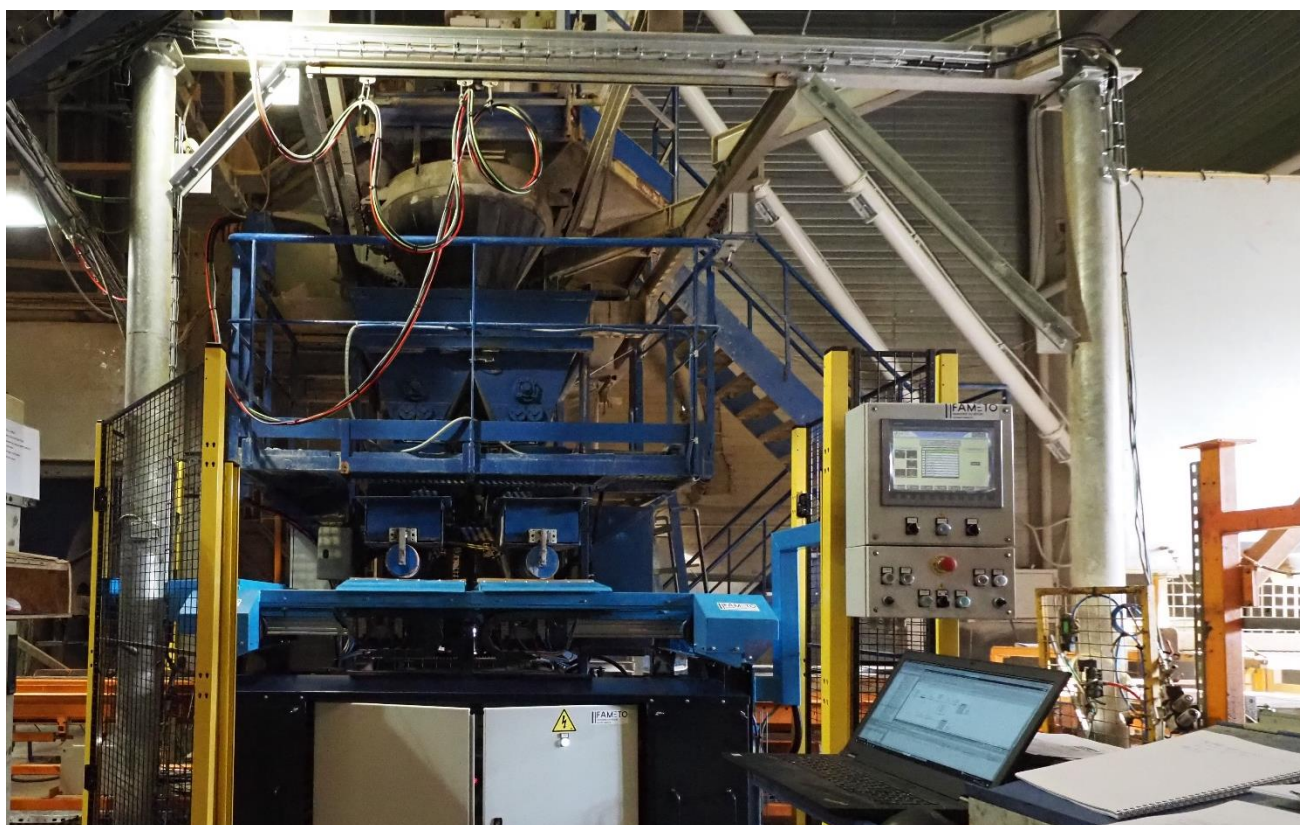


BOULLEVILLE, le 27/06/2024

## WEFA

FILLING SYSTEM FOR HOME AND GARDEN FURNITURE



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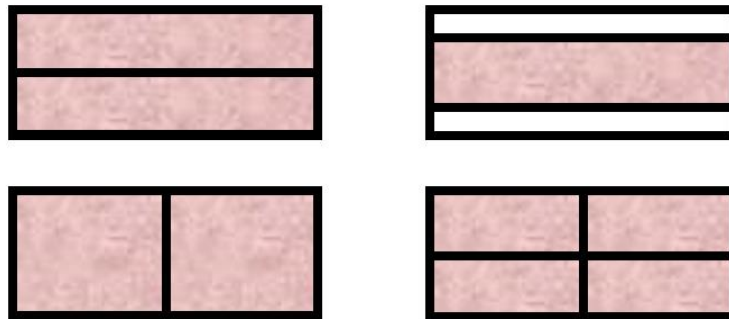
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## PRESENTATION OF THE FILLING STATION

To answer the problem of filling concrete moulds automatically and in series, such as slabs, curbs, pavers, we propose a filling system that integrates a screw feeding system, with polyurethane pockets. They fill and weigh the necessary concrete during the mold transfer operations and vibration, and quickly empty it into the mold as soon as it appears below.

- The system allows changing the shooting position of the concrete in the moulds and the possibility of filling with two or four pockets. This possibility allows a uniform distribution of concrete in the moulds.
- Allows total freedom in the realization of the moulds because the throw of the concrete is not fixed but definable by the operator.



