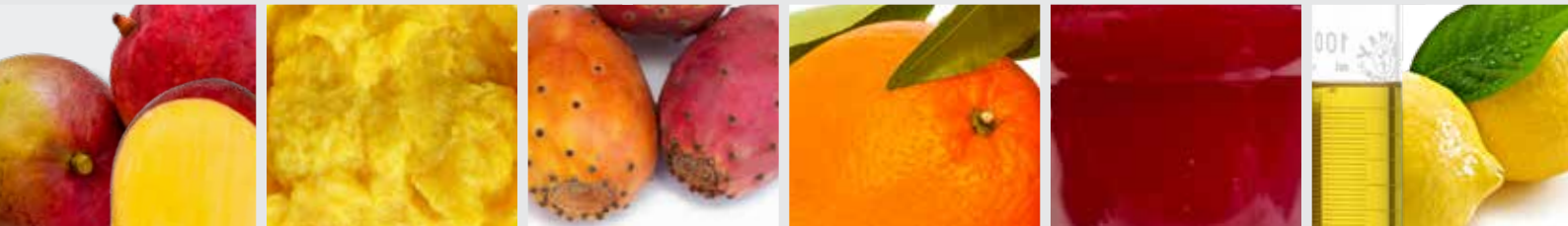


Research & Technology Center

Puebla, Mexico



Technologies and Services for Fruit and Vegetable,
Thermal Processing and HPP Systems

A pilot plant dedicated to serve our customers

Direct contact: puebla.customerservice@jbt.com

The Research & Technology Center (RTC) in México - Puebla, offers technologies and services for the food industry broadly in three areas, Fruit and Vegetable, Thermal processing and HPP Systems.

Fruit and Vegetable processing

Fruit and Vegetable processing offers knowledge in two categories, Citrus and non Citrus processing. The primary objectives of each category is to optimize the yield, quality and throughput of the processing equipment and systems that JBT Corporation supplies. With our well-established R&D management process in place, our processing systems consistently maximizes the available expertise and resources.

Currently the Puebla RTC is equipped with three commercial JBT extractors (Models 391 and 593), a Fresh'n Squeeze® Multi-Fruit Juicer, a screw finisher, a paddle finisher, and an FTE Turbo Finisher. The RTC is equipped to simulate many of the processes found in the modern commercial food processing industries. The facility is equipped with sophisticated laboratory instruments prepared to perform quality investigations and physicochemical analysis to analyze fruit, juice and pulp products as established by the USA, European, and Mexico regulatory authorities and the market's demanding requirements.

JBT's READYGo FVP (Fruit and Vegetable Processing) skid is a process system for making cold-extracted juices from a variety of fruits and vegetables.

The quality of our investigations is guaranteed by using sound scientific practices and procedures that consistently use methodologies and statistics to properly plan the experiments and to analyze the results.

Puebla RTC offers the following services for the Fruit and Vegetable Processing Industry:

- 1. Monthly citrus characterization program:** Generate monthly yield and quality reports. These reports are then sent via our JuiceLines™ monthly e-mail distribution to help customers optimize their production facilities.
- 2. Process Audits:** JBT process experts can visit production facilities to review the process line and give support to improve and optimize processes.
- 3. Specific Tests at RTC:** Our Food Scientists and Process Engineers can work with the customers to develop new product and process formulations to address the changing market requirements.



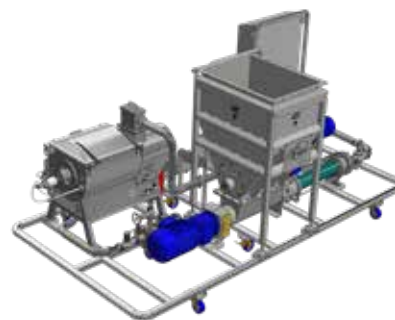
Extractor Model 391



Extractor Model 593



Extractor Model CJE 191



READYGo™ FVP



Multi-Fruit Juicer



UCF 110



UPF 100



FTE-50



Triple Mixer Tank A&B



VacShear A&B

4. Training: Another value provided by the Research and Technology Center is a training facility and specific testing for customers with new raw materials and process optimization. Here customer personnel can learn about scientific processes and procedures, laboratory equipment, equipment operations, and much more. A fully equipped training facility is available to host groups of up to 25 people for special training programs.

In addition, other equipments are available such as pulper (FMC 50), industrial blender (Stephan UM44), A&B tanks and mini MORE equipment, among others, which help to process other fruits and vegetables in our Pilot Plant. Studies have also been conducted with several fruits and vegetables to understand their behavior, generate yield and quality data, and define new processes. Some of these products are grape, melon, litchi, mango, banana, mamey, apple, pineapple, cucumber, aloe vera, carrot, ginger, guava, etc.

Thermal processing systems

Our Thermal Pilot facility has the capability to batch products in our thermal laboratory and then perform the required heat penetration studies in a laboratory sterilizer. The lab is equipped with the most modern measurement technology for thermal process data collection - for batch and continuous systems - and data analysis. Pilot equipment for food product preparation, filling and seaming on the semi-industrial scale is also available.

Our multi-Purpose Laboratory Sterilizer has the flexibility to simulate static and agitating (end over end) batch with steam water spray. Therefore it is capable of accurately simulating majority of production sterilizers engineered and built by JBT. This system provides the processor with the capability and flexibility to accurately design thermal processes using the type of equipment that best fits the requirements of the product, instead of forcing the processor to reformulate a product to fit a certain type of sterilizer.

