

Soft dough, solid performer



The Soft Dough Sheeter from FRITSCH

Passion for Dough

Healthy eating is becoming a big part of the modern lifestyle, and today's consumers of baked goods are increasingly demanding breads and rolls that are free from additives. Producing these Clean Label foods requires increasingly hydrated doughs with pre-proofing times far in excess of two hours. Such doughs have a higher water content and are therefore softer and highly developed, giving them a greater tendency to stick. All this, of course, is placing new demands on the machines processing the dough.

FRITSCH has found the solution in its Soft Dough Sheeter (SDS). Thanks to precise portioning and positioning of the dough, the SDS produces a continuous sheet of even the softest of dough while maintaining very high weight accuracy. Individual dough blocks weighing between 150 and 200 kilograms can be fed into the specially designed hopper, while the overall capacity ranges from 800 kilograms to five tonnes. The SDS is especially gentle at processing very soft and pre-proofed doughs with bowl rest as well as sponge doughs which, depending on the type of flour used, achieve a dough yield of around 165 to 190. That makes the SDS ideal for producing Mediterranean and artisanal-style bread products of all shapes and sizes.

Conveyor belt with fold-up sides

During processing, the dough first runs through the star wheel roller portioner before being prepared in the Soft Dough Sheeter and Soft Dough Former for further shaping of the dough sheet. The dough is brought onto the conveyor belt from the side through a special hopper – so the entire processing requires very little oil from beginning to end, resulting in a hygienic process that ultimately pays off for low cleaning requirements and many other benefits. The machine is also built in a compact design that can be dismantled without tools and wet-cleaned.

The dough blocks portioned by the star wheel roller are gently dropped from a very low height onto an intermediate transfer section, from where they can be placed at the appropriate spacing on the patented trough-shaped conveyor belt. This belt has special sections along the sides that fold up – preventing lateral shifting of the dough blocks. Targeted flouring of these side areas of the conveyor belt additionally prevents soft dough from sticking.



Three rollers for gentle dough processing

The individual blocks can be placed with measured overlapping before being transferred to the Soft Dough Former. This guarantees uniform weight distribution even for pre-fermented doughs. A floured levelling roller joins the individual dough blocks to each other. Next, sensors detect the volume of the thoroughly floured dough sheet so that it can be fed into the Soft Dough Former (SDF) in a controlled way.

In the SDF, the dough runs through three rollers. The optimal arrangement of these three rollers and synchronized moving sides effectively prevent the introduction of tensile or shear stresses around the edges, so the dough sheet is subject to minimal mechanical stress overall. The result is a gently extruded, very uniformly shaped dough sheet that is closed on all sides and thus possesses the best characteristics for outstanding baked goods.