

This edition of Elscint Ahead Newsletter, as usual contains two recently completed applications, one for feeding of razor blade components while the other is of a specially manufactured tapping equipment for tapping of a small nut with M2 tapping. Hope you find these interesting. As usual, you can write to us with your feedback and also download the back copies of the <u>Elscint Ahead Newsletter</u> and the <u>pdf version</u> of this newsletter.

## Elscint Vibratory Bowl Feeders for razor blade components

Elscint recently manufactured three vibratory bowl feeders for three parts of a razor blade. The first was the top cap which is fitted on the top of the blade with a moisturizing strip attached to it. One particular orientation was required with a speed of 120 parts per minute per row in two rows. The second part was the protective cap which is the protective cap fitted on top of the blade during packing and handling. The speed here too was 120 parts per minute per row in two rows. The third part was "Seat", which is the base on which the blade is fitted and the balance two parts fitted on. This too required a speed of 120 parts per minute per row. The orientation possibilities for each of these parts were six and hence providing the

The orientation possibilities for each of these parts were six and hence providing the required speed was very difficult, if not impossible for most manufacturers. However, Elscint took this up as a challenge and completed all 3 bowl feeders with zero wrong orientation and a speed of between 125 to 140 parts per minute per row (2 rows). Elscint used its Model 400 with an outer track bowl. The total diameter of the bowl was dia 850

n. Proper overflow arrangement was provided for all the 3 bowl feeders.



## **Elscint Automation**

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## Four Headed Tapping Machine for M2 Tapping

Elscint recently manufactured four headed Automatic Tapping Machine. The part to be tapped was electrical Cable Nut. The tapping required was M2 and tapping depth was 1 mm. The customer requirement was for tapping at a very high speed. Hence Elscint recommended a 4 headed tapping head. Elscint used a stainless steel outer track bowl with Elscinthane PU coating with 4 outlets for feeding to the tapping head. Gravity chutes with escapements / singulators for each of the chutes were provided.

At the tapping station, tapping took place pwith the help of a specially designed four head spindle tapping attachment. The components were stopped with an (patented) Elscint pneumatic escapement while the tapping took place. After tapping, the tapped components were released / unloaded to fall into a bin. The bin had a provision for recirculation of the coolant / oil to be used for tapping along with a coolant tray. The machine had a PLC and a HMI for easy operator interface. The machine had option of running a coolant or tapping oil. Recirculation of the oil / coolant was also provided for. Sensors were used to check the possibility of tap breakage as well as for providing indication to the operator that the components in the bowl feeder were empty.



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