SAVOURY SNACKS PRODUCTION COURSE

1

CHIPS & SNACKS
Raw Materials to Formed Products

13-14-15 MAY 2014
Berlin, Germany
SAVOURY SNACKS PRODUCTION COURSE 1

Objectives of the course / what you will learn

This three day intensive course organised by the European Snacks Association will provide an understanding of:

- **THE MARKET FOR SAVOURY SNACK PRODUCTS ACROSS EUROPE**

- **THE KEY DRIVERS FOR SUCCESSFUL NEW SNACK PRODUCT DEVELOPMENT**

- **HOW POTATO CHIPS, EXTRUDED, PELLETED, AND SHEETED SNACKS ARE MANUFACTURED**

- **KEY TECHNIQUES IN POPCORN AND PRETZEL PRODUCTION**

- **THE FOOD SAFETY ASPECTS YOU NEED TO BE AWARE OF**

- **HOW TO MAKE THE RIGHT RAW MATERIAL AND PROCESS CHOICES**

- **HOW TO EXPLOIT THE VERSATILITY OF DIFFERENT PROCESS SOLUTIONS**

- **HOW TO MAXIMISE PRODUCT QUALITY AND CONSISTENCY**

Attendees will have the opportunity to interact with experts with years of practical experience of working within the savoury snack food industry. They will empower you to troubleshoot and evaluate your own processes and equipment, to find hidden areas of opportunity that could result in novel process solutions and new product ideas.

You will learn in detail about industry best practice and the latest practical applications of new technology both to improve your product quality and consistency and to achieve potentially significant cost savings.

The course combines classroom lectures from leading experts in the savoury snacks industry with practical interactive sessions as appropriate.

Who should attend?

The agenda is presented as an intensive course for new plant personnel or as a refresher for more experienced operators.

It offers an excellent opportunity for those people involved in savoury snack manufacture to meet experts in the field, to discuss their current problems, and to find creative solutions which will enhance their plant operations.

The course is designed for:

- **Snack manufacturing personnel, including:**
  - Plant managers, operations personnel, project managers
  - Research & Development personnel
  - Plant engineers and quality control technicians

- **Personnel wishing to better understand their production processes**
  - Line production personnel and supervisors
  - Quality assurance personnel
  - Production management

- **Suppliers researching the needs and production methods of their customers**

- In addition, the course content is appropriate for business development managers, sales and marketing specialists, equipment manufacturers and product designers who are interested in understanding the wide range of possibilities for turning creative ideas into real products.

The course material will serve as a useful reference for snack processors, product formulators, scientific staff and technicians, as well as for business managers in the areas of nutrition, snack food processing, baked snacks, extruded snacks and tortilla chips.

Course Conduct

All course sessions will be informal and questions are encouraged during lectures, breaks and social periods.

Course lecture materials will be given to each attendee at registration and will be in English.

Dress code is business casual.
Tuesday
13 May 2014

Introduction & Welcome – Course Overview

Market Intelligence – Opportunities for Snack Makers
- Getting the market into context
- Top line savoury snacks sales/volume trends across Europe
- NPD launch activity: Identifying the key drivers - health & wellness, better-for-you, obesity, nutrition, functional foods, growth in NPD in low fat, baked, fortified, organic, low fat, low sodium, indulgent eating, impulse/convenience/on-the-go
- Key pointers for the future.

Coffee Break

Potato Chips – Raw Materials
- Most common chipping varieties used across Europe.
- Key attributes to look for and variety selection
- Key agronomic factors affecting potato quality/consistency
- How to optimise potato storage.
- The procedures and controls necessary to deliver chip quality throughout the year.

Potato Chips – Key Back-End Process Elements
- Best practice potato handling and back-end processing.

Potato Chips – Frying
- Fryer systems for standard, batch, and lower fat products.
- Factors which influence choice of frying systems and deciding which best fit your needs.
- The impact of fryer throughput, oil turnover rates, and process conditions impacting on product quality and costs.
- How fryer design and set up can affect efficiency, energy recovery, quality and food safety.

Food Safety – Acrylamide Toolbox
- Legislative developments on acrylamide and the implications for processors.
- Key aspects of the FDE toolbox.
- How the range of acrylamide mitigation options for minimising acrylamide production relate to different product types and processing circumstances.

Lunch

Potato Chips – Optical Sorting
- Key elements required for effective inspection and sorting both pre- and post-fryer.
- Options for defects identification and removal.
- Setting machine parameters to eliminate unwanted defects whilst maximising product throughputs and minimising good product giveaway.

Coffee Break

Extruded Snacks – Raw Material Choices for Processing Snacks
- The choice of raw materials for making snacks is immense, including cereals and grains, maize, wheat, rye, rice, potato granules and flakes, starches, fibre, and a host of smaller ingredients which can significantly affect the finished product.
- How the vast array of options impact on taste, texture, and appearance, whilst recognising the practical limitations of some extrusion technologies.

Coffee Break

Extruded Snacks – Snack Pellets
- The very wide range of products available, the raw materials used, and how they are processed.
- What the future holds for these products at the forefront of savoury snack innovation.

Sheeted Snacks – Manufacturing Technology
- Sheeted technology has been fuelled by the emergence of the baked chip category and with stacked chips and tortillas growing in popularity.
- The technology involved and the key ingredients and processing steps which impact on product quality and consistency.
- What the development of improved processes and raw materials holds for the future.

Note: To expedite the course subjects may be presented in a different running order or on a different day than shown.

