Flowsheet technology at KSU, USA

What you will learn

Learn how to use your flowsheet to improve your mill. We discuss the underlying principles of the flour milling process. How to adjust your machines to get the best yields and how to handle your mill. How to get the best from your production line using different raw materials and milling processes. But this isn't just theoretical training.

You spend two days in Kansas State University's fully operational Hal Ross Flour Mill. Learn how to improve cleaning, conditioning and milling techniques. You also have access to some of the latest milling machines for a close-up look at how they work..

Required skill level

Solid working experience in a flour mill. This course is well-suited for production managers, head millers and experienced shift millers.

Next course dates and more information

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

Price

Course fees for IAOM members are $1,900 and the non-member fee is $2,100 / 1 week

What is included

- Invitation letter for visa application
- Hands-on access to some of the latest milling machines
- Two days of practical experience at the fully operational Hal Ross Flour Mill in KSU's Department of Grain Science and Industry
- Printed training documents
- One social event with dinner
- Unlimited access to Wi-Fi and Internet

Bühler AG | Milling Academy, 9244 Uzwil, Switzerland | T +41 71 955 30 58, millingacademy@buhlergroup.com

Flowsheet technology at KSU, USA
Detailed program

Monday

Reception at IGP Executive Conference Center
- Explanation of administrative matters, formalities
- Introductions
- Short introduction of Buhler group

Raw material
- Structure of various wheats
- Influence on the milling process

Cleaning and conditioning
- Various approaches to the wheat cleaning section according to wheat variety, hardness and contamination
- Wheat conditioning and tempering philosophies in accordance with the raw material

Practical: Cleaning and conditioning

Tuesday

Practical: Cleaning and conditioning of wheat for Wednesday

Mill flow sheet technology
- Rules and principles of flow sheet design
- Flow sheets with and without purifiers
- Application of eight roller mill in flow sheets
- Flow sheets for soft wheat milling
- Flow sheets for hard wheat milling
- Flow sheets for whole wheat milling incl. bran grinding
- Flow sheets for durum wheat milling
- Germ recovery

Dinner with the group

Wednesday

Practical: Flour mill operation (Part 1)
- Setting the break rolls and optimizing the break release to produce clean semolina
- Application of eight roller mill (B1/2, C1/2)
- Effects of impact detachers on flour and intermediate products
- Over sifting, under sifting
- Discussion of sample table

Thursday

Finished product section
- Quality control / quality assurance
- Particle size measurement PSM and it applications
- Control sifter application for various wheat varieties
- Impact machine
- Sampling equipment
- NIR on-line equipment

Mill Assessment and mill performance
- Assessment procedure of a flour mill to evaluate its performance

Dinner with the group

Friday

Aspiration and pneumatics
- Explanation of systems and application
- Layout and design of an aspiration system
- Practical measurements of static and dynamic pressure, calculation of air velocities and volumes
- Determination of required filter area, air to cloth ratio for various applications

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.

Bühler AG | Milling Academy, 9244 Uzwil, Switzerland | T +41 71 955 30 58, millingacademy@buhlergroup.com