



European Snacks Association

Savoury Snacks Production Course

Part One: Raw Materials to Formed Products

10-12 November, 2008
Marbella, Spain

A large white bowl is filled with a variety of savoury snacks. The snacks include golden-brown potato crisps, small square extruded snacks with a grid pattern, orange-colored pellet snacks, and larger, irregularly shaped sheeted snacks. The bowl is set against a blue background with a subtle pattern of small white dots.

POTATO CRISPS | EXTRUDED SNACKS | PELLET SNACKS | SHEETED SNACKS



Savoury Snacks Production Course Part One: Raw Materials to Formed Products

OBJECTIVES OF THE COURSE

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

- ▶ THE MARKET FOR SAVOURY SNACKS PRODUCTS ACROSS EUROPE
- ▶ WHAT THE KEY DRIVERS ARE FOR SUCCESSFUL NEW PRODUCT DEVELOPMENT
- ▶ HOW POTATO CHIPS, EXTRUDED, PELLETTED, & SHEETED SNACKS ARE MANUFACTURED
- ▶ 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
- ▶ PROCESS CONTROL TECHNIQUES BOTH ON AND OFFLINE
- ▶ HOW TO OPTIMISE ENERGY MANAGEMENT

You 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 trouble-shoot and evaluate your processes and equipment, to **find hidden areas of opportunity** that could result in **novel process solutions and new product ideas**. They will introduce you to best practice solutions to **improved product quality and consistency** and open your eyes to the potential of **significant cost savings**.

The course combines classroom lectures from leading experts in the savoury snacks industry with practical demonstrations where appropriate.



WHO SHOULD ATTEND?

The agenda is presented as an intensive course for new plant personnel and 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, project managers
 - R & D engineers
 - 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, 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 processors, product formulators, chemists and technicians as well as business managers familiar with extrusion, nutrition, snack food processing, extruded snacks and tortilla chips.

COURSE CONDUCT

All course sessions will be informal and questions are encouraged during lectures, breaks and social periods. Lecture materials will be given to each attendee at registration and will be in English. Dress code is business casual.



The Market for Potato Crisps in Europe: Key Trends, Developments and Drivers
(Mintel GNPD)

Topline PC sales/volume trends across Europe. NPDP launch activity. Health & wellness – better-for-you, obesity, nutrition, functional foods, growth in NPDP in low fat, baked, fortified, organic, low fat, low satfat, trans fat-free, low sodium. Indulgent eating. Impulse/convenience/on-the-go. Pack sizes. Flavour developments – premium flavours, regionality. Influence of energy & raw material prices/sustainability. Key pointers for the future.

COFFEE BREAK

Potato Crisp Production: Key Process Elements (Heat & Control Pty)

Potato variety/potato solids/shape/size/blemish – affect on product quality. Washing – stone and debris removal, etc. Peeling – options: abrasive/steam – batch/continuous. Slicing – options: Urschel and others, blades/holders/setting and quality. Washing – starch removal – fresh vs re-circulated water – removal of fines. Blanching – effect on colour/texture/freshness/starch recovery. De-watering – effect on product texture/cooker loading/profile. Frying: options - batch continuous/vacuum; key issue: heat profile/residence time/oil turnover/fresh and residual oil. Steam blanket/heat recovery/oil drainage/fines removal. Oil management/Energy consumption.

Key Drivers in Potato Crisp Production: Health, Contaminants, Safety, Legislation (ESA)

Health as a Key Driver in Potato Crisp Production (Mintel GNPD)

Potato Crisps: Lower Fat / Baked (Heat & Control Pty)

Lower fat technology – key process parameters. Flexibility and control. Raw material influences. Oil management issues – turnover etc. Energy usage cf standard baked technology – key process parameters/constraints. Raw material selection.

Food Safety as a Key Driver in Potato Crisp Production (ESA)

Acrylamide: CIAA Toolbox Options (PPM Technologies, Inc)

Potato variety/reducing sugar levels/storage effects. Low temperature processing – options and effect on quality/acrylamide. Impact on product colour/texture/oil quality, etc. Raw Material selection, washing/blanching, frying parameters, vacuum technology, colour sorting, aspariginase/calcium salts, etc. What and how to use. Effect on process and product characteristics. What works on which type of product. Effect relative to other 'tools'.

Control Technology: Online vs. Offline (Olympus Automation)

Fryers – automatic pilot. Online measurement and control of moisture/oil content/texture/FFAs/colour. Feedback mechanisms and control – limits of technology.

COFFEE BREAK

Oil Management / Oil Supplies (AAK Oils & Fats)

Vegetable oil options – type and source. Fresh oil quality – key performance measures. Oil storage – design/control/flexibility. Performance in the fryer – fresh vs. residual mix. Impact on product quality and shelf-life. Impact of fryer temps/oil turnover rate/keeping on standby/rapid heating/cooling methods on product quality. Cooker CIP and manual cleaning systems – caustic and acid washes. Why, when, how? Consequences of mistreatment.

