

# Refrigerated Modified Atmosphere Packaging Seafood Safety

Educational Webinar

October 2017



NATIONAL  
FISHERIES  
INSTITUTE®





# SEAFOOD Packaging



# Seafood Packaging - Why

- Global growth – consumption
- Import / Export markets growing

## Packaging promotes and assist in:

- Improve Food Safety
- Shelf life Extension
- Enhance Quality
- Reduce Distribution Costs
- Convenience
- Support Legislation / FDA



# Packaging Solutions





# Seafood Packaging

Fresh

Frozen

Barrier

Non-Barrier

Barrier

Non-Barrier



**FISHMONGER/  
HEALTH & WELLNESS**



**GOURMET/  
VALUE ADDED**



**OVENABLE/  
MICROWAVABLE**



**SNACKS/SUSHI**



**SMOKED**



**EXPORTERS**

# Packaging Types

## Vacuum:

Bags

Trays with vacuum skin

Microwavable

Dual Ovenable

Rollstock

## Non-Vacuum:

Trays with lid stock

Overwrap

Microwavable

Dual Ovenable

*Any of the above packaging can be considered ROP; therefore, all processes need to follow the FDA Food Code as recommended.*

# Vacuum Solutions



# 10K OTR Vacuum Shrink Bags

## Attributes

- Oxygen-permeable vacuum bag meets the FDA guidelines for fresh seafood (>10,000 OTR)
- Heat sealable
- Vacuum allows for quick, deep chilling
- Preserves product freshness and color
- All bags are printed with 10K Logo for easy identification by inspectors



# Darfresh® 10K Vacuum Skin Package

## Attributes

- Oxygen permeable film that meets FDA guidelines for fresh seafood (>10,000 OTR)
- Can be used with a semi-rigid or pre-made tray
- Helps eliminate cross contamination
- Vacuum skin package helps preserve color and product integrity through distribution
- Keeps product secure for easy distribution and merchandizing



# Darfresh® Vacuum Skin Package

## Attributes

- Barrier material to help reduce oxidation
- Can be used with a semi-rigid or pre-made tray
- Helps eliminate cross contamination
- Vacuum skin package helps preserve color and product integrity through distribution
- Keeps product secure for easy distribution and merchandizing



# Simple Steps®

## Attributes

- Cook frozen (barrier film) or fresh (non-barrier film - >10,000 OTR) seafood in a microwave
- Can be used with semi-rigid or pre-made trays
- Product can be shipped frozen and sold as case ready in same package
- Keeps product secure for easy distribution and merchandizing



# Rollstock



## Attributes

- Barrier material and non-barrier materials (>10,000 OTR)
- Thermoformed package (form a pocket and seal with perimeter heat seal)
- Vacuum allows for quick, deep chilling
- Can be shipped with reduced quantities of ice helping to decrease transportation costs



# Case Ready Solutions -MAP



# Perforated Lidstock

## Attributes

- Meets FDA regulations for oxygen transmission levels (>10,000 OTR)
- No modified atmosphere required
- Remains fog-free during refrigeration



# High OTR Overwrap Film

## Attributes

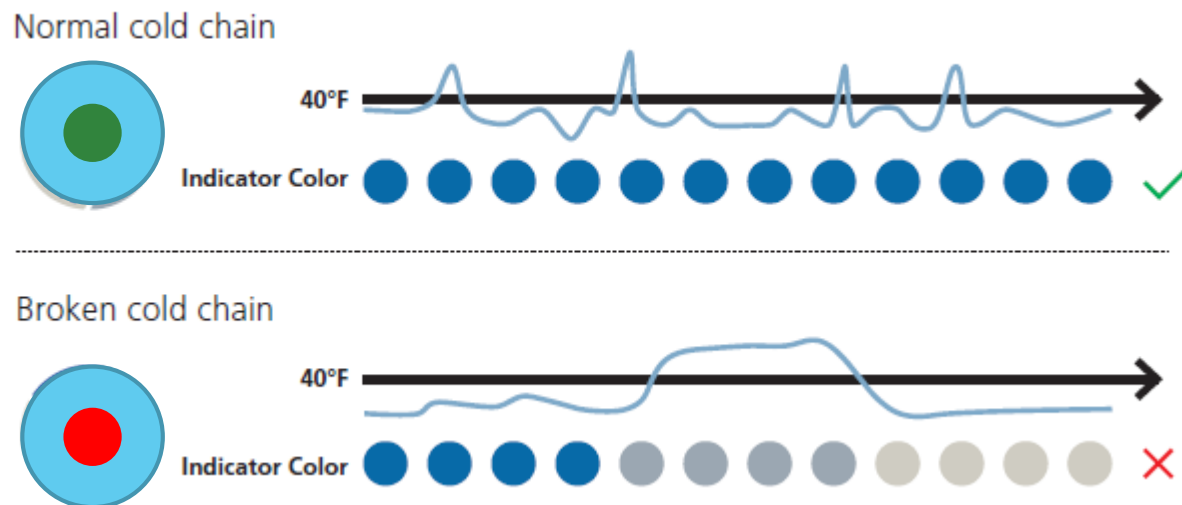
- Meets FDA regulations for oxygen transmission (> 10,000 OTR)
- Highly resistant to punctures, tears, and abrasions
- Can print the film



# MAP Lidstock (with TTI)

## Attributes

- Create desired oxygen modified atmosphere by gas flushing the lidstock and tray combination (barrier lid stock and tray)
- TTI required on the package due to FDA regulations
- Remains fog-free during refrigeration



# Barrier overwrap film

## Attributes

- Highly resistant to punctures, tears, and abrasions
- Can print the entire package
- TTI required to meet FDA regulations for oxygen transmission



# Questions ?