

RAW MATERIAL DOSING SYSTEMS



A typical raw ingredient system for a medium sized commercial bakery consists of, for example, 2 silos (rye and wheat flour), 6-8 Big Bags, 10 small ingredients, 2 sourdough starters and a few fluids. Depending on the system dimensions, the system will automatically and with a high degree of precision dose 10-15 medium-sized (300 l) dough batches an hour. A single person can easily manage the entire dough production process.



Big Bags can be used to dose, for example, rye and wheat flours directly into the mixing hopper. With a modest investment, the need to lift heavy bags will be significantly minimized, thus making the work more enjoyable as well as saving on costs.

Because the Powder Technic raw material dosing system is modular, it can be installed in phases. The first phase can be limited to, for example, the installation of flour silos and modernization of water dosing with a new weighing hopper, Watermatic™ water doser and new, state-of-the-art recipe control automation. The dosing system can be later upgraded by automating, for example, the dosing of fluids and small ingredients, with Fluidmatic™ and Powdermatic™ dosers. Our equipment is extremely compact in size, thus making them easy to place, even in the most cramped bakery spaces. Powder and fluid dosing equipment can be placed, for example, in a raw material storage area, from which precisely weighed raw ingredients are conveyed by feed pipes to the production area.



Fluid processing, i.e. the dosing of water, oils and syrup, can be either partially or fully automated, or as needed.



Automatic recipe dosing is started by selecting the right recipe from the menu and then pressing the Start button. A single person can easily manage the entire dough production process.

The dosing of raw materials is fast and precise. Maintaining active control of each dosing, the automation eliminates dosing errors. This ensures product consistency, which reduces problems on the production line. Doses can be ordered from the system individually by recipe number or by the recipe name. The automation sets the recipe proportions automatically when making smaller dough. A dosing order can be made directly according to the required products. For example, 2,500 apple pies: the automation calculates the amount of dough doses needed and creates an order queue on a separate order processing page.

The controls system can be linked to another bakery production control system. This makes it possible to, for example, enter orders and monitor production from the office on a PC. The automation also keeps a precise inventory of all raw materials and products made. For example, the amount of flour in the silos is always known. A production report can be printed out for a desired period of time. Using printable work instructions, it is easy to manually dose raw materials that are not part of the automatic recipe dosing.