

Imitation Crabmeat

Generic HACCP Plan

Updated: 1/30/97

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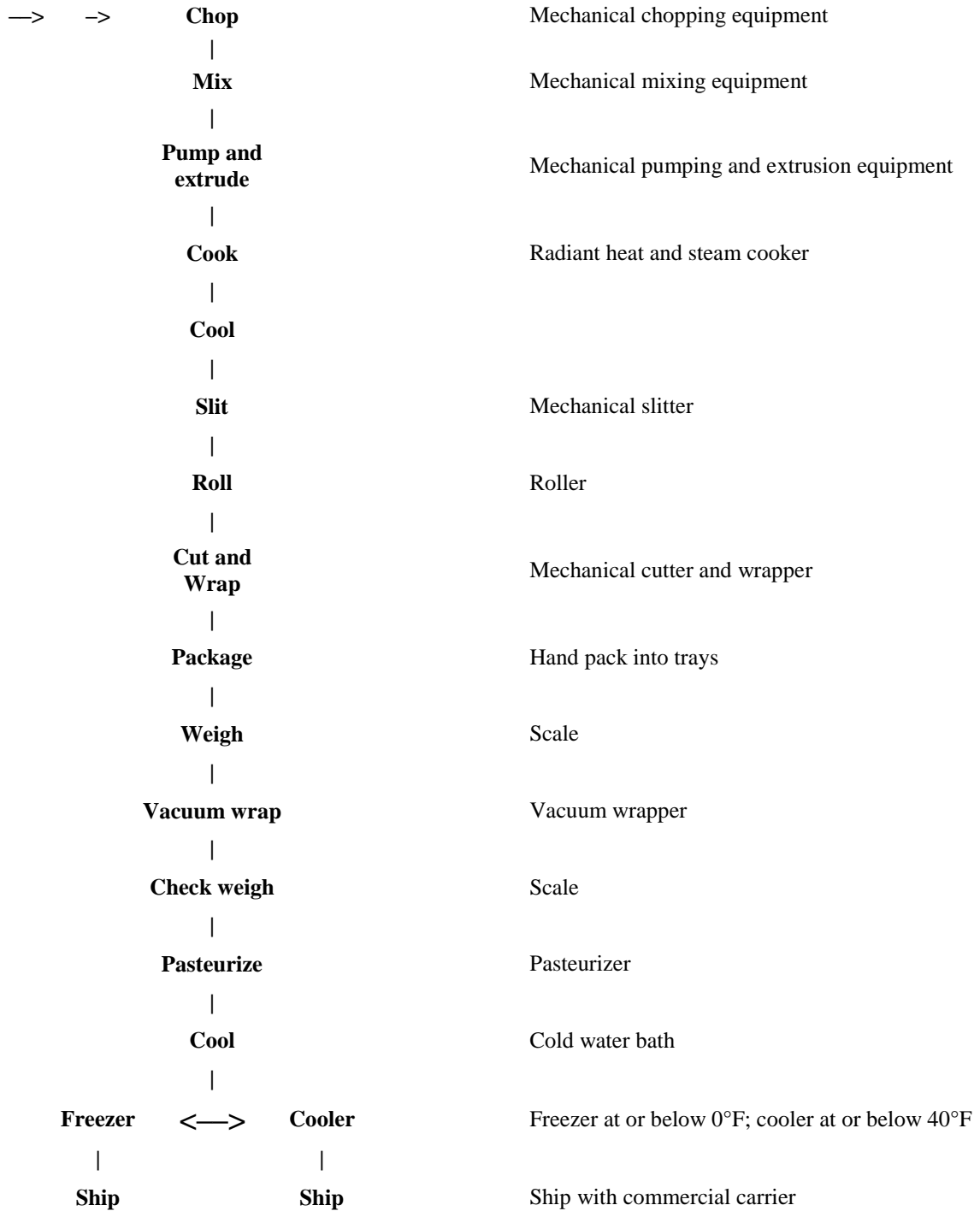
1. Product Description

Aquatic Product Raw Material:	Frozen surimi made from Pacific whiting (<i>Merluccius spp.</i>) or pollock (<i>Theragra chalcogramma</i>)
Raw material harvest Area:	Oregon/Alaska
Raw material received:	Directly from processor
Finished Product:	Ready-to-eat imitation crabmeat sticks
Food additives, ingredients, processing aids:	Flours, seasonings
Shipping:	Shipped by commercial carrier
Intended use:	Ready-to-eat fully-cooked imitation seafood product
Intended consumers:	General public

