

# >> Coperion know-how at your disposal: Online Seminars on Process Technology for Polyolefin Compounding

## COURSE OBJECTIVES

- To provide process engineers and operation supervisors with an understanding of the fundamental and practical aspects of the design and operating mode of a ZSK twin screw compounder
- To update knowledge in the field of Polyolefin Compounding

#### LANGUAGE

All courses will be held in English if there is no other predefinition.



## DATES AND LOCATION

Sessions are split in 3 parts with 3 hours each 8-11 am (Central European Time)

**MS Teams** via Coperion GmbH, Stuttgart, Germany Participants get access to this Coperion training channel via MS Teams after PO

#### SEMINAR FEE

EUR 1.330,- per trainee. This price will be charged plus VAT.

#### ATTENDEES WILL RECEIVE

- Coloured Coperion textbook PROCESS TRAINING in Polyolefin Compounding in PDF
- Certificate upon completion of the course (PDF)

#### INDIVIDUAL SEMINARS

In addition to the regularly scheduled classes, courses can be held.

Training contents can be modified according to your objectives. Having discussed your needs we work out a customized training schedule and pricing for you.



## >> Content. Seminar on Process Technology for Polyolefin Compounding

## DAY 1

- Basic process knowledge in the field of compounding engineering plastics
- Self cleaning screw profile of twin screw extruders
- Development of the ZSK twin screw extruders
- Screw elements: layout and definitions
- Working principle of screw elements
- Compounding plants and comparison of different extruder systems
- Process sections inside of the ZSK
  - Feeding
  - Melting
  - Degassing
  - Metering
  - Screw tip design

#### DAY 2

- Materials for different applications
- Screen changer
- Melt Pump
- Pelletizer
- Plant layout
  - Compounding and Pelletizing of Polyolefin
  - Compounding of Bimodal Polyethylene
  - Pelletizing of Polymer Melts
  - Devolization of Polymer Solutions

- Process variables
  - Specific energy influence of rate and screw speed
  - Motor load (torque)
  - Temperature profile: influence of the various operating parameters

#### DAY 3

- Latest Coperion developments and insights in the field of
  - polyolefin compounding
- Scale-up
  - Methods to design a compounding line
  - Product properties
  - Interlock sequence
  - Specific energy
  - Melt temperature
- Trouble shooting
  - Operating window
  - Analysis of rate limitations
  - Torque limitations
  - Melting limitations
  - Vent limitations
  - Feed limitations
  - Pressure limitations

#### CONTACT INFORMATION

For more information about Coperion's seminars please contact: **Udo Bode** Phone: +49 (0) 711 / 897-2379 udo.bode@coperion.com

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