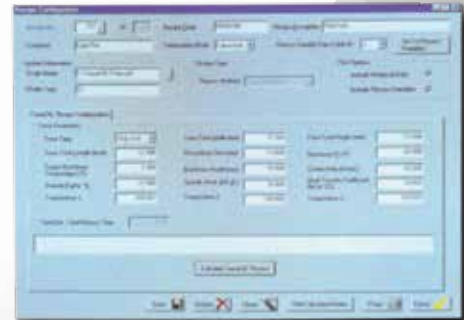


# TunaCAL™



## Optimized Tuna Precooking

### Three Fundamental Solutions from TunaCAL™

#### YIELD

- Reduced cooking loss means more meat
- Accurate cooking profile reduces skinning labor

#### QUALITY

- Oxidation virtually eliminated
- More and consistently better loins

#### EFFICIENCY

- Uses heat from “traditional cooling” cycle
- Significant energy and water savings

### How It Works

#### ...TunaCAL™ Makes Product Characteristics Controllable...and Consistent

LOG-TEC Momentum™ control hardware monitors the precooking process for required information so TunaCAL™'s intelligent, patent pending algorithms can:

1. Calculate multiple critical factors in real time.
2. Deliver the target backbone temperature everytime.
3. Adjust the precooking process in real time.
4. Hands off - automatic process control.

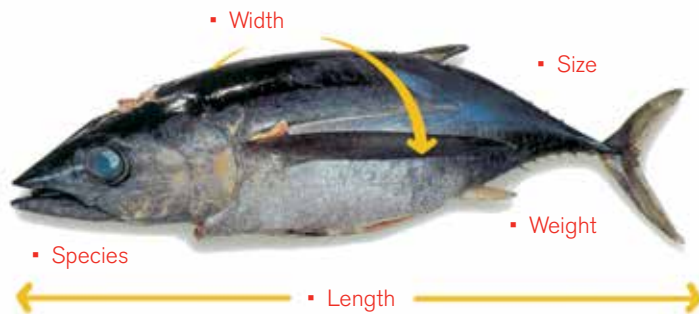
#### Example Product Attributes Monitored in Real Time

#### TunaCAL™ Utilizes a Minimum of Nine Critical Optimization Measurements

- Oil Content
- Initial Incoming Temperature
- Desired Backbone Temperature
- Thermal Conductivity\*

\*Additional factors can be added

**The most optimized process. Every day. Every fish.**



## TunaCAL™ Backgrounder

### Eliminates Trial & Error Method

TunaCAL™ is a highly refined mathematical modeling software created to optimize the tuna precooking process and provide significant benefits in yield, consistency and quality. TunaCAL™ automatically adjusts for a multitude of product variables (see front panel for the basic list) in real time, and enables the scientific optimization of your precooking process without using trial and error.

### TunaCAL™ Installed on the LOG-TEC Momentum™ Operating System

LOG-TEC Momentum™ hardware is designed to precisely control the delivery of a process. The system removes the human operator from the critical delivery functions and ensures a more efficient process.

### Significant Yield Gains Realized

JBT research demonstrates that TunaCAL™ can deliver a positive yield increase, depending on the species and the environmental conditions existing at the time of processing. TunaCAL™ supports a complete line of benefits throughout your processing line. For instance, TunaCAL™ helps deliver consistent product to your cleaning tables, which facilitates skin removal and cleaning. Our economic models show that TunaCAL™'s combination of consistency, yield improvement, and direct support of better line operations contributes to the customer's organization with:

- Significantly higher quality end product
- More overall revenue generated from the line
- Higher operational profitability.

### Technical Differentiators

- Mathematically optimized recipes
- Operator selects species and rack count
- All valves and field devices are automatically sequenced
- "Operator-free" pre-programmed recipes and automatic deviation management
- Patent TunaCAL™ on-line control strategy and predictive modeling algorithms

## WE ARE YOUR SINGLE SOURCE FOR PROFITABLE PROCESSING SOLUTIONS

JBT is a leading provider of integrated food processing solutions. From single machines to complete processing lines, we enhance value and capture quality, nutrition and taste in food products. With a local presence on six continents, JBT can quickly provide our customers and partners in the food processing industry with the know-how, service, and support needed to succeed in today's competitive marketplace.

### JBT LIQUID FOODS

FRESH PRODUCE TECHNOLOGIES | FRESH-CUT, ROBOTICS, STEAMING | FRUIT AND VEGETABLE PROCESSING | SECONDARY PROCESSING | ASEPTIC SYSTEMS | FILLING AND CLOSING | IN-CONTAINER STERILIZING | TRAY SEALING | HIGH-PRESSURE PROCESSING | POWDER PROCESSING | TUNA PROCESSING

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- Controls both heating and cooling phases
- Supports metrics capture for processing and business use.

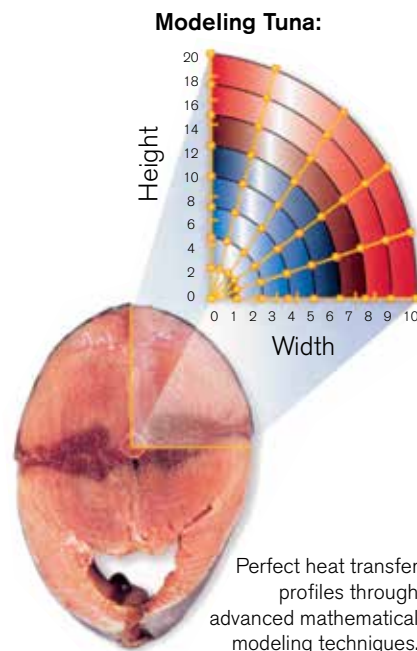
**TunaCAL™ is the most technically stable, industry proven, and operationally fool proof solution. It simply embeds all sensitive operations and delivers purely optimized precooking processes without human intervention.**

### Precooking Configuration by Species

The virtually infinite TunaCAL™ database holds individual parameter profiles for each species or subset of that species. This mathematical reduction translates the physical structure of the fish into algorithmic variables (see Monitored Factors section) to deliver the perfect backbone exit temperature every time... eliminating trial and error precooking.

### Options and Support

TunaCAL™ is available as an "Easy Deployment" retrofit package for non-vacuum applications or with the JBT Vacuum Precooker. Our JBT Solutions Team can also provide completely integrated tuna solutions that consist of vacuum pre-cookers, tuna fillers, vacuum liquid fillers, seamers and overpressure sterilizers for plastic containers, pouches or traditional cans.



We're with you, right down the line.™

hello@jbt.com | [jbt.com](http://jbt.com)

