



# Food Processing Facilities Equipment and Facility Brochure



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# Food Processing Facilities

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The Food Processing Facilities at the University of Nottingham are now available to businesses that wish to develop their ideas and products for food and drink but don't have all the equipment necessary. The facilities can be used to make batches of product for market testing, to scale up from the kitchen to pilot scale or to try equipment before making a purchase. Experience is also on hand to enable users to get the best out of their time.



Visitors must attend a compulsory training session prior to using any of the facilities or equipment in this brochure. The session lasts approximately 45 minutes and is included in the pricing structure, subsequent visits will require training only for additional equipment used.

These facilities are just one part of a range of research laboratories and a wide variety of quality control tests and specialised techniques are available elsewhere at the Sutton Bonington site. Please see our website for more information on the range of facilities, techniques and expertise:

**[www.nottingham.ac.uk/biosciences/divisions/food/index.aspx](http://www.nottingham.ac.uk/biosciences/divisions/food/index.aspx).**

**Special rates (including free use of some facilities) are available for small businesses (SMEs) in the East Midlands:**

- Nottinghamshire
- Derbyshire
- Leicestershire
- Lincolnshire
- Northamptonshire
- Rutland

## Food Production Hall



The food processing hall has areas for storage, refrigeration, steam processing, dry milling, extrusion, canning, baking, vacuum sealing and shelf life testing. An Innovation Area provides a fully serviced space for the user's own equipment.

There is a dedicated, separate air conditioned room for containment of foods containing allergenic ingredients and products.

## Quality Control Laboratory

The quality control/analysis laboratory facilitates quantitative assessment of process and product related measurements.



For example testing of breads might include measurement of volume, crust colour, texture and bubble analysis within the loaf.



## Development Kitchen

The development kitchen is available for small scale preparation of products prior to basic tasting in the adjoining sensory booths.



## Sensory Booths



## Teaching & Discussion Room



A full sensory suite is available elsewhere on-site for more sophisticated analysis. The teaching and discussion room has full air conditioning, wireless networking facilities and will accommodate twelve people.

## Equipment

### Retort

The Lagarde retort will allow thermal processing of cans, pouches and trays. Operation can be static, rotating or oscillating to encompass a wide range of products from meat to sauces and soups.



In addition to the retort are facilities for can sealing.

## Extruder



The Prism extruder can be used for a wide range of extruded products from corn snacks to textured protein products.

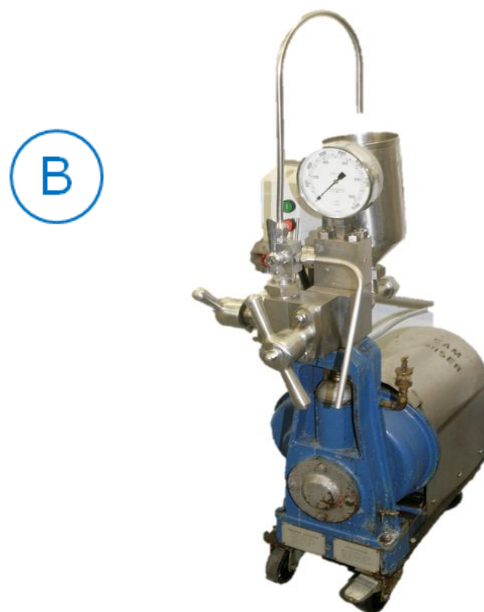
## Incubators

Incubators and ovens come in a range of specifications e.g. temperature, varying, humidity and vacuum. Applications include drying, baking and accelerated shelf life testing.



### Homogeniser

The homogeniser is used for the preparation of emulsions as well as homogenisation of milk products prior to ice cream making.



### Ice Cream Maker



The ice cream maker will prepare up to 5 litres of ingredients which will make up to 8 litres of finished product.



B

### Steam Jacket Vessels (Jam Pans)

Steam jacket vessels are versatile and have been used for the manufacture of cheeses, creams, jams, jellies, sauces and soups. The working capacity is approximately 25 litres and can be used in conjunction with a high shear mixer.



A

### Hobart Chopper

The bowl chopper is used for the preparation of chopped ingredients, for example burger and sausage preparation.



### Other Equipment Available

Other equipment available for use includes:

- Pastry brake
- Mixers for up to weights of 20kg
- Mills
- Sieve shakers
- Balances – milligrams to 25kg
- Many other facilities.

**Please email [openforbusiness@nottingham.ac.uk](mailto:openforbusiness@nottingham.ac.uk) or telephone 0115 9516696 to enquire.**

## Quality Control Laboratory Equipment

**Falling Number Apparatus**



**Colourimeter**



B

**Pasting Viscometer**



**Rotational Viscometer**



**C-Cell Image analyser**



**Silverson (High shear mixer)**






B

**TA-XT2 Texture analyser**



## Price Structure

<u>Category</u>	<u>Price Range</u>
 A	Price - Group A £150 to £300 £ per day
 B	Price - Group B - £301 -£650 per day
 C	Price - Group C - £651 to £950 per day

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