



Including visiting
our partner
**Hosokawa
Alpine** in
Germany

Pulses processing



What you will learn

Discover the possibilities within the entire value chain of pulses and learn how to add value to beans, peas, chickpeas and lentils. The course will be a deep dive into the process and technology necessary to transform pulses into valuable ingredients for protein-rich plant-based foods such as meat and dairy alternatives. You will learn how to efficiently design a plant for processing pulses, the possible grinding processes, dry/wet protein extraction, and the associated machine design and operation. Everything from reception to the finished product. In addition, you will gain practical experience by working with key equipment for processing pulses in our training center and protein application center. The course also includes a visit to our partner Hosokawa Alpine, where you will gain valuable insights into the dry fractionation of proteins.

Required skill level

This course is well-suited for anyone interested in a deep technological insight into processing pulses (minimal technological know-how required).



Next course dates and more information

Scan the QR code or go to buhlergroup.com/academy

Price

CHF 2'350.00 per person / 1 week

What is included

- Invitation letter for visa application, printed training documents, one social event and dinner
- Deep dive into major trends and how pulses represent a key answer to them
- Full insight into pulses processing technology
- Hands on access to key equipment for pulses processing
- Practical experience at our fully equipped Milling Academy hall
- Transfer & Visit to Augsburg (GER), to visit our partner Hosokawa Alpines' facilities
- Instructors with extensive experience in pulses process technology

Pulses processing

Detailed program



Monday

Welcome at the Milling Academy

- Formalities and administrative matters
- Bühler factory visit, including application centers

Market overview

- Potential of pulses market

Raw material

- Different cereal varieties and their application
- Composition and characteristics of the pulses seed

Intake, pre-cleaning & cleaning section

- Transport and cleaning equipment

Cleaning (cont.) and grading

- Study of different flowsheets
- Practical works in cleaning section / GIC

Sorting pulses by using SORTEX machines

Tuesday

Dehulling section

- Machinery for dehulling
- Study of different flowsheets
- Dehulling for protein extraction and for traditional markets

Grinding

- Study of various flow diagrams

Automation in pulses processing

- Products and services to improve automation in mill

Service and maintenance

- Products and options in service and maintenance

Transport to Hosokawa Alpine in Augsburg, Germany

Social event with dinner & overnight stay in Augsburg

Wednesday

Protein concentration

Technology for dry protein fractionation

- Fine Grinding and particle size measurement principles
- Air classification and compaction

Visiting Application Center Hosokawa Alpine

Transport back to Bühler Uzwil, Switzerland

Thursday

Protein Isolation

- Market trends & end products
- Intro into Protein isolation process
- Study of flow diagrams

Visit Protein Application Center, Uzwil

Friday

Nutrition and quality

- Pulses in nutrition
- Food safety
- Various laboratory methods, evaluation of results

Value nutrition/extrudates

- Dry and moist extrudates

Bakery

- Introduction and overview on the baking process

Sustainability of pulses

Working hours

08.00 – 09.30 / 10.00 – 12.00
13.15 – 15.00 / 15.15 – 17.00

We reserve the right to adjust the schedule for organizational reasons.

