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▶ FEEDING IN THE LATEST

▶ FEEDING OF SMALL BALLS

▶ FEEDING OF DENTAL FLOSS PACKS

Elscint Ahead

Components for which systems are available

Feeding In The Latest . . .

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Welcome to the July edition of the Elscint Ahead Newsletter. As usual, two recently completed applications are mentioned in this newsletter. First one is of feeding of small balls with singulation, which was supplied in Pune, India itself, while the second is for a large FMCG company in Mexico. In fact, Elscint caters to a wide variety of customers, within and outside India. You can download the [pdf version](#) of this newsletter as also the back copies of the [Elscint Ahead Newsletter](#).

Feeding of small balls

[Elscint](#) recently manufactured and supplied two vibratory bowl feeders for feeding of stainless steel balls. One unit was to feed a dia 5.5 mm ball while the other one was to feed a dia 8 mm ball. The customer wanted a poka-yoke to ensure that the dia 5.5. mm ball would not be fed in the one designed for dia 8 mm ball and vice versa. The speed required was just 12 balls per minute for both the equipment. However, the customer required singulation for the same i.e. one ball to be released on receipt of a signal. This required a highly accurate singulation mechanism. This was provided with the help of a Festo make cylinder. Further good quality sensors were also required to ensure, the bowl feeder is switched off once the tube carrying the balls is full and to provide a signal to the customer once a single ball is singulated. For both these, a ring type sensor was used. Model 100 with a small dia 120 mm bowl was used for both the applications. The equipment was completed within the customers timeline and successfully installed at the customer's place. You can watch the video of the [vibratory ball feeder](#).



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Feeding of Dental Floss Packs

A customer from Mexico recently approached [Elscont](#) for solving a problem relating to feeding of dental floss packs. The packs were presently oriented and fed by hand. The customer wanted to automate the same and needed a solution for the same. The requirement was to orient the packs in one direction and feed the same at a speed of 100 packs per minute. For this speed, presently two employees were required for the feeding and the customer was keen on eliminating them. The packs were having a diameter of 60 mm and thickness of 20 mm. The opening side had to be down and the side base which was flat had to be facing the bowl centre. The orientation was very complicated and difficult as the cap had just a 0.5 mm protrusion and it was not possible to hold it on that. However, there was a printed label on the cap side. Using this as base, Elscint used a small camera to check the label. If the label was up, the pack passed through while if it was down, it was blown back into the bowl. Most of the times, the packs came with the labels down. Hence, all the packs were twisted in 180 degrees to get the labels up and thus improve the feed rate. After blowing out the wrong packs, the rest of the packs were taken forward and made to stand up on the flat surface. Whichever pack did not so stand up, was further removed and recirculated with an air blow. Then finally the packs were again twisted in 90 degrees to get them into the correct position as required by the customer. As against the required speed of 100 parts per minute, a speed of 120 parts per minute was achieved. The equipment was packed and dispatched by air freight to the customer's plant in Mexico. As the packs were quite large and the speed required too was more, Model 630 with a step / cascade bowl was used for this application. The diameter of the bowl was dia 1100 mm.

The electrical & pneumatic controls required for the camera as well as the vibrator controller were housed in a separate box. The final destination being Mexico, the unit was designed to work with 110 V / 60 Hz / 1 Phase input supply. The equipment was sent by air freight to Mexico and installed at the customer's factory.

You can watch the [bowl feeder video here](#).



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