Wednesday
14 May 2014

Extruded Snacks – Extrusion Theory
- Basic principles of the extrusion process.
- Process evolution from first to third generation snacks and into the future.

Extruded Snacks – Extrusion Technology Choice and Selection
- The merits and limitations of available technologies (including single and twin screw).
- An in-depth look at the systems available focusing on the range of raw materials they are capable of processing and the type of products, and quality, they are able to produce.
- The practical aspects of set up, controllability, throughputs, flexibility, and relative expectations of the consumables used.

Lunch

Extruded Snacks – Raw Material Choices for Processing Snacks
- The choice of raw materials for making snacks is immense, including cereals and grains, maize, wheat, rye, rice, potato granules and flakes, starches, fibre, and a host of smaller ingredients which can significantly affect the finished product.
- How the vast array of options impact on taste, texture, and appearance, whilst recognising the practical limitations of some extrusion technologies.
Thursday
15 May 2014

Extruded Snacks - Die & Cutter Design
• The technology behind die design.
• The impact it has on product definition, quality, and consistency.

Extruded Snacks - Frying
• An in-depth look at the technology for frying extruded snack products.
• The challenges for fryer designers and how they are managed.
• The key factors to be taken into consideration and how they affect product quality and processing efficiency.

Coffee Break

Extruded Snacks - Hot Air Expansion
• With many snacks products on the market now claiming to be lower fat, we look at the alternative processes to frying that are available.
• What the latest generation of hot air expansion and fluidised bed techniques can deliver.
• The direction of emerging technologies for the future.

Pretzels
• The key ingredients used and their role in product quality and consistency.
• The processing systems available, identifying the key stages of the process and how these can be controlled and optimised.

Popcorn
• How popcorn is produced - the essential elements involved in producing a great product.
• Savoury or sweet - coating and flavouring techniques explained.

Course Conclusion & Feedback

Note: To expedite the course subjects may be presented in a different running order or on a different day than shown.
Enrolment
Savoury Snacks Production Course
Part 1 13-14-15 May 2014, Berlin

1 How to book
A. FAX completed form to: +44 (0) 207 420 7221, or
B. EMAIL to: claire@esa.org.uk, or
C. MAIL to: European Snacks Association at the above address.

Note: Places are limited. Applications will be accepted on a first-come, first-serve basis. Enrolment forms must be accompanied by payment.

2 Your details (please use a separate form for each participant)

 lacking name .......................................................... First name ..........................................................

Company ................................................................................................................................. Job title ..........................................................

Address ........................................................................................................................................ City ..........................................................

State / Country / Province ................................................................. Post / ZIP Code ................................................................ Country ..............

Telephone ................................................................................................................................. Fax ..........................................................................................

Email* ........................................................................................................................................ Mobile (Cell) Phone ..................................................................

*Note: bookings will be confirmed by email; please ensure that your email address is clearly legible.

3 Enrolment fee (please choose appropriate option)

Price includes three nights’ hotel accommodation – 12, 13, and 14 May, welcome drinks on Monday 12 May, breakfasts, lunches, dinners, evening activities, course materials and certificate of attendance.

<table>
<thead>
<tr>
<th>Choose rate type</th>
<th>Payment by 28 February 2014</th>
<th>Payment after 28 February 2014</th>
<th>Your cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESA Member*</td>
<td>EUR 1,600</td>
<td>EUR 2,300</td>
<td>EUR 4,900</td>
</tr>
<tr>
<td>Non-Member</td>
<td>EUR 2,000</td>
<td>EUR 2,900</td>
<td>EUR 4,900</td>
</tr>
</tbody>
</table>

*Note: ESA membership must be fully paid at both the date of booking and the date of the event. Otherwise, prices will automatically revert to non-member rates.

Hotel accommodation: Three nights in a double / twin room for single use is included. Additional room nights or room upgrades will be the responsibility of the participant. Room reservations will be made by ESA upon receipt of enrolment form and payment. Breakfasts, lunches and dinners are included; however, hotel extras (e.g. mini bar) must be paid by each participant upon departure.

4 Payment options (please choose appropriate option. Payment MUST accompany enrolment.)

Bank transfer: I have transferred AMOUNT EUR................................. plus all bank transfer charges on DATE.............................. to:

Credit card: Please debit my credit card for (total + 3% processing fee) AMOUNT EUR.................................
Visa  MasterCard / Eurocard (please select appropriate card, we do not accept AMEX or Diners Club cards)

I hereby certify that I have read and agree to the TERMS & CANCELLATION CONDITIONS as stated below. I accept that for the purpose of congress organisation only, my personal data will be registered by using electronic data processors. Bookings are not valid without signature.

Date Signature

TERMS & CANCELLATION CONDITIONS. Confirmation letters and receipted invoices will be sent on receipt of payment – which must be made at the time of enrolment. Full payment must be received before the course commences. If you cancel your place by 28 February 2014, there will be a EUR 250 administration charge. No refunds will be made for non-shows or if you cancel after 28 February 2014, whatever the reason. Cancellations MUST be made in writing to ESA and will be acknowledged. If you are unable to attend, a substitute delegate may be made at any time. It may be necessary for reasons beyond the control of the organisers to alter the content, timings or venue. The organisers will not accept liability for any transport disruption or individual transport delays and in such circumstances normal cancellation terms apply. In the event of a terrorist alert or other incident that prevents the running of the course, the organisers reserve the right to retain up to 50% of the fee as a contribution to registration, location, marketing and central administration costs.