Waukesha Cherry-Burrell
A United Dominion Company

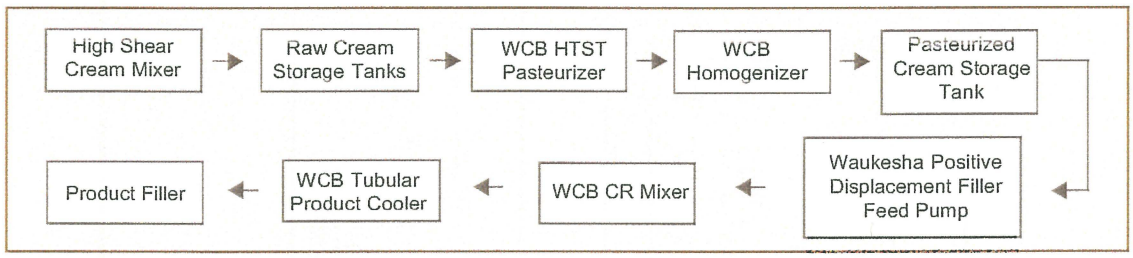
Process Technology
Bullet 9941 12-99

CHANTILLY CREAM

PROCESS DESCRIPTION:

Raw ingredients are mixed in a high shear mixer and transferred to the raw cream storage tanks. The mixer and tanks are jacketed with hot water to insure that all ingredients are dissolved. The raw cream is homogenized, pasteurized and cooled in the WCB HTST pasteurizer, then transferred to the pasteurized cream storage tank. The pasteurized storage tank is jacketed with chilled water to keep the pasteurized product cold. The product is then pumped by a WCB positive displacement pump through the WCB CR Mixer where it is whipped with nitrogen. It is then chilled in the WCB corrugated tubular product cooler to remove the heat of mixing and flows to the filler.

BLOCK FLOW DIAGRAM:



PROCESS SYSTEM FEATURES:

- WCB CR Mixer combines product recycling and shear action for mixing that can be tuned to exactly the right amount of physical work. Continuous mixing, blending, dispersing and whipping is accomplished with full control of the amount, the intensity and the duration of the whipping action.
- WCB corrugated tubular heat exchanger cooler removes any heat created by the whipping step.
- Accurate addition of the nitrogen gas as well as control of the whipping action and cooling assures consistent product quality.
- Batching system can be used with a variety of raw ingredients.
- WCB plate heat exchanger based pasteurizer eliminates harmful organisms.
- System and equipment designed for CIP.
- Programmable logic controls available for repeatable product consistency.

EQUIPMENT REQUIRED:

- High shear mixer
- Miscellaneous storage tanks
- WCB plate heat exchanger
- WCB hot water set
- WCB homogenizer
- WCB holding tube
- WCB CR Mixer
- WCB tubular heat exchanger
- Waukesha positive displacement pump
- WCB centrifugal pumps
- Miscellaneous valves
- Control system
- CIP system

