

3] Innovative Aseptic Process Technology From HRS !

HRS^o
process systems

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A Wholly Owned Subsidiary Of Hrs International, Uk.

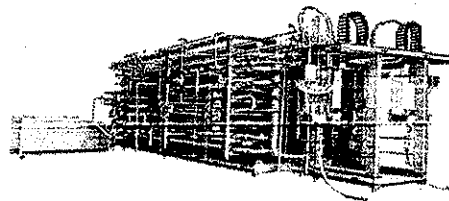
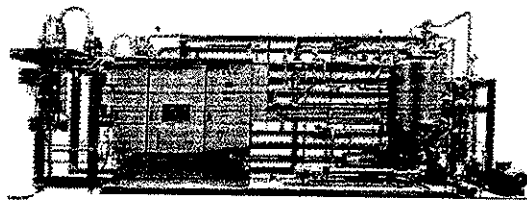
Fruit pulps and pastes are key ingredients for preparing a range of food products. Good quality and extended shelf life of the final product is a key market demand. Processing of fruit based pulps and pastes have evolved from traditional methods to technologically advanced methods like pasteurization, sterilization and aseptic processing. The main factors for improvisation are better product quality in terms of natural color, flavor, to retain nutritional properties, extended shelf life and ease of packing and transportation for further processing and/ or consumption.

HRS Process Systems Limited has recently supplied the HRS Monobloc Sterilizer; a complete system for aseptic sterilization and filling of fruit pulp for processing plants in Krishnagiri district of Tamil Nadu, South India. Sterilization means the elimination of all forms of pathogens and organisms to allow excellent microbial quality of the product thereby achieving better product shelf life and safety.

HRS Monobloc Sterilizer is an integration of sterilizer and filler on a single skid fully automated with PLC based controls. This system is designed to process upto 7000 kg per hour of fruit pulp/ puree concentrate of high viscosity and comes with aseptic filler for bag-in-drum filling mechanism. For preparation before sterilization, the fully ripened fruits are washed, sorted, peeled, deseeded and pulped through pulper and finisher to get clean pulp which then pasteurized

through the Ecoflux* Corrugated Tube Heat Exchanger (CTHE) based pre-heater pasteurizer and then passed through a separator to remove unwanted particles and fibres. The heart of the sterilizer are the Ecoflux* AS series CTHEs which enable heating upto 115°C and cooling upto 25°C, piston pump for homogenizing and de-aerator with automatic vacuum control system supported with CIP pump and peripherals.

The filling section of the monobloc is with the HRS Aseptic Filler which has fully automated, double filler heads with bag clamping system, conveyor to support the drums and a steam line for sterilization of the filling chambers.



Features of HRS Monobloc Sterilizer

- Compact unit of Aseptic Sterilizer & Filler
- Designed with ECOFLUX* CTHE for maximum energy efficiency
- Optimal velocities & turbulence for consistent processing
- De-aerator for automatic vacuum control
- Homogenizer for uniform particulates
- Bag-in-drum filling
- Integrated CIP for easy maintenance
- Complete PLC based automation-

Advantages & Benefits

- Hygienic end product
- Better aroma retention due to HTST technology
- Continuous processing gives consistent quality
- Longer shelf life at ambient storage conditions
- Easy-to-operate PLC controls
- Impeccable services support
- Lower labour costs
- CIP to ensure sanitation
- Bulk packaging enables easy transportation
- Higher savings due to higher energy efficiency
- Lower maintenance, higher returns on investment

Applications of HRS Monobloc Sterilizer

This system is suitable for processing a wide range of raw fruits/ foods such as Mango, Guava, Papaya, Banana, Tomato and many more.

- Sterilization & Filling of fruit pulp
- Concentration of fruit pulp
- Pastes & Puree processing

Having supplied pulp preheaters and pasteurisers to the customer, our product performance and a track record of

excellent project commissioning and service back-up have further made the customer entrust us with orders of this large a scale for further modernization of their plant operations. It has been a major breakthrough in terms of engineering and manufacturing efforts where we predominantly compete with international suppliers in this product category.

About HRS PSL:

HRS Process Systems, a part of the HRS Group that operates at the forefront of thermal processing technology is one of India's leading heat exchanger and fruit/food processing solutions specialists. Established in India in year 2003, the company is ISO 9001:2008 certified with high rating from CRISIL with over a decade of experience in supplying state-of-the-art solutions for heating, cooling, pasteurizing, sterilization, evaporation and aseptic processing of various fruit pulps/beverages for the food/fruit/beverage industry. Their innovative products include ECOFLUX* corrugated tube heat exchanger, UNICUS scraped surface heat exchanger, FUNKE plate heat exchanger, HRS Piston Pump, HRS ParaDice* dice pasteurizer, Aseptic Fillers, Integrated systems for food processing and evaporators.

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