



## Virtual Intermediate Nonwovens Training Course

Instructor, Ed Thomas

Head of Research and Product Development, First Quality, Fiberweb, (retired)

### VIRTUAL COURSE AGENDA

#### Day 1

#### Tuesday

- 10:00 am **Welcome**
- 10:15 am **Module 1: Program Overview**  
Introduction to nonwoven markets, product applications and processes
- 10:47 am **Module 1: Q & A**
- 11:02 am **Module 2: Major Nonwoven Markets**
- 11:34 am **Module 2: Q & A**
- 11:49 am **Module 3: Manufacturing Technologies – A Primer**  
Definitions of nonwovens, short history of the technical evolution of the industry.  
Description of basic nonwoven manufacturing principles and systems.
- 12:21 pm **Module 3: Q & A**
- 12:36 pm **BREAK**
- 2:37 pm **Module 4: Fiber Fundamentals**  
Generic types and characteristics, property comparisons, raw material-fabric  
property relationships.
- 3:51 pm **Module 4: Q & A**
- 4:06 pm **Concludes for the day**



**Day 2**

**Wednesday**

- 10:00 am **Module 5: Web Forming – Drylaid Carded and Long Fiber Airlaid**  
Analysis of carding and staple fiber airlaid systems. Review of background, process technologies and recent developments
- 10:36 am **Module 5: Q & A**
- 10:51 am **Module 6: Web Forming – Short Fiber Airlaid and Wetlaid**  
Development of wetlaid nonwovens based on paper technology. Unique characteristics of cellulose fibers in wetlaid technology. Development of short fiber airlaid nonwovens and comparison of short fiber airlaid nonwovens technology with wetlaid nonwovens technology.
- 11:29 am **Module 6: Q & A**
- 11:44 am **BREAK**
- 1:44 pm **Module 7: Web Forming – Polymer Laid: Spunbond**  
Basic principles associated with spunbond and meltblown nonwovens and the polymers used in their production.
- 2:26 pm **Module 7: Q & A**
- 2:40 pm **Module 8: Web Forming – Polymer Laid: Meltblown and Spunmelt**  
Basic principles associated with spunbond and meltblown nonwovens and the polymers used in their production.
- 3:13 pm **Module 8: Q & A**
- 3:29 pm **Module 9: Web Bonding I– Mechanical: Stitchbond, Needlepunch, Hydroentangling**  
Mechanical bonding principles and systems.
- 4:07 pm **Module 9: Q & A**
- 4:22 pm **Concludes for the day**



**Day 3**

**Thursday**

- 10:00 am **Module 10: Web Bonding II– Thermal and Chemical**  
Chemical and thermal bonding principles and systems.
- 10:54 am **Module 10: Q & A**
- 11:09 am **Module 11: Nonwoven Fabric Finishing & Converting**  
Principles, processes, and methods used to treat nonwoven fabrics to obtain enhanced physical and aesthetic properties for specific end-use.
- 11:44 am **Module 11: Q & A**
- 11:54 am **BREAK**
- 1:54 pm **Module 12: Nonwoven Fabric Test Methods and Nonwovens Trends**
- 2:11 pm **Module 12: Q & A**
- 2:26 pm **Module 13: Worldwide Nonwovens – Statistics and Trends**  
Brad Kalil – INDA
- 3:11 pm **Module 13: Q & A**
- 3:26 pm **Module 14: Special topics, Dave Rouse – INDA**
  - Nonwovens Industry Response to COVID-19 Pandemic
- 3:46 pm **Module 14: Q & A**
- 4:15 pm **General Q & A**
- 4:30 pm **Concludes for the day**