Milling Technology I Course.

Monday.
- **Reception at Training Center**
  - Explanation of administrative matters / formalities
  - Introduction of Bühler Ltd. and factory tour

- **Cereal Science**
  - Cereal varieties and their application for human food
  - Maize (corn), Rice, Wheat, Barley, Sorghum, Durum, Millet, Oats, Rye, Triticale

Tuesday.
- **Wheat Intake / Storage**
  - Quality control at the wheat intake, various flow sheets
  - Machines of pre-cleaning section: Drum sieve, various Magnets, Separator, Aspiration channel etc.

- **Customer Service**
  - Possibilities and Solutions

- **Mechanical Conveying Equipment**
  - Design features and working principle of
  - Elevator, chain conveyor, screw conveyor, belt conveyor

- **Save Storage of Wheat**
  - Dust explosions.
  - Infestation control, pests in grain

- **Weighing and Dosing**
  - Overview of process equipment

- **Social Event with Dinner**
Milling Technology I Course.

Wednesday.  Bühler Automation Win Cos
Cleaning section machines
- Design features and separating principles of cleaning machines
- Destoner, Combinator, Combi-Cleaner, Indented Cylinder, including demos on display machines in the Training Center

Thursday.  Cleaning Section Machines
- Design features and separating principles of cleaning machines
- Colour sorter, Scourer, Peeler

Cleaning Section Operation
- Practical work in the training center Cleaning section

Basics about Conditioning
- Tempering of wheat with ideal moistures and tempering times
- Conditioning equipment and working principle

Friday.  Roll Change
- Practical demonstration of roll exchange
- Plansifter: Change drive belt

2nd Week

Monday.  Milling Machines
- Design and working principle of
- Roller mill, Plansifter, Purifier, Detachers, Bran finishers
- including practical demos on milling machines in the Training Center

Basics on Mill Flow Sheet
- General flow sheet rules, Hard- and Soft wheat flow sheets
- Break system, Granulations, Purification, Reduction system
- Specific values of a mill: Roll surfaces, bolting areas
- Flow sheet with eight roller mill, study flow sheet of school mill
- Conditioning of wheat for Tuesday milling

Tuesday.  Running of the School Mill
- Studies of starting sequences and procedures
- Start school mill:
- Setting of break rolls with break releases
- Adjust feed rolls and feed gates
- Adjust smooth rolls
- Adjustments on purifier
- Display intermediate stocks and discussion
- Conditioning of wheat for Wednesday milling
Milling Technology I Course.

**Wednesday.** Practical Work in School Mill, continued:
- Work with and without detachers, study results
- Determine break granulations
- Change mill to eight roller mill system
- Clean-up entire school mill

**Thursday.** Visit to Swissmill Zürich

**Aspiration and Pneumatic**
- Basic knowledge about Aspiration and Pneumatic systems

**Dinner**

**Friday.** Finished Product Section
- Quality control / quality assurance equipment
- Control sifters, Sterilator, Sampling equipment, NIR on-line equipment, Blow line air cooling system

**Milling Laboratory**
- Explanations on various methods
- Visit to the milling laboratory

**Ash Curve Analysis**
- Study of an ash curve and discussion about the application
- Drawing of an ash curve

**Remarks.** We reserve the right to adjust the schedule if necessary for organizational reasons.

**Working hours.**

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