WATSON DairyConsulting

HACCP FOOD SAFETY & QUALITY

Cream Pasteurizing & Dispatch

	Process Step		Hazards	Control Measures	CCP	Critical Limits	Monitoring Procedures	Corrective Action	Responsible Personnel	System Ref
C1	Storage in Raw cream tank	1.1	Cream goes off because of temperature	Cream cooled and processed promptly		Cream < 10C and <12hrs	Process control checks	Process or check acidity development to	Process Tech.	Process Procedures
		1.2	Cream goes off because of dirty plant Water required quality Valves pumps and process equipment in good condition	Tank cleaned every 24 hours under set conditions Laboratory tests Engineering repair and maintenance		CIP Set correct Water meets potable standards	Checks on process records Investigate, clean and refill system Equipment functioning correctly	Clean before use Engineers Repair all faults and check production	Process Tech. Laboratory Engineers	Process procedures Laboratory procedures Maintenance records
		1.3	Cream goes off because of damage to vessel	Sound tank integrity		No cracked or damaged vessels	Three monthly checks by engineers	Repair damage. Do not use tank	Engineers	Engineers method
		1.4	Cream contaminated with chemicals such as cleaning fluids	SCADA controlled CIP		No cleaning fluid or chemical residues	Compositional checks on cream	Process monitoring and laboratory checks	Process Tech. Laboratory	Laboratory tests schedule
		1.5	Foreign bodies get into cream	Vessel enclosed	CCP 3	No ingress of foreign bodies	Process checks	Investigate and reject contaminated product.	Process Tech.	Process Procedures
C2	Cream to Balance Tank	2.1	Foreign bodies falling into cream	Covered balance tanks	CCP 3	No foreign bodies	Audits	Reject milk with foreign bodies	Process Tech.	Lab and Process
		2. 2	Ingress of water from water line	Fail safe valve		No water ingress causing FPD failures	Freezing point test	Ensure FPD in final product is correct	Process Tech. Lab Tech.	Lab and Process
		2.3	Chemical contamination from cleaning fluids	Fail safe detergent valves		No chemical contamination	Organoleptic checks, valve maintenance	Reject milk with chemical contamination	Process Tech. Lab Tech.	Lab and Process
C3	Cream to regenerative heating section	3.1	Contamination into finished cream	Plate pack integrity checks and pressure balance system		No holes in plates	Annual plate integrity checks. Pressure balance controlled by Pasteurizers	Repair plates Repair pressure balance	Engineers Process Tech.	Process and Engineers
		3.2	Contamination from Dirty plant	CIP & Sterilise after 8 hours running		Clean plant	Pasteurizer control Laboratory checks	Re-clean plant in the event of CIP failure	Process Tech. Lab Tech.	Lab and Process
C4	Cream through homogeniser	4.1	Contamination from dirty plant	CIP & Sterilise after 8 hours running		Clean pipe-work	Pasteurizer control Laboratory checks	Re-clean plant in the event of CIP failure	Process Tech. Lab Tech.	Lab and Process
		4.2	Unhomogenised cream (Not usually homogenised)	Correct homogenisation pressure		Fat globules <1.5 micron &	Pasteurizer control Laboratory checks	Reject incorrectly homogenised milk	Process Tech Lab Tech.	Lab and Process