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2. Flow Diagram

Surimi	Flours	Liquid seasonings	
Receiving	Receiving	Receiving	Frozen surimi, flours, seasonings received at loading platform
Freezer	Dry storage	Refrigerated storage	Freezer at or below 0°F; refrigerated storage at or below 40°F; dry storage at ambient temperature
Thaw	Weigh	Measure	Thawing equipment, scale, measuring utensils
	Mix	←	←— Mechanical mixing equipment



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3. Potential Hazards

1. **Potential species-related hazards:** (FDA's Draft Hazards and Controls Guide)

- a. None
- 2. **Potential process-related hazards:** (FDA's Draft Hazards and Controls Guide)
 - a. Pathogen Survival Through Cooking
 - b. Cross-Contamination
 - c. Temperature Abuse During Processing of Cooked Products and Raw Molluscan Shellfish
 - d. Pathogen Survival During Pasteurization
 - e. Recontamination after Pasteurization
 - f. Temperature Abuse During Final Cooling (Pathogens)
 - g. Temperature Abuse During Finished Product Storage (Pathogens)
 - h. Temperature Abuse During Distribution (Pathogens)
 - i. Metal Inclusion
 - j. Food and Color Additives

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4. Hazard Analysis Worksheet

(1) Ingredient/ Processing Step	(2) Potential Hazard Introduced or Controlled	(3) Is the Potential Hazard Significant (Reasonably Likely to Occur - Yes/No)	(4) Justification for Inclusion or Exclusion as a Significant Hazard (Consider the likelihood that the hazard would or would not be introduced, or intensified, or a hazard from a previous step can be controlled	(5) Preventive Measure(s) for the Significant Hazard from Column 3 (Existing plus additional, if needed)	(6) Critical Control Point (Yes/No)
Receiving	BIOLOGICAL None	No	N/A	N/A	No
	CHEMICAL None	No	N/A	N/A	No
	PHYSICAL None	No	N/A	N/A	No
Storage	BIOLOGICAL None	No	N/A	N/A	No
	CHEMICAL None	No	N/A	N/A	No
	PHYSICAL None	No	N/A	N/A	No
Thaw, weigh, measure	BIOLOGICAL None	No	N/A	N/A	No
	CHEMICAL None	No	N/A	N/A	No
	PHYSICAL None	No	N/A	N/A	No
Mix	BIOLOGICAL None	No	N/A	N/A	No
	CHEMICAL Food and color additives	No	Ingredients and additives are not a food safety hazard	N/A	No

Chop	PHYSICAL Metal inclusion	Yes	Mechanical mixing equipment	Metal detector at check weigh	No
	BIOLOGICAL None	No	N/A	N/A	No
	CHEMICAL None	No	N/A	N/A	No
Mix	PHYSICAL Metal inclusion	Yes	Mechanical Chopping equipment	Metal detector at check weigh	No
	BIOLOGICAL None	No	N/A	N/A	No
	CHEMICAL None	No	N/A	N/A	No
Pump and extrude	PHYSICAL Metal inclusion	Yes	Mechanical mixing equipment	Metal detector at check weigh	No
	BIOLOGICAL None	No	N/A	N/A	No
	CHEMICAL None	No	N/A	N/A	No
Cook	PHYSICAL Metal inclusion	Yes	Mechanical pumping and extrusion equipment	Metal detector at check weigh	No
	BIOLOGICAL Pathogen survival	No	Not a pathogen kill step	N/A	No
	CHEMICAL None	No	N/A	N/A	No
Cool	PHYSICAL Metal inclusion	Yes	Mechanical cooker parts	Metal detector at check weigh	No
	BIOLOGICAL Cross-contamination	No	Controlled at pasteurization	N/A	No
	Pathogen growth	No	Minimum time period	N/A	No
Slit	CHEMICAL None	No	N/A	N/A	No
	PHYSICAL None	No	N/A	N/A	No
	BIOLOGICAL Cross-contamination	No	Controlled at pasteurization	N/A	No
	Pathogen growth	No	Minimum time period	N/A	No
	CHEMICAL None	No	N/A	N/A	No
	PHYSICAL Metal inclusion	Yes	Mechanical slitter	Metal detector at check weigh	No

