plastic and rubber materials in the product area are FDA approved. The CheddarMaster can be upgraded to fully comply with USDA standards.

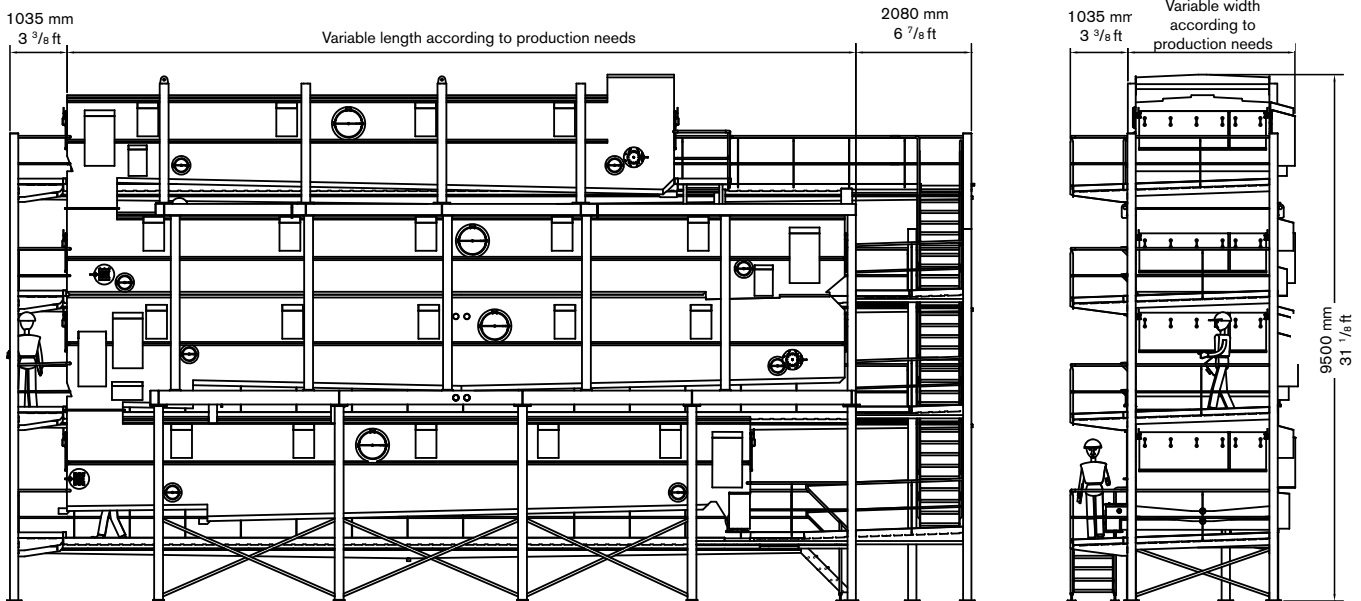
Standard equipment

- Shell body with herring bone bed support
- Drive station with completely splined SS shaft
- Tail shaft
- Plastic scraper
- SS snubber shaft
- SS return belt supports with build-in nozzles
- Pin stirrers
- Curd inlet and whey screen
- Turn-over plates
- CIP shut-off device between belts
- Curd mill and comb with built-in nozzles
- Salt boom
- Discharge auger
- Manholes with safety switches
- Removable spray bars below/between/above belts
- Platforms and staircases – subject to customization

CheddarMaster capacity diagram

(2,000)	(9,900)	(11,000)	(13,250)	(17,600)	(19,850)	(24,250)	(33,000)	(lbs/hr) Capacity Range
900	4,500	5,000	6,000	8,000	9,000	11,000	15,000	kg/hr
Width 4.2 m (14 ft)								Max. length 16 m (52 ft) Max. width 4.9 m (16 ft)
Width 3.3 m (11 ft)								Max. length 15 m (49 ft) Max. width 4 m (13 ft)
Width 2.4 m (8 ft)								Max. length 14 m (46 ft) Max. width 3.1 m (10 ft)
Width 1.5 m (5 ft)								Max. length 13 m (43 ft) Max. width 2.2 m (7 ft)
		60,000 (15,850)		75,000 (19,800)		90,000 (23,775)		l/h Max. CIP capacity at 2 bar (gal/hr)
						105,000 (27,750)		

CheddarMaster System dimensions



SPX Flow Technology
 Pasteursvej, DK-8600 Silkeborg
 Phone: +45 70 278 278 Fax: +45 70 278 330
 www.apv.com ▪ www.spxft.com

For more information about our worldwide locations, approvals, certifications, and local representatives, please visit www.apv.com.
 SPX Corporation reserves the right to incorporate our latest design and material changes without notice or obligation.
 Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing.

Issued: 04/2010 6008-01-04-2010-GB

Copyright © 2010 SPX Corporation

