

Practical use of Chill Killing



Practical Use of Chill Killing for Shrimp Harvest

Chill Killing:

A method where shrimp are rapidly cooled in ice slurry or chilled water before further processing.

Key benefits of using chill killing for shrimp:

- Product quality:
 - Better texture and firmness
 - Enhanced Freshness
 - Better appearance
 - Physical Integrity

- Food Safety and Shelf Life:
 - Lower bacterial load
 - Extended shelf life
- Animal Welfare:
 - More humane method
 - Market requirements
- Niche market access:
 - Preferred by some markets prioritizing humane slaughter
 - Customer specific requirements



- Challenges:
 - Cost and resource burden
 - Limited cold chain facilities in farming areas
 - Manual and in-efficient preparation of ice slurry
 - More training and supervision required as harvesting teams are from the farm.
 - Managing use / re-use of slurry water, potential for contamination.
 - Chill killing can be ineffective if placement of slurry tanks is away from the pond due to access limitations.
 - Few tests available for quantification of freshness
 - TVN testing.
 - Water protein ratios.