Post-fryer Handling (Heat & Control Pty)

The perfect crisp – stacked/drained and consistent in colour and texture. Removal of surface oil through conveyor systems – limits and points to note. Post-fryer cooling. Effect on flavouring. Accumaveyors and other holding systems – effect on breakage, “goo”, and consistent feed to flavour systems.

The Market for Sheeted Snack Products in Europe: Key Trends, Drivers and

Developments (IRI Infoces - tbc)

Topline sheeted snack sales/volume trends across Europe. NPD launch activity. Health and wellness – better-for-you, obesity, nutrition, functional foods, growth in NPD in low fat, baked, fortified, organic, low fat, low satfat, trans fat-free, low sodium. Indulgent eating. Impulse/convenience/on-the-go. Pack sizes. Flavour developments – premium flavours, regionality. Influence of energy and raw material prices/sustainability. Key pointers for the future

Sheeted Snack Manufacturing Technology (Heat & Control Pty)

Options: raw materials, shape, texture, colour, inclusions, oil content. Raw materials: key parameters and effect on product attributes, mixing, conditioning/steaming/forming a sheet, reduction rollers, effect of rate of reduction, control of thickness, cutting & re-work. Conveying/separation/drying/frying/other cooking methods. Process control online and off. Handling ex-cooking.

COFFEE BREAK

Key Drivers in Sheeted Snack Production: Health, Contaminants, Safety, Legislation (ESA)

Health as a Key Driver in Sheeted Product Production (IRI Infoces - tbc)

Raw Materials, Thermal Processing and Flavour (Bühler Aeroglide)

Managing the drying curve. Sequential heat zone. Use of humidity in managing flavour and quality. Impact of moisture content.



LUNCH

The Market for Extruded Savoury Snacks in Europe: Key Trends, Developments and Drivers (AC Nielsen)

Topline extruded snack sales/volume trends across Europe. NPD launch activity. Health & wellness – better-for-you, obesity, nutrition, functional foods, growth in NPD in low fat, baked, fortified, organic, low fat, low satfat, trans fat-free, low sodium. Indulgent eating. Impulse/convenience/on-the-go. Pack sizes. Flavour developments – premium flavours, regionality. Influence of energy & raw material prices/ sustainability. Key pointers for the future.

Basic Extrusion Theory / Technology (Lalesse Extrusion bv)

What is extrusion? How does it work? Raw materials/heat/pressure/shear. Limits – Raw materials, shape, texture, definition.

Twin Screw vs. Single Screw (Baker Perkins Ltd)

Contrast pros and cons – versatility of systems to handle different raw materials and produce different shapes and textures. Further possibilities of forming, dual textures, inclusions, etc. Extrusion parts, screws and sleeves, relative wear and life, and effect on product parameters as they wear. Relative costs and upstream requirements.

COFFEE BREAK

Snack Pellet Manufacturing Technology (Quality Pellets a/s)

Raw materials selection – key parameters. Mixing, feeding, extruding, form and shaping – key process parameters and control. Sheeting and cutting – reworking offcuts. Adding colours/inclusions, etc. Versatility and limits. Conveying/separating/drying/cooling – theory/practice/effect on quality. Storage.

Energy Management and Process Control (Bühler Aeroglide)

Energy sources and selection. Economics of energy demand. Energy recovery systems. Control methodology and practical application. Advanced controls.

**Key Drivers in Extruded Snack Production:
Health, Contaminants, Safety, Legislation (ESA)**

**Health as a Key Driver in Extruded Snack Production
(AC Nielsen)**

**Raw Material Choice / Processing in
Developing Healthier Products
(Limagrain Céréales Ingrédients)**

How to produce lower fat/salt/sugar snacks. Options – Raw material and process choice. Versatility and limitations. Adding “healthier” ingredients, bran, whole grain, fibre, soya – what is possible/effect on product quality – taste/texture/ appearance.

**Thermal Processing Options for Healthier Products (Bühler
Aeroglide)**

Overview of benefits of hot air in snack production. Hot air methodology for drying, toasting and expansion. Hot air technologies as applied to snack production.

COFFEE BREAK

**Shape and Design as a Key Driver in
Extruded Snack Production (AC Nielsen)**

Die and Cutter Design (Clextral - tbc)

Die design & extruder operating curves. Dynamics of product expansion during extrusion processing. Die plate wear and its impact upon product quality. Design of co-extrusion dies. Cutter and knife design. The golden rules of extrusion die design.

COURSE CONCLUSION AND FEEDBACK (ESA)

LUNCH AND DEPARTURE



INSTRUCTORS

- ▶ AAK Oils & Fats
- ▶ AC Nielsen
- ▶ Baker Perkins Ltd
- ▶ Bühler Aeroglide
- ▶ Clextral - tbc
- ▶ European Snacks Association
- ▶ Heat & Control Pty
- ▶ IRI Infores - tbc
- ▶ Lalesse Extrusion bv
- ▶ Limagrain Céréales Ingrédients
- ▶ Mintel, GNPD
- ▶ Olympus Automation
- ▶ PPM Technologies, Inc
- ▶ Quality Pellets a/s

For additional information, please write, call, fax or e-mail:

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Also, please visit the ESA website at www.esa.org.uk for information and updates on all future activities.

