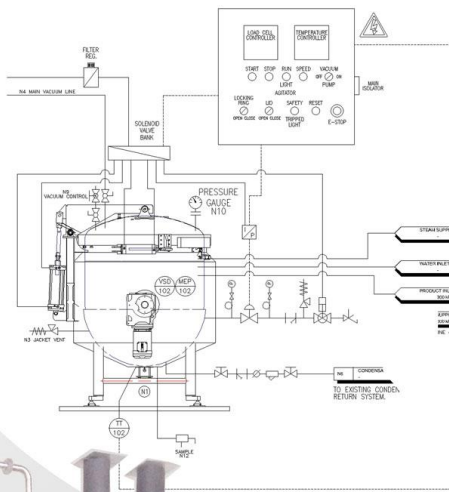


# INOX PROCESS



**PRESSURE  
COOKING**

**VACUUM  
COOKING  
& MOISTURE  
REDUCTION**

Inox process retorts and kettles are designed for batch processing of food products by pressure, atmospheric, or vacuum cooking.

Accurate process temperature control is achieved by a finely tuned P&ID loop complete with steam control valving.

Hygienically designed scraped surface agitator systems are available to avoid product 'burn on' with carefully selected engineered scraper materials.

A load cell weighing system is available to ensure accurate and consistent product manufacture.

Control systems are designed in accordance with relevant Australian standards together with software systems that ensure reliable processing feedback data and high quality hardware that can endure food industry environments.

INOX provide complete system design, including process evaluation, mechanical equipment design, electrical design, installation and commissioning.

**PRESERVES, JAMS,  
JELLIES, SAUCES,  
SOUPS, LIQUID  
STOCKS,  
COSMETICS,  
PHARMACEUTICALS  
& MORE.**

**QUALITY  
AUSTRALIAN  
MADE and AS1210  
COMPLIANT**

Total Processing Flexibility

- *pressure cooking*
- *vacuum cooking*
- *moisture reduction/concentrating*

Manual through to fully automated control systems

Australian-made and compliant

# INOX

316L Stainless Steel Construction and polished sanitary finish on product contact surfaces

## PRESSURE COOKING PROCESS ADVANTAGES

1. Pressure cooking helps retain the quality of the foods, by reducing the cooking time, by increased temperature (higher boiling point) inside the vessel and pressure which retains the particles within the product.

2. Cooking by pressure results in healthier and better tasting food, prepared in less time and with less energy.

3. Food quality and flavour retention is achieved as the vessel is sealed and pressurised during cooking. The vessel does not permit air or liquids to escape below a pre-set pressure.

4. Makes excellent sauces after sautéing by dissolving products of caramelisation and mallaird reaction. Works well with foods that require water infusion/braising methods

5. Higher temperatures are more effective at killing bacteria.

## VACUUM COOKING PROCESS ADVANTAGES

1. Short, low-temperature boil preserves colour, flavour and wholeness of fruit/vegetable pieces.

2. Less inversion of sugar than when jam is boiled at atmospheric pressure and temperature.

3. Overheating is avoided, since size of batch is not influenced by temperature and time it takes for steam bubbles to pass through the batch.

4. Larger batches can be processed than with the open-kettle method.

5. Sugar penetration to the centre of the fruit is more effective.

Vessel top opens to allow for atmospheric cooking via steam jacket



Vapour extraction line to shell & tube vapour condenser. All process lines including shell and tube condenser are fully CIP-able



Weight measurement and moisture reduction control during vacuum cycle controlled by load cells. System operated by industrial PLC control & quality locally supported hardware.



Vessel top opens completely to allow for full ingredient addition by tipping equipment or manual. Allows for 100% visual inspection and complete cleaning accessibility.

## Horizontal Agitator – Scraped surface

This type of agitator provides an excellent method of lifting and folding product for uniform mixing and even cooking. Product is 'lifted' from the bottom and pushed towards the top – much like stirring thick sauces and soups in a large pot by hand. Agitator scraper blades contact the heated surfaces of the bowl and effectively eliminate product 'burn-on' during heating and cooking.

Our scraper blade arrangement has been developed over many years of industry experience. Material used is engineered plastic detectable by metal detection equipment which can also withstand the high temperatures of steam jacketed vessels and is food grade compliant.

