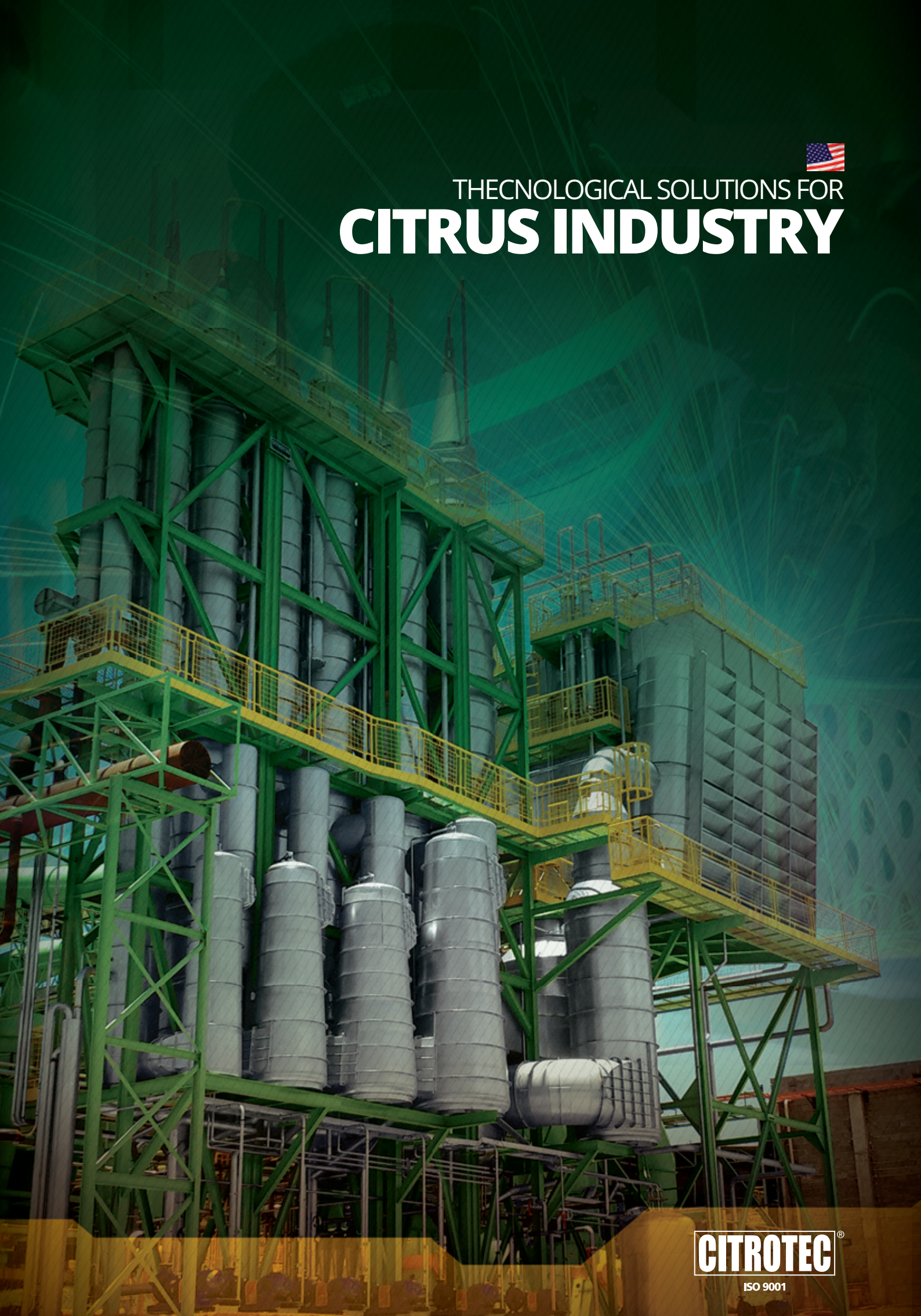




THE TECHNOLOGICAL SOLUTIONS FOR  
**CITRUS INDUSTRY**



**CITROTEC**®

ISO 9001



THE BEST COST VERSUS BENEFIT RATIO IN THE MARKET

# CITRUS EVAPORATORS



ISO 9001

The evaporators produced by Citrotec® are determined by their capacity to remove water, number of stages and effects.



TASTE® Evaporator for orange juice installed in Agroterenas Citrus, in Santa Cruz do Rio Pardo/SP - Brazil



TASTE® Evaporator for orange juice installed in Cooperativa Integrada in the city of Uraí/PR - Brazil

## TASTE® - EVAPORATOR

The TASTE® evaporators operate under the principle of descending turbulent mist, with short exposure to temperature and thermally accelerated. They are especially designed for the production of a wide variety of concentrated products with high quality and minimum operational costs. It can be equipped with high performance evaporative condenser or Barometric condenser or Surface condenser.

