



SOUPS and GRAVIES

COOK & CHILL PROCESS LINES

# COOK & CHILL SYSTEM

#### What is it?

It is an innovative, easy-to-manage food preparation system that guarantees outstanding results.

The traditional kitchen set-up, also referred to as a hot-hot system, envisages COOKING and immediate DELIVERY of the dishes. However, with the cook and chill system, the food is still prepared in a conventional manner but it then undergoes rapid chilling, up to 10°C in the centre of the food product within about 90 minutes after cooking, to then be stored and distributed.

#### **The Procedure**

The production process is made up of several steps:

- 1. Cooking (Cook): the centre of the food product reaches a temperature of 75°C or above for at least 10 minutes
- 2. Measuring out
- Chilling (Chill): the centre of the food product reaches a temperature 10°C or less within 90 minutes after the end of cooking
- 4. Storage
- 5. Transportation
- 6. Reheating

#### "What are the benefits of the C&C system?"

- Streamlining of work processes:
  - \_ The process of food production no longer depends on meal times, therefore it can be spread evenly throughout the day and week, avoiding busy and guiet periods typically connected with these times.
  - \_ The processing can also be done according to type of dish, by planning to cook similar products on the same day that results in maximising the productivity of each machine.
- Efficient usage of raw materials: reduced raw material wastage, optimisation of supplies and stock, and production of semi-finished products.
- Optimal usage of equipment: it is possible to make the best use of the equipment available thanks to fewer cooking cycles.
- Food products produced with the cook and chill system have greater nutritional and organoleptic qualities than those produced with the hot-hot system.
- Healthiness of the product: bacterial growth at temperatures between +10°C and +65°C is reduced to a minimum due to the rapid temperature drop.
- It extends product life without the addition of preservatives.



# RAW MATERIALS

The **raw materials** come by Europe and North America.

# **PRODUCTION**

**100 employees** in production plant and offices.

# **INNOVATION**

High efficiency and innovative products design.

# COOKING SYSTEMS

**30.000 equipment** running around the world in more than 55 countries.



To meet the growing demands for ready meals, Firex responds with a three step process. The Firex cook, fill, chill process. Perfect for soups and gravies, the Firex cook, chill, fill process is available on Fixpan, Cucimax, High-P and Baskett models.

**Big restaurant chains, central kitchens, food industries, school food service...** are some of our customers using Firex Process Line equipment for **soups and gravies**.

Available in gas, electric or steam heating version, our system lines are suitable from 100 to 500 liters per hours.

Our process has been designed to be versatile and flexible thanks to the possibility of a wide **range** of cooking equipment: stationary kettles, mixing kettles, pressure cookers...

The **high standard quality** of every item and the **friendly technologies** respect the Firex tradition in food processing equipment. Firex...efficient, reliable, advanced technology, sustainability.

# READY MEALS IN JUST 3 STEPS

How does it works?

### STEP 1 – COOKING

The process starts cooking the product in a cooker like Baskett mixing kettle or Cucimax pressure braising pan.

## **AUTOMATIC COOKER**



## MAIN FEATURES

Cooker available in steam, electric or gas heating. Double-jacket or direct heating. Cooking vessel in stainless steel AISI 316.

Cooking programs settable by electronic card. Electronic control on cooking temperature, time, tilting, mixing, safety. Washout valve for pumping system connection. Capacity from 30 to 600 lt.

#### STEP 2 – FILLING

The product is transferred hot from the cooker to the filler thanks to a dedicated pump. The soup can be put into special plastic bags or container of different capacities, depending on customer requirement, then sealed.

### FILLING AND SEALING STATION



#### MAIN FEATURES

Trolley transfer pumps in stainless steel AISI 316. Filler in AISI 316 available in different sizes and capacities.

## STEP 3 – COOLING

Hot soup bags go into a chilled water tank to be cooled. The bags should be laying in pull-out baskets so that their thickness remain uniform and in order to increase the cooling surface and reduce the cooling time. The baskets systems is raised and surrounded with motorized system.

## **COOLING TANK**

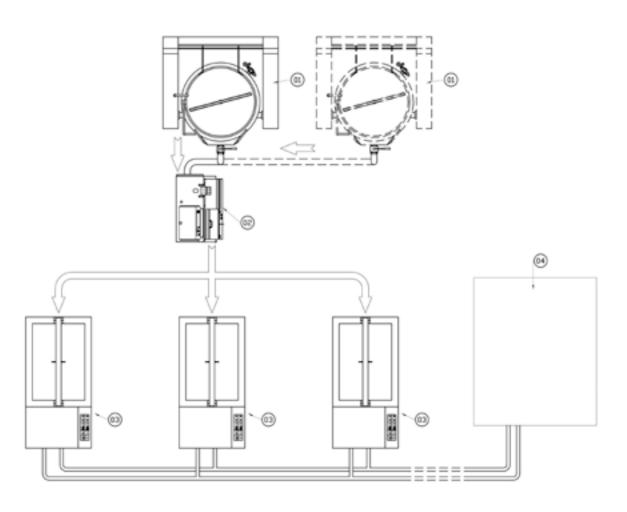


## MAIN FEATURES

Entirely made of AISI 304 stainless steel. Tubular structure in AISI 304 for housing envelopes inside baskets, with motorized lifting system on bridge structure. Connection for external chiller. Pump for water agitation to increase heating exchange and make it more uniform. Electronic control of the cooling water temperature.

# Process plant example for 100-200 kg/h

- 01 External chilling unit
- 02 Mixing kettle (130 lt)
- 03 Filling station
- 04 Sealing station
- 05 Bags chiller



# Process plant example for 400-800 kg/h

- 01 External chilling unit
- 02 Mixing kettle (500lt)
- 03 Filling station
- 04 Sealing station
- 05 Bags chiller



#### Firex is a manufacturer with a worldwide sales network.

We have been realized cooking systems for food industries and large kitchens for 40 years.

Firex projects and realises Energy and resources saving appliances.

Firex chooses the best raw materials and checks all production steps by quality management system.



**FIREX srl** . Z.I. Gresal, 28 . 32036 Sedico (BL) . Italy t.  $+39\ 0437\ 852700$  . f.  $+39\ 0437\ 852858$  . firex@firex.it **www.firex-foodequipment.com** 







