



Milling for experts at KSU, USA

What you will learn

You learn how to make a mill efficient. You will become proficient in the underlying principles of flour milling, how to improve machine adjustments and how to handle the mill. But this isn't just theoretical training. You will spend two days at KSU's fully operational Hal Ross Flour Mill, based in the Department of Grain Science and Industry. Here you learn cleaning, conditioning and milling techniques. You also have a close-up look at some of the latest milling machines and see how they work. You will learn how to improve all aspects of a mill's performance - from intake to the finished product..

Required skill level

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

→ [Courses and costs 2021](#)

What is included

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

Milling for experts at KSU, USA

Detailed program, part 1



Monday

Reception at IGP Executive Conference Center

- Explanation of administrative matters, formalities
- Introductions
- Short introduction of Bühler group

Wheat

- Kernel properties/trade and storage of wheat

Mycotoxin reduction

- Solutions to reduce mycotoxin contamination and improve grain quality

Cleaning section flow sheet concepts

- Flow sheet design adopted to wheat quality
- New flow sheets with focus on DON reduction

Practical: Hal Ross mill

- Walk through the mill
- Explanation of control system and starting of cleaning section
- Combi-cleaner / Indented cylinder
- Sampling and evaluation of samples

Sortex

- Color sorting in cleaning flow sheets

Tuesday

Conditioning of wheat

- Various conditioning philosophies

Peeling, light peeling, pearling

Roller mills, plansifters and purifiers

- New developments, design features, fluting styles, influence of roll speed, differential speed, grinding gap
- New developments, optimizing sifting efficiency
- Working principle and sieve set-up options

Practical: Hal Ross Mill

- Conditioning of wheat for Wed. / Thursdays Milling

Dinner with the group

Wednesday

The perfect break release

- Optimized adjustment of the brake system

Flow sheet technology

- Design features of flow sheets
- comparison of optimal flow sheets for various types of wheat and finished products

Starch damage

- Explanation of starch structure
- Influence of starch damage on water absorption

Practical: Hal Ross Mill

- Starting of the school mill
- Break release B1, B2, B3
- Setting of B4 and B5
- Check of finished bran

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Detailed program, part 2



Thursday

Practicals in the Hal Ross Mill [Part 4]

- Sampling of semolina and bran fractions
- Adjustment of purifiers (air setting and sieve configuration)

Practical: Hal Ross Mill

- Check of over- / underdressing on the plansifter
- Various settings on sizing rolls to optimize purifier load and clean semolina extraction

Practical: Hal Ross Mill

- Various settings of the reduction rolls with focus on 8-rollermill
- Difference between granulating and milling

Practical: Hal Ross Mill

- Completion of sample table

Cleaning of school mill

Dinner with the group

Friday

Pneumatic / Aspiration

Practical: Hal Ross Mill

- Measurement of negative pressure in pneumatic system

Performance evaluation

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.