Different thermal process evaluation and calculation strategies, such as the Ball Method, the General Method, and NumeriCAL™, are used to determine the most beneficial thermal process for a particular product. We can simulate these processes in our pilot installations and/or work directly in your autoclaves ensuring the highest quality of your product. Thermal process work can be performed either in your laboratory, factory, or in our pilot facility in Puebla, Mexico.



AR 091 MP Retort

Types of Products offered:

- Products with distinct solid and liquid components or in low viscosity products (broths and sauces).
- Canned mushrooms, vegetables, beans, asparagus, etc.
- Products with starch and gums.
- Homogeneous products such as milk, sauces, creams, etc.
- TUNA

Types of Packages offered:

- Cans
- Glass
- Pouches
- Cups and Plastic trays (ready to eat)



Agilent Infinity II 1260 HPLC



List of courses:



Thermal Processing Academy

Better Process Control School
(FDA Approved)

Types of Services offered:

- Temperature distribution tests
- Heat penetration tests

JBT Mexico organizes periodically different courses or seminars on fruit and vegetable processing, thermal processing and FDA regulations. The courses are normally in Spanish and can be taught at the JBT facilities or on customer site.

Thermal processing courses are taught by experts in the sector considered "process authorities" and recognized by the FDA.

HPP High-Pressure Processing

The Puebla facility is also capable of running HPP trials on its JBT AVURE 35L system. In addition to the actual high pressure processing of the food and/or beverage, the lab is also equipped to run organoleptic and sensory tests in order to determine the shelf life of the following products:

- Wet Salads & Dips
- Ready-To-Eat Meals
- Meat
- Beverages & Juices
- Vegetables
- Avocados
- Seafood

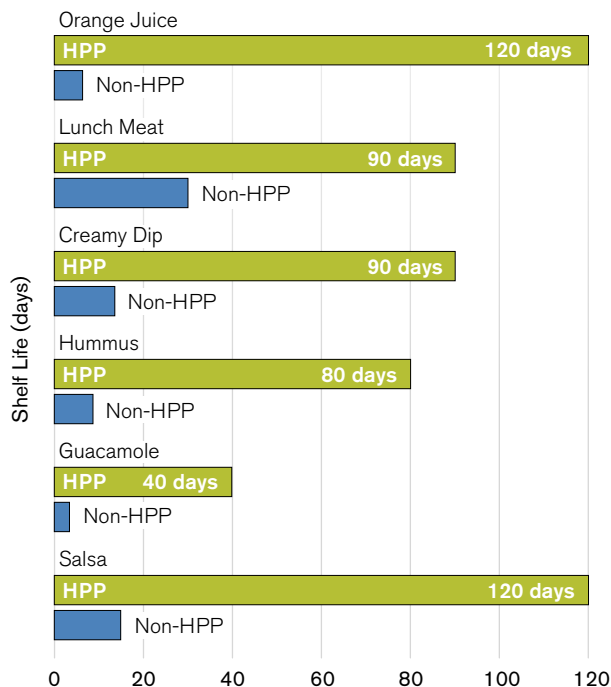


Avure™ Expandable HPP Machine

The world's first expandable High Pressure Processing machine. Produces from 40 to 70 million pounds per year.



Shelf Life Comparison



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

OUR BRANDS



Europe

John Bean Technologies NV
Via Mantova 63/A
43122 Parma
Italy
Phone: +39 0521 908 411
Fax: +39 0521 460 897

John Bean Technologies NV
Breedstraat 3
9100 Sint-Niklaas
Belgium
Phone: +32 3 780 1211
Fax: +32 3 777 7955

John Bean Technologies Foodtech Spain S.L.
Autovía A-2, Km 34,400 - Edificio 1 y 3
28805 Alcala de Henares
Madrid, Spain
Phone: +34 91 304 0045
Fax: +34 91 327 5003

JBT Food & Dairy Systems
Deccaweg 32
1042 AD Amsterdam
The Netherlands
Phone: +31 20 634 8911
Fax: +31 20 636 9754

North America

John Bean Technologies Corporation
400 Fairway Avenue
Lakeland, FL 33801
USA
Phone: +1 863 683 5411
Fax: +1 863 680 3672

John Bean Technologies Corporation
2300 Industrial Avenue
Madera CA 93639
USA
Phone: +1 559 661 3200
Fax: +1 559 661 3156

A&B Process Systems Corporation
212700 Stainless Ave.
Stratford, WI 54484
USA
Phone: +1 715 687 4332
Fax: +1 715 687 3225
abprocess@jbt.com

South Africa

John Bean Technologies (Pty) Ltd.
Koper Street
Brackenfell
Cape Town, South Africa 7560
Phone: +27 21 982 1130
Fax: +27 21 982 1136

South America

John Bean Technologies Máq.
e Equip. Ind. Ltda.
Av. Eng Camilo Dinucci 4605
14808-900 Araraquara, São Paulo
Brazil
Phone: +55 16 3301 2000
Fax: +55 16 3301 2144

John Bean Technologies Argentina SRL
Uruguay 1525
San Miguel de Tucumán
T4000BAG Tucumán
Argentina
Phone: +54 381 423 5322
Fax: +54 381 423 3799

Latin America

JBT de México S de RL de CV
Camino Real a San Andrés Cholula No. 2612
Col. San Bernardino Tlaxcalancingo
72820 San Andrés Cholula, Puebla
México
Phone: +52 222 329 4902
Fax: +52 222 329 4903

Asia Pacific

John Bean Technologies (Kunshan) Co., Ltd
No. 298 Shansong Road, Yushan Tow,
Kunshan City, Jiangsu Province
PRC 215300 China
Phone: +86 512 3663 0500
Fax: +86 512 3663 0550



We're with you, right down the line.™

hello@jbt.com | jbt.com

