

○ 09/2016 | ○ September | ○ 2016



Components for
which systems are
available

▶ FEEDING IN THE
LATEST

▶ FEEDING OF CONICAL
WASHER

▶ BOWL FEEDER FOR
BEARING CUPS

Elscent Ahead

Visit Us At- www.elscentautomation.com

Feeding In The Latest . . .

Monish Shete

In this edition of the Elscint Ahead newsletter, the first application is about a recently supplied equipment for feeding of conical washers while the second one is about a complete system for feeding of bearing cups. Hope you find these interesting. As usual, you can write to us with your feedback and also download the back copies of the [Elscent Ahead Newsletter](#) and the [pdf version](#) of this newsletter.

Feeding of Conical Washer

[Elscent](#) recently supplied an integrated a vibratory bowl feeder for feeding of a small dia recently manufactured a Vibratory Bowl Feeder for feeding of Conical & Flat Washers. The Washers were having outer diameter from 24 mm to 50 mm and thickness of 2.2 mm to 5 mm in ht. Due to its conical curvature, the washers have a tendency of coming in a bunch and it is difficult to remove one out of the bunch. Orientation too is very critical as the Washer is being used in a SPM which cannot detect wrongly orientated pieces. This makes it pertinent to have a bowl feeder that not only feeds correctly oriented parts consistently but also feeds them in a single row, thereby eliminating the chances of double feeding of the washers. For this Elscint used a stainless steel bowl with a reverse track which eliminated the double washers automatically. Additionally ahead of the bowl feeder, a linear vibrator with 800 mm track length having an auto-switch off mechanism and mounting arrangement was provided. After the linear vibrator, a Singulating arrangement with a Festo make cylinder with 60 mm stroke was provided to singulate and push a single washer forward. A mounting stand was provided for the complete system.



Elscent Automation

W-191 Bhosari MIDC
Pune 411 026. India
Tel.: +91-20-27122059 Fax: +91-20-27122994
Email – sales@elscentautomation.com
Website – www.elscentautomation.com

Elscint Vibratory Bowl Feeder for Bearing Cups

[Elscint](#) recently manufactured & supplied a complete feeding system for feeding of bearing cups to a centerless grinding machine. The work also entailed linking of two centerless grinding machines. For the first machine, Elscint used Model 630 with a dia 1100 mm stainless steel bowl coated with Elscinthane PU coating. The components being metallic, would make a lot of noise when fed on the metallic (stainless steel) bowl. However, with Elscinthane PU bowl coating, the metal to metal contact between the bowl and the components was eliminated, resulting in tremendous reduction in the noise level. It also ensured better feeding performance and longer life for the bowl. It oriented the cups in “Axial with open side forward” orientation and fed the same onto a linear vibrator, namely Elscint I which then transported the bearing cups upto the workrest of the centerless grinding machine. After grinding, a stationary, non-vibrating chute of 600 mm was used to convey the bearing cups ahead. It was then connected to a vibrating chute mounted on a linear vibrator which further conveyed the bearing cups 800 mm to the next grinding machine. The company already had an old vibratory bowl feeder which was not working. Elscint removed the same and placed the new bowl feeder on the same stand. After the second grinding operation, the bearing cups were again taken forward by 600 mm on a non-vibrating chute and then onto another vibrating chute of 800 mm with a stopper arrangement. The operator was supposed to pick and pack the bearing cups from the end of this track.

There was a lot of water and coolant which on the machine which used to travel back on the track. To ensure that this does not damage the vibrator coils, Elscint provided a cover for the linear vibrator and also extended the coil wire to keep the connectors away from the line of the water, ensuring that there was no damage to the vibrator coils. The complete system was manufactured in record time and installed at the customer’s end by Elscint.



Elscint Automation

W-191 Bhosari MIDC
Pune 411 026. India
Tel.: +91-20-27122059 Fax: +91-20-27122994
Email – sales@elscintautomation.com
Website – www.elscintautomation.com