Our design is cleanable by CIP, and blades can be easily serviced



# INOX

FOOD PROCESSING

# INOX

## FOOD PROCESSING COOKING SYSTEM

PRE-MIX  
CONCENTRATES  
XANTHAN GUMS  
PECTINS  
STARCHES  
SUGARS

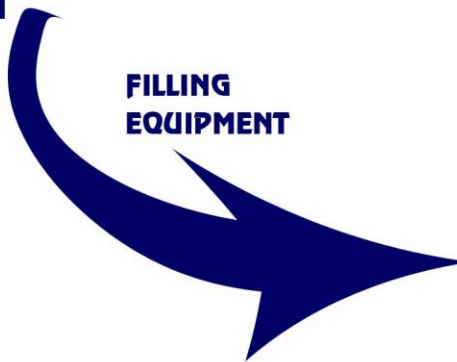
COOKER



INSTANTISER

PRESSURE COOKING  
VACUUM COOKING  
MOISTURE REDUCTION  
CONCENTRATING

FILLING  
EQUIPMENT



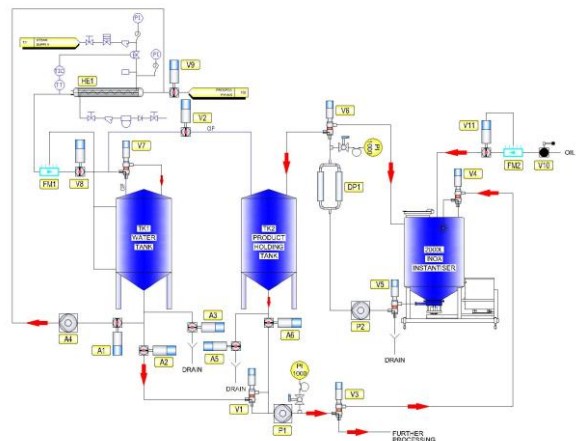
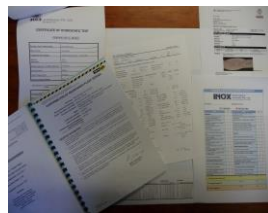
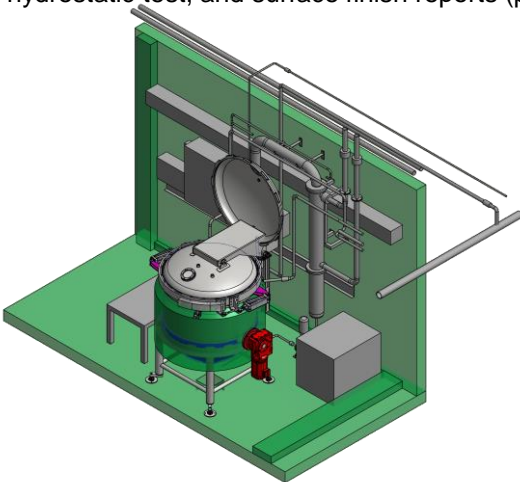
PASTEURISER/COOLING TUNNEL

TO  
PACKINGLINE



**INOX provide customised system design, Australian manufactured and Worksafe compliant equipment. Backed up by local knowledge and support.**

INOX process design experience is supported by detailed mechanical engineering design. Our equipment is manufactured in our Melbourne facilities which are dedicated to the highest accredited stainless steel fabrication procedures. Our QA documentation that accompanies the supplied equipment is tailored to cover material certification, welding traceability and qualifications, production reports, ITP's, NDT reports, and a number of various equipment tests including CIP performance, hydrostatic test, and surface finish reports (pre and post electropolishing).



## Pre-mixing Concentrates – INOX Instantiser systems

Pre-mixing of concentrates such as Xanthan gums, Pectins, sugars, or powder and liquid combinations for addition into the cooking process retort/kettle is most effective with the INOX Instantiser mixing batch system.

The INOX Instantiser is Australia's #1 food processing liquid/powder mixing system.

Proven with many Australian and international food processing companies, INOX offer a range of suitable options tailored to suit the needs of any niche food processing business.

Our 150L Demo Instantiser machine is available for trials to prove its effectiveness.

Compared to conventional mixing tanks and impellor systems, the INOX Instantiser has been proven to mix more effectively and up to 80% faster, resulting in improved product appearance, texture and ingredient mixture consistency.

The Instantiser's ability to mix smaller batches within the system allows manufacturers to produce smaller niche batches of product for in-house recipe testing or specific client supply.

Inox Instantisers systems can be incorporated with re-circulation system for pre-heating of product prior to the cooking process. This can be achieved with inline shell/tube heat exchangers or direct jacket heating of the Instantiser shell.

Improve your processing efficiencies and increase your profitability with well engineered Australian quality manufactured equipment.

# INOX



## INSTANTISER

The food industry benchmark for high speed, flexible, and effective product mixing systems.



xanthan gums



skim milk powder



whey powders



batter



[www.instantiser.com.au](http://www.instantiser.com.au)

# INOX

PRODUCT ANALYSIS  
SYSTEM DESIGN  
MANUFACTURED  
IN AUSTRALIA  
COMPLETE PROJECT  
MANAGEMENT



## PASTEURISING & COOLING TUNNELS

Efficient Pasteurising and Cooling systems designed especially for the food industry.



[www.inox.com.au](http://www.inox.com.au)

## TOTAL SYSTEM DESIGN AND SUPPLY



INOX Instantiser  
[www.inox.com.au](http://www.inox.com.au)

**Post cooking, post filling, INOX COOLING TUNNEL SYSTEMS provide further improved shelf life to your products as well as further production efficiencies that result in greater company profitability.**

Inox Cooling Tunnels are designed specifically after careful consideration, analysis, testing and cooling curve calculation to determine the size, speed and thermal loadings required to cool your product.

Inox Cooling Tunnel systems prepare your packaged food products for final packaging and quick delivery to market and increased shelf life.

Tests are undertaken in our R&D Facilities and we carefully design and detail design the equipment in our engineering department which then provides the information to our dedicated stainless steel manufacturing workshop. Truly a 'one-stop-shop' facility.

Final production equipment testing is completed in our workshop, client involvement and witnessing of testing is encouraged during this process to ensure smooth transition into your food processing manufacturing facility.

Inox pasteurising/cooling tunnel systems are found throughout many Australian food processing companies and also in the Asia region with installations in Malaysia and Philippines.