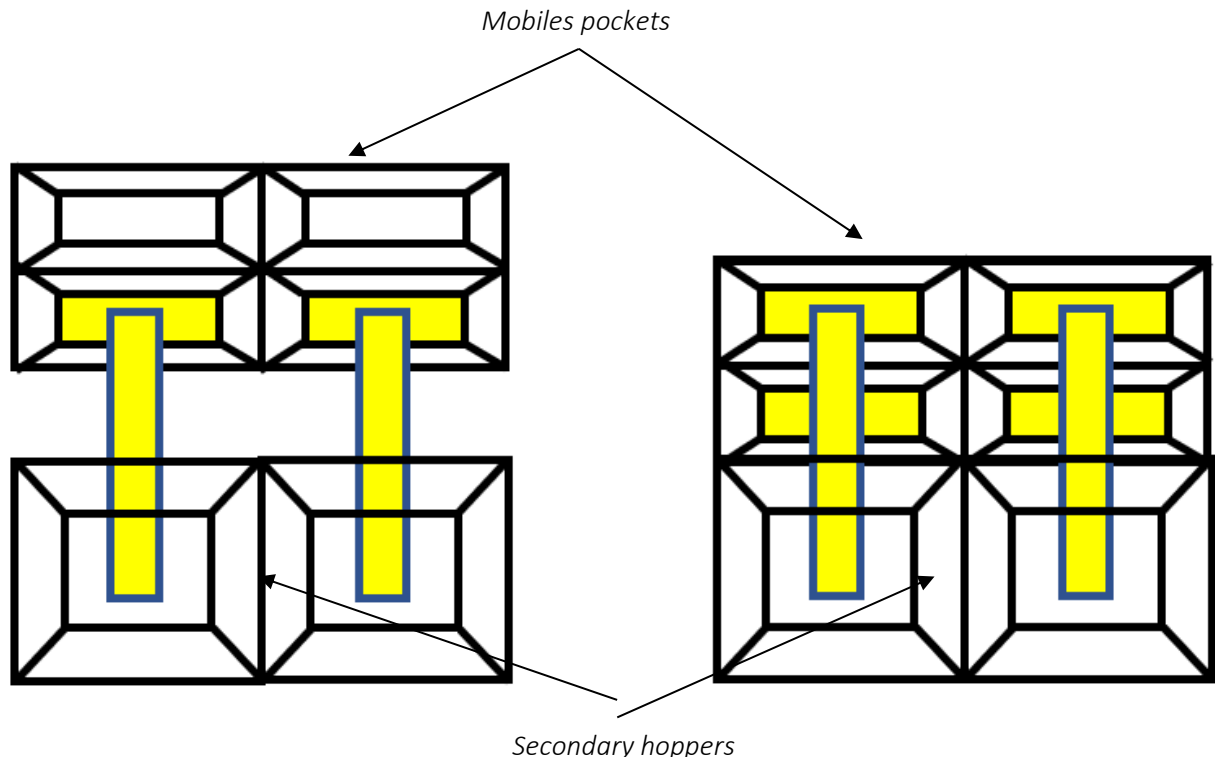
*Schematization of 4 mold configurations that we can fill with the filling station*

## CYCLE TIME DETAILS

- The filling cycle comes shortened by a 30% respect to the filling made directly by the screws, especially for the mould has 4 products. In addition, the weight cells on which each pocket is mounted, allow a more accurate weighing than a weighing system installed on the screws, because there is no noise produced by the rotation of the screws on the measurement.
- Cycle time: between 25 and 35 s per mold from 1 to 4 products
- Mould size: 1200x500x60 mm
- For a quick change of colors, the 4 polyurethane chutes are extractable in a few seconds.
- Screws are installed in a trolley to move outside and wash it.
- Choice to fill 2 or 4 pockets according to 4 possible configurations with an unchanged cycle time.

## PRESENTATION OF THE FAMETO SOLUTION

There are two hoppers, each equipped with a distribution screw. The screws fill in masked time (during mold handling and vibration alone) the 4 shoots. They are mounted on a two-axis trolley that moves, the distribution screws being fixed. Each pocket is mounted on load cells for precise weighing.



*Schematization of the technical dosing solution (filling of the pockets by the distribution screws in masked time) with the representation of the displacement of the pockets*

Each pocket can weigh up to 20 kg.

The pocket are made of polyurethane.

On the bottom, a pneumatic clamp closes/ opens the pocket.

The pocket are simply threaded onto the trolley from above, and are interchangeable in seconds. A clasp keeps them anchored to the trolley.

Two to two, are mounted on a gantry trolley that has two axes, which allows to move it quickly to the desired positions. The toothed belt movement, powered by brushless motors, is fast, quiet and precise.

It is possible to drain the concrete, either at a standstill or in translation.

The pockets move under the screws, two at a time to fill. Once weighed the amount of concrete needed, move to the emptying position, depending on the mold that arrives below.

The drain is immediate; before going back to fill, the clamps shake the pockets with quick cycles of opening-closing, so that is emptied well.





## AUTOMATION

An operator screen allows the configuration of the x and y axes according to the number of products to be filled in the molds, the configuration of the filling, the adjustment of the weight, with creation of the recipes. The daily production per shift is recorded as well as the defects that occurred. A production info recovery on USB key or network is possible.