### FEATURES:

- Shorter exposure to heat.
- Vacuum evaporation system.
- Low steam consumption.
- Low energy consumption.
- Low incrustation due to turbulent mist.
- Simple operation.
- Low maintenance and instrumentation cost.
- Made of stainless steel.
- Easy transportation and low installation cost.
- It doesn't need cooling tower (when it uses E. C).
- Indirect condensation with 100% of sanitary conditions guaranteed (when it uses E. C.).



TASTE® Evaporator for pineapple juice, installed in Mexico

TASTE® Evaporator for citric, apple and grape juice, installed at Fischer S/A, in Videira/SC - Brazil





Evaporator ENET with D'Oiler installed in Tropfruit in Estância/SE - Brazil



Evaporator ENET with D'Oiler installed in Maratá Sucos in Estância/SE - Brazil

## EVAPORATOR D'OILER EQUIPPED WITH DISTILLATION COLUMN TO RECOVERY CITRUS OIL AND CONCENTRATION

High quality aromatic citrus oil (d-Limonene), it comes from the peel of citric fruits. Citrotec<sup>®</sup>'s distillation columns installed in the TASTES, concentrate and recover the high quality citrus oil (high aldehyde) from the liquor of the citric peel reacted and pressed, in addition to promoting the concentration to approximately 45° Brix.

### FEATURES:

- Shorter exposure to heat.
- Vacuum distillation system.
- Low incrustation due to low heating.
- Vacuum evaporation system.
- Low incrustation due to turbulent mist.
- High rate of evaporation.
- Simple operation.
- Low maintenance and instrumentation cost.
- Made of stainless steel.
- Easy transportation and low installation cost.
- High rate of investment return.
- Reduction of load on effluent treatment.



TASTE<sup>®</sup>/WASTE installed at Citrus Juice, in Itajobi/SP - Brazil

## TASTE<sup>®</sup>/WASTE

It is an evaporator of liquor concentration from pellet mil production or citric peel wash water for the production of base pectin with recovery of d-Limonene. This system allows the recirculation of the condensate in the production of base pectin with low water consumption and friendly environment using boiler steam and dryers gases energy.

### FEATURES:

- Recovery of the condensate in the evaporation of the citric peel washing water, allowing the recirculation of this product.
- Production of pectin base with low water consumption.
- Recovery of d-Limonene.
- Cleaning C.I.P.
- Low cost operation.
- Low energy consumption.
- Use of Evaporative Condensers.
- Dryer gases energy recovery.



TASTE<sup>®</sup>/WASTE installed at Garcia Carrión, in Spain





## DISTILLER - D'OILER

Equipped with a vacuum distiller column, to remove residual d-Limonene remaining in the discharge of cold pressed oil systems and other waste streams, it recovers and concentrates the high quality citrus oil (high aldehyde). It can also be supplied with the bagasse processing system through a mill, lime doser, reactor and pressing.

### FEATURES:

- Low investment costs.
- Allow to use water recirculation in the juice extractors.
- Extraction of high quality d-Limonene, with high value.
- Low energy consumption.
- High rate recovery.

D'Oiler installed in Agroterenas Citrus in Santa Cruz do Rio Pardo/ SP - Brazil

## CITRUS PEEL DRYER

The citrus peel dryer is a simple step rotating equipment of high efficiency, widely used in the citrus industry. The rotary drum has the function of distributing the bagasse in single pass that the water evaporates, generating humid gas, which is sucked by the fans of the suction box. That humid gases of the drying can be used in the Waste Heat Evaporators (WHE).

### FEATURES:

- Drying of the citric bagasse with high efficiency and low energy consumption.
- Bagasse drying for the production of Pellets with high quality.
- Small change in color of dry peel.
- Production of pellet mil of high value.
- Safe and automated operation.
- High drying rate.



World largest 80,000 lb/h citrus peel dryer by Citrotec®





## CITRIC PEEL DRYER WITH MULTIPLE PASS

The citric peel dryer is a high efficiency equipment and low exposure of the bagasse to high temperatures. It is ideal for the production of pectin base of high quality with color preservation. Safe and automated operation the citric peel dryer with multiple passes is widely used in the citric industry.



### FEATURES:

- Drying of the citric bagasse with high efficiency and low energy consumption.
- Bagasse drying for the production of pectin base with high quality.
- Small change in color of dry peel.
- Production of feed of high value.
- Safe and automated operation.
- High drying rate.

Citric bagasse dryer with multiple turns, installed at Citrus Juice, in Itajobi/SP - Brazil



## INDUSTRIAL COMPLEX AND MAINTENANCE SERVICE

Modern industrial complex capable of meeting all the needs of its customers. The manufacturing process of Citrotec®, as well as, maintenance services, combine the latest technology with highly trained professionals, with international know-how and strict quality control. The Citrotec® maintenance staff is very specialized and can do service maintenance in evaporators, citrus dryers and all citrus plants equipments in worldwide.

New industrial site with an area of 5000 m<sup>2</sup>

## CITROTEC'S CUSTOMERS

We are building trust and total customer satisfaction. It is our main goal, Citrotec® proves its competence and commitment by high quality products and services.







**CITROTEC**®

ISO 9001

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