

# Raw materials and melting

## Introductory training

duration  
3 half days

date  
March 11 - 14

location  
Online or Eindhoven,  
The Netherlands

A high-quality glass melt comes from a well-prepared batch. This course covers the initial steps of glass production, from the mineralogy and selection of raw materials to the formation of a melt. The sources and pre-processing of raw materials are presented. Batching operations and means to prevent segregation are discussed. The important influence of the raw material choice on batch-to-melt conversion, kinetics, energy consumption, and process emissions are emphasized.

### Contents

- Characteristics of the classical raw materials used in the glass industry : chemical composition, grain sizes
- Batch handling, segregation and charging methods
- Cullet use, market, and processing
- Benefits and drawbacks related to the use of recycled cullet
- Influence of raw materials on glass redox and quality
- Batch composition and melting energy
- Melting reactions and kinetics

### Training methods

We offer a blended learning approach by mixing e-learning, lectures, open discussions, exercises, and case studies in teams or individually. The number of participants per course is between 10 and 25 to maximize your learning experience. Participants always receive the presentations and a training certificate.

### Level of seniority

This course is meant for novice to advanced beginners who would like to improve their understanding and apply the knowledge in practical cases.

### Investment

Training costs € 2.190,- per participant. This is the equivalent of 4 tons of glass. Price excludes tax and duties. The 6th participant from the same company can join for free.

### After the training

- You have a clear understanding of the main criteria for raw material selection
- You can optimize your raw materials according to the specification of your process and products regarding redox, energy consumption, emissions, melting rate
- You can solve problems related to segregation and batch handling
- In the context of concerns about emissions and energy consumption, you have ideas on innovative alternatives for current raw materials.

Cancellation fees apply. 1 week before training 50%; no show, full price. In case of an unexpected event, we are happy to look for rescheduling or voucher options. CelSian reserves the right to cancel up to two weeks prior to the training, proposing new dates or refunds. Are you registering as a group? You are entitled to a 15% discount on all courses: for 5 registrations, the 6th participant can join for free.