

TRAINING TITLE

A world of nonwovens.

OPERATIONNAL OBJECTIVES

The participant(s) will have the opportunity to apply the knowledge acquired during the training in the workplace and will be able to:

- Discover the nonwovens applications & markets
- Understand the technologies of the different web forming and web bonding processes.
- Improve knowledge by understanding the advantages and disadvantages of different nonwoven processes.
- Understand the information axes for nonwovens.
- Become familiar with the technical vocabulary..

An assessment of the knowledge acquired will be carried out at the end of the course

LEVEL'S FORMATION

Beginners.

PUBLIC

It is an open program for everyone who wants to develop his/her knowlege on the nonwoven's market and to analyse a nonwoven product. Research and development engineer, innovation manager, product manager, market manager, marketing manager, senior technician...

PEDAGOGICAL PREREQUISITES

None.

2023 SEASON

No textile knowledge required.

PRICE

On-demand at CETI training – From 3 to 10 participants.

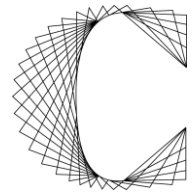
DURATION

2 days - 14 hours

METHOD & TEACHING MATERIALS

This training alternates theoretical and practical presentations, with illustrations of concrete cases, in the form of participative workshops based on the illustration of concrete cases of material transformation processes (identification of the technology used, differentiation of materials, etc.).

The teaching materials used are as follows :



- Digital materials (Powerpoint presentations, video, quiz, practical exercises product analysis)
- Presentation of material samples (yarns, nonwovens, products).
- Illustration of processes on the CETI prototyping platform

DELIVERABLE

Each participant will receive a hard copy on PDF file of the course content at the end of the course.

EVALUATION PROCEDURES

- **A Training Needs Analysis form** is sent to the participants before the course so that the trainer can find out about the activity and its environment, their level of competence, any specific technical issues and the existence of a disability, which will be taken into account. A check of the pedagogical prerequisites will also be included. The participant has this form, drawn up by our trainers, to fill in online, which lasts a few minutes.
- **1 knowledge assessment** at the beginning of the course through a round table discussion to validate participants' expectations and remind them of the course objectives.
- **1 evaluation and validation of the skills acquired** at the end of each training part, established by the trainer who verifies orally, in the form of a quiz or question and answer game, the skills acquired during the training. The trainer decides on the validation of the acquired skills based on the results obtained. This evaluation determines the results mentioned **on the End of Training Certificate** which is sent to you by e-mail after the training.
- **1 training satisfaction survey** given to participants to fill in at the end of the training.
- **1 individual training completion certificate** is sent after the training to the HR department and/or to the participants.

CETI TRAINER

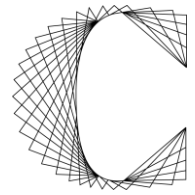
Simon Fremeaux – Textile Engineer, Nonwoven expert, CETI

PEDAGOGICAL CONTENT

DAY 1 | A WORLD OF NONWOVENS – 7 hours

The objective of Day 1 will enable participants to develop their knowledge of products and markets for nonwovens and to understand the operation of sail forming and sail consolidation technologies.

09h00	WELCOME OF THE PARTICIPANTS
09h00 – 09h30	Participant profile exchange and knowledge assessment
09h30 – 10h30	OVERVIEW OF NONWOVENS



- Definitions of a nonwoven
- Nonwovens products and markets
- Nonwovens production in Europe and global projection

10h30 – 11h15 **THE MATERIALS RESOURCE**

- Raw materials (technical and environmental characteristics)
 - Thermoplastic resins
 - Synthetic, natural and artificial fibres
- Comparison of material and fibre properties

11h15 – 11h30 Coffee break

11h30 – 12h30 **WORKSHOP / Review of the Fibrous Materials Catalogue**

- Differentiation of raw materials and fibres

12h30 – 13h30 Lunch

13h30 – 15h45 **WEB FORMING TECHNOLOGIES**

- Process characteristics (MELTBLOWN – SPUNBOND – SPUNMELT)
- Description of the associated consolidation technologies
- Industrial production lines: Line size and output.
- Illustration of the technologies on the CETI pilot lines

15h45 – 16h00 Coffee break

16h00 – 17h00 **WORKSHOP / Technology differentiation**

- Analysis of nonwoven products according to the process used
- Exploration of the influences of process parameters on the properties
- of the products

DAY 2 | A WORLD OF NONWOVENS – 7 hours

The objective of Day 2 will be for participants to be able to develop their knowledge of sail training technologies and understand the areas of innovation for them. An assessment of at the end of the day.

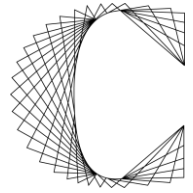
09h00 **WELCOME OF THE PARTICIPANTS**

09h15 – 11h00 **FIBRE-BASED SAIL FORMING TECHNOLOGIES**

- Process characteristics CARDE – AIRLAY – WETLAID - AIRLAID
- Description of the associated consolidation technologies
- Industrial production lines: Line size and output.
- Illustration of the technologies on the CETI pilot lines

11h00 – 11h15 Coffee break

11h15 – 12h30 **WORKSHOP / Technology differentiation**



- Product study - Analysis of nonwoven products according to the process used
- Explore the influence of process parameters on product properties and associated research and development.

12h30 – 13h30 Lunch

11h30 – 12h30 **WORKSHOP / Review of the Fibrous Materials Catalogue**

- Differentiation of raw materials and fibres

12h30 – 13h30 Lunch

13h30 – 15h00 **MATERIAL QUALITY CONTROL**

- Resistance to user stresses (dimensional stability, appearance after maintenance, pilling, abrasion resistance, tear resistance, ...)
- Environmental resistance (UV resistance, water repellency, water permeability)

15h00 – 15h15 Coffee break

15h15 – 16h00 **WORKSHOP / Technology differentiation**

Analysis of nonwoven samples on the measuring equipment of the characterisation laboratory of CETI

16h00 – 16h15 **EVALUATION OF ACHIEVEMENTS**

16h15 – 17h00 **DISCUSSION & CONCLUSION**

TIME LIMITS AND PROCEDURES FOR ACCESS TO TRAINING

The time required to access our INTRA training courses requires adaptation according to your needs and our resources. As soon as we receive your request, our training consultant will call you back within 3 days to refine your request (choice of date, face-to-face method, location, additional options, etc.).

The CETI proposes dates as soon as possible according to your availability and that of the trainer(s). To guarantee that you will be able to start the training on the date set, you must make sure that you send us the signed proposal. If you are applying for funding from your OPCO, make sure you know how long it takes to process your applications.

TRAINING REFEREE CONTACT. (INFORMATION – DIFFICULTIES ENCOUNTERED – COMPLAINTS)

For all requests for customised training, contact our training department to study your specific request to contact@ceti.com

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

CETI is committed to providing access to training for people with disabilities. For any question and/or **request for adaptation** of a training course to **specific needs**: adaptation of the duration of access to training, adaptation of the means of provision, accessibility of premises, You can contact our Disability Advisor in complete confidentiality; Jonathan Blin (jonathan.blin@ceti.com) for your specific needs for the training course.