



# Technical School

## Thermal Processing Academy Aseptic and Canning

**March 13-17, 2023**

Puebla, México



### Why is it important to participate?

The course is structured in such a way that the participants will obtain knowledge of the critical parameters in food safety and the quality of products thermally treated in autoclaves and continuous sterilizers (container processes) as well as “in-flow” (aseptic processes).

The course will be developed in 5 days to cover all the most important aspects that concern the technological topics related to the thermal treatment of food products, both for canned products and for aseptic products. Once this knowledge has been acquired, the participants will be able to understand their responsibility for the quality and safety of processed foods.

During the first two days of the course, exclusive topics will be addressed for aseptic processes that will allow understanding and developing thermal processes based on the nature of the product and the type of exchanger used to process. The following three days will address topics focused on container processes, rotating and static batch or continuous equipment, temperature distribution in equipment, heat penetration in products, and critical factors for process design and deviations.

### Who is the course for?

The course is aimed at all people involved in the production of high-quality and safe canned and aseptic food products for the final consumer. Some of the people who fall into this category are:

Operators and line supervisors, plant engineers, food technologists, new product research and development personnel, and quality control personnel.

### Content

#### Aseptic Processes

##### **13 March**

- Calculation of heat treatment
  - Effect of product viscosity
  - Effect of the presence of particles

##### **14 March**

- Ester Sterilizers with tubular heat exchanger
- CIP: Cleaning In Place
- SIP: Sterilization In Place Aseptic filler
- FDA regulatory references

## Containerized Processes

### 15 March

- History of canning Microbiology
  - General features
  - Microbiology of thermal processes
- Sterilization/Lethality/General Method
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  - Fo
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- General Method
- Heat transfer concepts Sterilization systems
  - Batch
  - Continuous
- Temperature Distribution Concepts

### 16 March

- Advanced aspects of numerical calculation
- Temperature distribution
- Heat distribution
- Heat Penetration Studies
- Calculation methods
  - Método General
  - Fórmula de Ball
  - NumeriCAL® software Critical factors

### 17 March

- Data Analysis for Temperature Distribution
- Data Analysis for Heat Penetration
- Case study to calculate a process
- Analysis of process deviations
- Practical example with product

## Certification

At the end of the seminar, each participant will receive a training certificate from the JBT "Technical School".

## Course Venue

JBT de México S de RL de CV.  
Camino Real a San Andrés Cholula No. 2612  
Col. San Bernardino Tlaxcalancingo.  
CP: 72820. San Andrés Cholula, Puebla

## Participation Fee

### March 13-14

Aseptic Processes: \$750 USD + I.V.A. (16%)

### March 15, 16 and 17.

Container Processes: \$1,000 USD + I.V.A. (16%)

### Full participation (5 days):

Discounted fee \$1,500 USD + I.V.A. (16%).

Limited availability

10% discount for prompt payment (February 03, 2023)

10% discount when registering 2 or more people from the same company (Before February 18, 2023)

## Important

Last day to receive payments and registration form:

**March 3, 2022.**

## Payment Methods

**New Clients:** Payments in advance (100%) by bank transfer.

Billing after receipt of payment.

**Existing Clients:** Purchase orders will be accepted but payment must be reflected before February 28, 2023

Send the registration form per participant and proof of payment to the following email: [fabiola.carrillo@jbt.com](mailto:fabiola.carrillo@jbt.com)

## For more information:

[fabiola.carrillo@jbt.com](mailto:fabiola.carrillo@jbt.com)

Tel.: +52 222 329 4902 ext. 121

## Speakers



### Jacques Bichier

I. in Agricultural Engineering from the University of Florida.  
He has been with JBT since 1991 as a member of the Process Technologies Lab Group in Madera, California. Expert in heat treatment designs, sterilization systems (rotary, hydrostatic, immersion, steam/air and pressurized water systems), numerical models and legal requirements.



### Antonio Aldini

Master's degree in analytical chemistry at the University of Parma, 1997.  
R&D Manager at JBT Parma with 15 years of experience in Aseptic processes.