

## >> Coperion know-how at your disposal:

Online Seminars on Process Technology in 2022 for Engineering Plastics, Masterbatch Production and Powder Coating 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 processing engineering plastics

#### **DATES AND LOCATION**

#### SESSION 1: Apr 20-22, 2022

- split in 3 parts with 3 hours each
- 8:00 11:00 AM Central European Time

#### SESSION 2: Sep 27-29, 2022

- split in 3 parts with 3 hours each
- 08:00 11:00 AM Central European Time

**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 Engineering Plastics, Masterbatch Production and Powder coating 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.

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# >> Content. Seminar on Process Technology for Engineering Plastics, Masterbatch Production and Powder coating 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

- 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

- 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 limitations
  - Vent limitations
  - Feed limitations
  - Pressure limitations

## **CONTACT INFORMATION**

For more information about Coperion's seminars please contact:

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