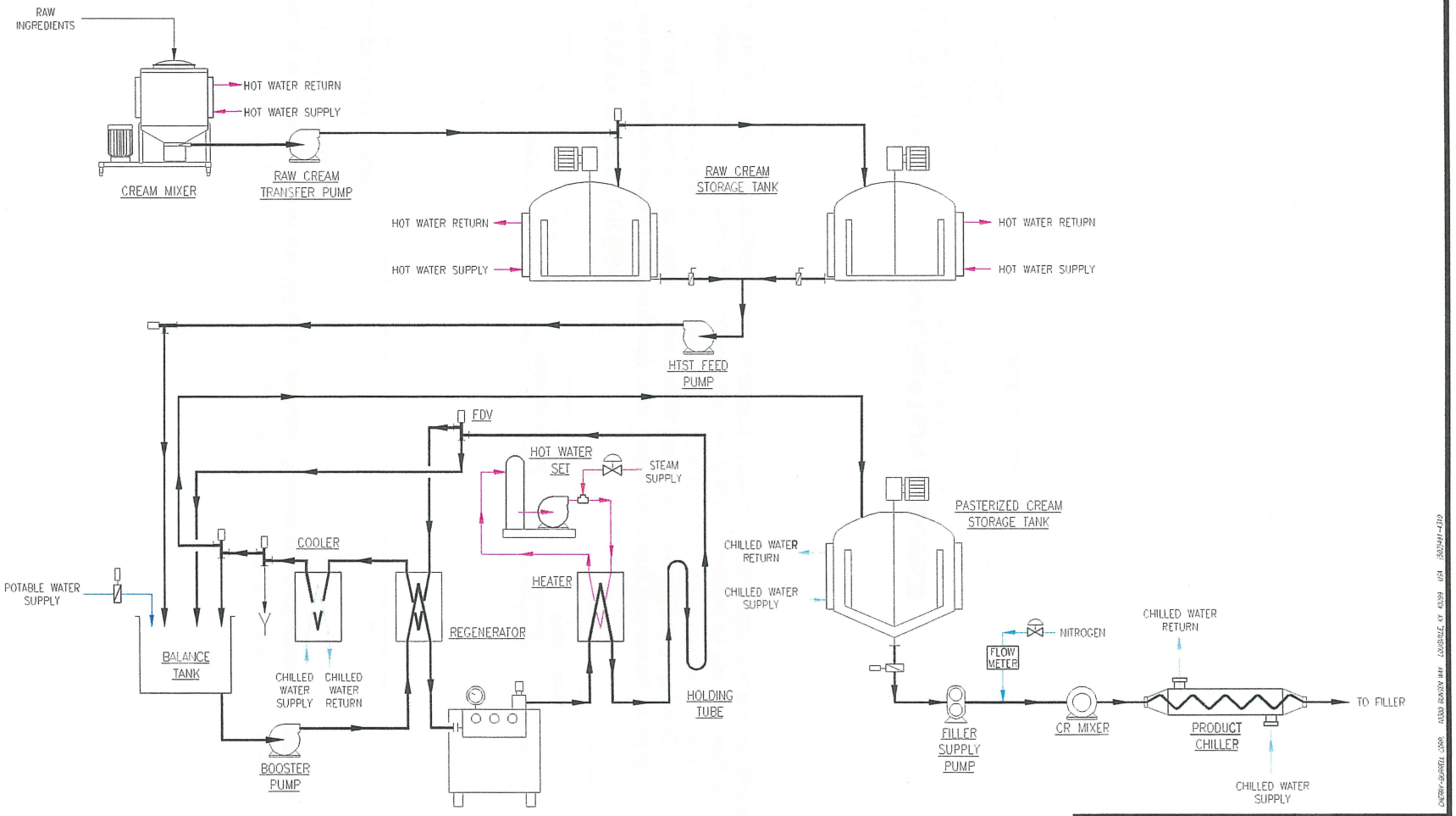
PROCESS PARAMETERS:

- Capacities: up to 3000 lb/hr per CR Mixer

INFORMATION REQUIRED FOR QUOTATION:

- Products _____
- Product flow rate _____
- Product viscosity _____
- Product specific gravity _____
- Product pH _____
- Product inlet temperature _____
- Desired product holding temperature _____
- Desired holding time _____
- Desired holding temperatures _____
- Desired fill temperature _____
- Electrical service available _____
- Steam service available _____
- Cooling media service available _____

Chantilly Cream


RAW INGREDIENTS
HOT WATER RETURN
HOT WATER SUPPLY
CREAM MIXER
RAW CREAM TRANSFER PUMP
RAW CREAM STORAGE TANK
HOT WATER RETURN
HOT WATER SUPPLY
HOT WATER RETURN
HOT WATER SUPPLY
HTST FEED PUMP
FDV
HOT WATER SET
STEAM SUPPLY
COOLER
HEATER
POTABLE WATER SUPPLY
REGENERATOR
BALANCE TANK
CHILLED WATER SUPPLY
CHILLED WATER RETURN
HOLDING TUBE
BOOSTER PUMP
HOMOGENIZER
PASTERIZED CREAM STORAGE TANK
CHILLED WATER RETURN
CHILLED WATER SUPPLY
NITROGEN
FLOW METER
CHILLED WATER RETURN
FILLER SUPPLY PUMP
CR MIXER
PRODUCT CHILLER
TO FILLER
CHILLED WATER SUPPLY
REV
BY
DESCRIPTION
DATE
Waukesha Cherry-Burrell
A United Dominion Company
THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND MUST NOT BE COPIED OR DISCLOSED TO OTHERS UNLESS AUTHORIZED BY WAUKESHA CHERRY-BURRELL CORPORATION
DRAWN BY JMF
ENGR. CBR
CHECK BY
DATE 11/3/98
SERIAL NO
SIZE B
FOR TYPICAL CHANTILLY CREAM SYSTEM
DRAWING NO. PB-9941
CHERRY-BURRELL CORP. 11300 BLANKEN WAY LOUISVILLE, KY 40299 USA (502)491-4313
12/17/98-15:12:54