

# >> Coperion know-how at your disposal: Online Seminars on Process Technology in 2022 for Chemical and Reaction Technology

#### 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 processing engineering plastics

#### DATES AND LOCATION

#### **SESSION 1**

upon request

split in 3 parts with 3 hours each

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

#### LANGUAGE

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



#### SEMINAR FEE

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

#### ATTENDEES WILL RECEIVE

- Coloured Coperion textbook PROCESS TRAINING in Chemical and Reaction Technology 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 Chemical and Reaction Technology

#### 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

- Discharge section
- Screen changer
- Pelletizer
- Interlocks
  - Interlock sequences
  - Start up sequences
- Process variables
  - Specific energy influence of rate and screw speed
  - Motor load (torque)
  - Temperature profile: influence of the various operating parameters
- Materials for different applications

#### CONTACT INFORMATION

For more information about Coperion's seminars please contact:

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### • General layouts for different polymers

- Feeding
- Melting
- Degassing
- Metering
- Screw tip design
- Premix
- Color-matching
- Split-feed

#### DAY 3

- Latest Coperion developments and insights in the field of
  - Compounding Engineering Plastics
  - Masterbatch Production
  - Powder coating 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 limitationsVent limitations
  - Feed limitations
  - Pressure limitations