Roll	BIOLOGICAL				
	Cross-contamination	No	Controlled at pasteurization	N/A	No
	Pathogen growth	No	Minimum time period	N/A	No
	CHEMICAL				
	None	No	N/A	N/A	No
Cut and wrap	PHYSICAL				
	None	No	N/A	N/A	No
	BIOLOGICAL				
	Cross-contamination	No	Controlled at pasteurization	N/A	No
	Pathogen growth	No	Minimum time period	N/A	No
Package	CHEMICAL				
	None	No	N/A	N/A	No
	PHYSICAL				
	Metal inclusion	Yes	Mechanical cutting equipment	Metal detector at check weigh	No
	None	No	N/A	N/A	No
Weigh	BIOLOGICAL				
	Cross-contamination	No	Controlled at pasteurization	N/A	No
	Pathogen growth	No	Minimum time period	N/A	No
	CHEMICAL				
	None	No	N/A	N/A	No
Vacuum wrap	PHYSICAL				
	None	No	N/A	N/A	No
	BIOLOGICAL				
	Cross-contamination	No	Controlled at pasteurization	N/A	No
	Pathogen growth	No	Minimum time period	N/A	No
Check weigh	CHEMICAL				
	None	No	N/A	N/A	No
	PHYSICAL				
	None	No	N/A	N/A	No
	Metal inclusion	Yes	Mechanical processing equipment	Metal detector	Yes

Pasteurize	BIOLOGICAL				
	Pathogen survival	Yes	Inadequate pasteurization may not kill pathogens	Use established process	Yes
	CHEMICAL				
	None	No	N/A	N/A	No
	PHYSICAL				
	None	No	N/A	N/A	No
Cool	BIOLOGICAL				
	Recontamination after pasteurization	No	Package prevents recontamination	N/A	No
	Pathogen growth	Yes	Temperature abuse may allow pathogen growth	Cool to 40°F or below within 4 hours	Yes
	CHEMICAL				
	None	No	N/A	N/A	No
	PHYSICAL				
	None	No	N/A	N/A	No
Cooler	BIOLOGICAL				
	Recontamination after pasteurization	No	Package prevents recontamination	N/A	No
	Pathogen growth	Yes	Temperature abuse may allow pathogen growth	Hold at 40°F or below	Yes
	CHEMICAL				
	None	No	N/A	N/A	No
	PHYSICAL				
	None	No	N/A	N/A	No
Freezer	BIOLOGICAL				
	Recontamination after pasteurization	No	Package prevents recontamination	N/A	No
	Pathogen growth	No	Temperature too low for pathogen growth	N/A	No
	CHEMICAL				
	None	No	N/A	N/A	No
	PHYSICAL				
	None	No	N/A	N/A	No
Ship	BIOLOGICAL				
	Recontamination after pasteurization	No	Shipped by commercial carrier	N/A	No
	Pathogen growth	No	Shipped by commercial carrier	N/A	No
	CHEMICAL				
	None	No	N/A	N/A	No
	PHYSICAL				
	None	No	N/A	N/A	No

Reviewed by:

Date:

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5. HACCP Plan Form: Imitation Crabmeat

(1) Critical Control Point (CCP)	(2) Hazard	(3) Critical Limits of the Preventive Measures	Monitoring				(8) Corrective Actions	(9) Records	(10) Verification
			(4) What	(5) How	(6) Frequency	(7) Who			
Check weigh	Metal inclusion	Perform no processing without a metal-detection device	Packaged product	Metal detector	Each package	Automatic reject	Destroy or reprocess	Metal detector record	Daily record review; Metal detector calibration
Pasteurize	Pathogen survival	Heat to internal temperature of 177.8°F for 5 minutes	Time <i>or</i>	Temperature recorder	Continuous	Processing supervisor	Reprocess	Recorder chart	Daily record review
			Time	Measure chain speed	Daily before processing	Processing supervisor	Reprocess	Process log	Daily record review
			Temperature	Temperature recorder	Continuous	Processing supervisor	Reprocess	Recorder chart	Daily record review
Cool	Pathogen growth	Cool to 40°F or below within 4 hours	Temperature	Temperature recorder	Continuous	Processing supervisor	Destroy	Recorder chart	Daily record review; thermometer calibration
Cooler	Pathogen growth	Less than 4 hours above 40°F	Temperature	Temperature recorder	Continuous	Processing supervisor	Destroy	Recorder chart	Daily record review; thermometer calibration

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6. Daily Metal Detector Record

Date:

Processing line:

CALIBRATION CHECK

Time	Results	Comments	Initials
	Pass _____		
	Fail _____		

REJECT RECORD

Time	No. of packages rejected	Disposition of packages	Comments	Initials

Reviewed by:

Date:

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The author is Robert J. Price, Extension Specialist, Seafood Products, Food Science & Technology, University of California, Davis, CA 95616-8598

UCSGEP 96-2W; April 1996

This work is sponsored in part by NOAA, National Sea Grant College Program, Department of Commerce, under grant number NA36RG0537, project number A/EA-1, through the California Sea Grant College Program, and in part by the California State Resources Agency. The U.S. Government is authorized to reproduce and distribute reprints for governmental purposes.