

Nonstop perfection.

Continuous Mixing for more efficient, consistent bun and roll production.













You've perfected your product. Now perfect your process.

One source for complete systems

Working as one, AMF Bakery Systems and Exact Mixing have the knowledge and experience to help you achieve perfect buns and rolls from start to finish, all day every day. AMF Bakery Systems is the industry leader in high speed bread, bun and soft roll equipment while Exact Mixing offers unmatched leadership in Continuous Mixing. Together, we can provide you with the entire production line for bun and roll production including:

Materials Handling

Metering

Mixing

Dividing

Forming

Proofing

Baking

Packaging

Optimize roll and bun baking with the experts in Continuous Mixing

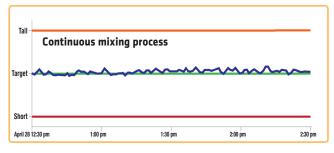
Batch processing can be inefficient and lead to variations in dough, which can impact consistency in bun and rolls. Continuous Mixing solves these problems by providing a consistent, uniform dough stream to your production line at the same rate that it is being used.

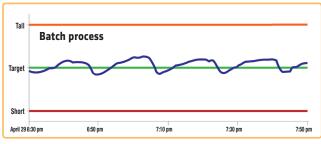
The thorough mixing action of our systems quickly develops strong bonds in gluten strands. Peak development and consistent delivery

of dough at the optimum temperature is achieved through a precise combination of speeds in the mixing and developing sections of the system.

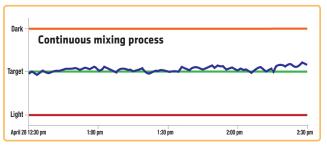
At a recent installation we collected data that resulted in the graphs below. They illustrate the improved consistency of bun color and height delivered by Continuous Mixing compared to batch mixing. Numerous additional variables were measured and all showed similar improvements.

Batch vs. continuous mixing: bun height





Batch vs. continuous mixing: bun color





Other advantages of Continuous Mixing

- · Quick and easy sanitation
- · Reduces labor and peak energy demand
- Eliminates bun surface imperfections
- · Easy to learn and operate

- · Accommodates "within spec" flour variations
- Maximizes water absorption—reduces cost of ingredients, improves yield
- Creates consistent bun and roll shape
- · Dough exits the mixer in usable sized loaves
- Less dough at risk if downstream equipment fails

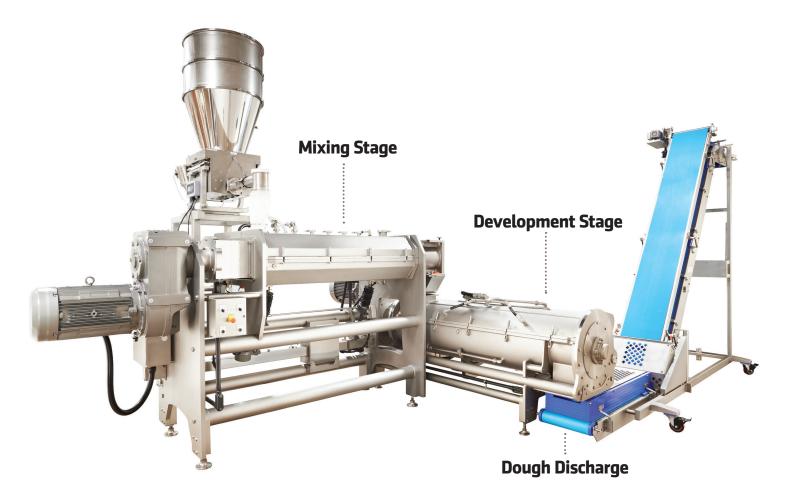








Bun and Roll HDX Continuous Mixer



A complete Continuous Mixing system also includes:

Materials Handling

We work with vendors who specialize in solutions, including dilute phase, dense phase, vacuum and pressure processes. We can also customize input methods to your individual process needs.

Operator Interface

All metering and mixing procedures are monitored and initiated by the control system so the operator is always able to confirm and modify as needed.

Ingredients Metering

Gravimetric, Loss-in-Weight technology provides precise, uninterrupted dry ingredient metering to the Continuous Mixer. Flowmeters connected to the closed loop control system ensure that liquid ingredients are accurately delivered to the Mixer.

Minors Blending

To reduce costs, increase flexibility and simplify the process, some minor ingredients are automatically pre-blended before metering.

Continuous Mixer

Continuous Mixing is the process of continuously metering ingredients directly into the mixing chamber. The mixing may be done in stages to ensure all ingredients are incorporated properly.

System Monitoring

Automated controls monitor the mixing process to self-correct for any variations in ingredients or temperature.

Explore Continuous Mixing technology at our Science and Innovation Center



The Reading Bakery Systems Science & Innovation Center is a fully licensed food production facility for research and development. At this world-class facility, bun and roll manufacturers can experience the advantages of Continuous Mixing on their products and processes using our Exact Continuous Mixing Systems. Each mixing system is complemented with highly accurate Loss-in-Weight gravimetric dry feeders and mass flow liquid systems. AMF downstream bun production equipment is also available for testing.

At the Science & Innovation Center, you can:

- Demonstrate machinery and processing techniques
- Research profitable innovations in mixing, forming and baking
- Validate new ingredients

- Develop new processes
- Conduct shelf-life studies
- Produce market samples for evaluation and testing

AMF Bakery Systems and Exact Mixing offer a variety of mixing technologies to meet all your process needs. To learn more about the advantages of Continuous Mixing and decide if continuous mixing is right for you, please call **Jim Warren** at **(01) 610.693.5816** or visit our website at **www.exactmixing.com.**

Members of the Markel Food Group

With the combined resources of Reading Bakery Systems, AMF Bakery Systems, Tromp Group and Solbern, the Markel Food Group offers a wide portfolio of high quality solutions for the food industry.