LOCATION AND ACCOMMODATIONS

The course will be held on 10, 11 and 12 November 2008.

All lectures will take place in the H10 Andalucía Plaza Hotel in Marbella, Spain.

This hotel is located approximately 10 minutes from the centre of Marbella and 40 minutes from Malaga airport with multiple transportation options.

TRANSPORTATION

Transfers will be arranged to / from the airport and hotel.

REGISTRATION

Advance enrolment is required – use form on page 8.

Course Registration Fee:

On or before 1st October 2008

EUR 1,600 inc VAT ESA members

EUR 2,300 inc VAT ESA non-members

After 1st October 2008

EUR 2,000 inc VAT ESA members

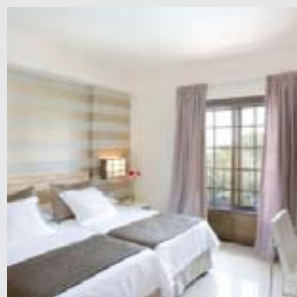
EUR 2,900 inc VAT ESA non-members

Fee includes: Airport transfers, hotel accommodations, all course activities over the 2½ day seminar including group meals and evening events, course notebook and certificates of attendance.

Note: Course registration is on a “first-come, first-serve” basis. Places are strictly limited to encourage participant interaction. Full payment of the course enrolment fee is required in order to confirm each participant’s place in the course. Payment may be made by credit card (Visa, MasterCard, AMEX) or bank transfer.

Cancellation: If you cannot attend, please notify us by 1st October 2008, and we will refund your fee, less an administration charge of EUR 250. Cancellations after this date and no shows will be subject to full charge of the course fee; however, a substitute may be enrolled at any time.

ESA reserves the right to cancel this course with full refund, substitute speakers or change schedules as necessary to expedite the course.



UPCOMING EVENTS

SAVOURY SNACKS PRODUCTION COURSE PART 2 – Flavouring to End-of-Line

April 2009

Location tba

SNACKEX 2009

June 8-9, 2009

Berlin, Germany

SAVOURY SNACKS PRODUCTION COURSE PART 3 – Nut Processing

October 2009

Location tba



European Snacks Association
6 Catherine Street
London WC2B 5JJ
United Kingdom

SAVOURY SNACKS PRODUCTION COURSE ENROLMENT

10 - 12 November 2008 • H10 Andalucía Plaza Hotel • Marbella, Spain

1. HOW TO BOOK

- A. **FAX completed form to:** +44 (0) 207 420 7221, or
B. **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.

ESA MEMBERSHIP STATUS

- Member
 Non-Member



2. YOUR DETAILS (please photocopy this form for additional participants)

__Miss __Ms. __Mrs. __Mr. __Dr. LAST NAME: _____ FIRST NAME: _____
COMPANY: _____ JOB TITLE: _____
ADDRESS: _____ CITY: _____
STATE / COUNTY / 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 airport transfers, three nights hotel accommodation (9, 10 and 11 November), welcome drinks on Sunday 9 November, breakfasts, lunches, dinners, evening activities, course materials and certificate of attendance. VAT is also included in enrolment fee.

Choose Rate Type	Payment By 1 October 2008	Payment After 1 October 2008	Your Cost
<input type="checkbox"/> ESA Member*	EUR 1,600	EUR 2,300	EUR _____
<input type="checkbox"/> Non-Member	EUR 2,000	EUR 2,900	EUR _____

*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.

Total Payment Enclosed: EUR € _____

Hotel accommodation (three nights, double room for single use) at H10 Andalucía Plaza Hotel 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 _____ free of all bank transfer charges on DATE _____ to:
European Snacks Association – Barclays Bank Plc, Account No. 53568766. Bank Code: 20-65-82. IBAN: GB60 BARC2065 8253 568766. SWIFT: BARC GB 22.

CREDIT CARD: Please debit my credit card for (Total + 3% processing fee) AMOUNT EUR _____

__Visa __American Express __MasterCard / Eurocard (please select appropriate card; we do not accept Diners Club cards)

NAME ON CARD (HOLDER): _____ CARD NUMBER: _____

EXPIRATION DATE: _____ SECURITY CODE: _____

CARDHOLDER ADDRESS (if different from registrant): _____ CITY: _____

STATE / COUNTY / PROVINCE: _____ POST / ZIP CODE: _____ COUNTRY: _____

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. If payment is not received before the course, delegates will be asked to guarantee payment on the day at the registration desk with a personal credit card. If you cancel your place before 1 October 2008, there will be a €250 administration charge. No refunds will be made for no-shows or if you cancel after 1 October 2008, 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.