

Micro/Minor Ingredient Hydration System

ECS Engineering has developed a system to deliver micro/minor ingredients to MDD or Horizontal Bar mixers. The system integrates with existing ingredient delivery systems.

The hydration system consists of a hopper mounted outside of the mixer's safety gates with a removable sifter frame. As an option the sifter frame can be fitted with a dust extraction system.

Operation

During the batch weigh cycle an amount of water (typically 20litres / 5¼gallons) is diverted to the micro/minor ingredients hopper. The operator adds the hand weighed ingredients to the hopper through the sifter. The ingredients are kept in suspension with the hopper mounted agitator until needed.

When the mixer calls for the weighed up recipe to be dropped into the bowl the hydrated micro/minor ingredients are pumped directly into the bowl with the other ingredients.

A unique valve arrangement ensures no water/ingredients are left in the hopper or pipe work.

Key Benefits

- **Reduced Mixing Cycle Time.** As the micro/minor ingredients are included in the main ingredient drop there is no need for the mixer to tilt to the hand load position.
- **Improved Safety.** The hydration system is located away from the mixer tilt swing area eliminating the need for operators to approach the mixer. If safety gates are fitted the hydration system is located outside of the gates.
- **Improved Dough Quality.** Pre hydration of the dry micro/minor ingredients improves dispersion in the primary mixing phase.
- **Reduced Dust.** The dust extraction system and keeping the ingredients suspended in water reduces fine particles in the bakery.

