Components for which systems are available

06/2013 | June | 2013

Elscint Ahead

Feeding In The Latest . . .

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It is quite challenging to feed different families of components in a single bowl feeder. The first news story is about feeding of nuts & bolts in the same bowl feeder. This requires very innovative thinking on part of the bowl tooler. The second news story of this edition of the Elscint Ahead Newsletter mentions a newly developed product, Heavy Duty Rotary / Centrifugal Feeders.. One can now be assured of having a major competitor to a vibratory bowl feeder! As usual, you can write to us with your feedback and also download the back copies of the Elscint Ahead Newsletter and the pdf version of this newsletter too.

Feeding of Nuts & Bolts in the same Bowl Feeder

Usually vibratory bowl feeders are made for either bolts or nuts due to the intrinsic nature of the tooling required for each type of component. However, Elscint has developed a special type of vibratory bowl feeder which can feed various types of nuts and bolts in the same vibratory bowl feeder with slight changeover tooling. Bolts from size M 4 to M 14 and nuts from M4 to M30 can be fed through the same vibratory bowl feeder. This helps fastener manufacturers attain a lot of flexibility and adaptability with regard to the vibratory bowl feeders. The changeover tooling is made in such a way that a range of bolts and nuts are fed in the same bowl feeder. The outlet of the nuts is blocked while feeding the bolts and while feeding the bolts, the outlet of the nuts is blocked. This makes the changeover tooling very easy. Read More...

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Elscint Heavy Duty Rotary / Centrifugal Feeders

When one talks about a Rotary / Centrifugal Feeders (motorised feeder), it conjures up the vision of feeding of light weight plastic parts like caps or drippers. Large and heavy metallic parts are rarely fed in a Rotary / Centrifugal Feeder. The main reason is that for feeding large parts, the size of the Rotary / Centrifugal Feeder has to be very big and secondly, the structure of the same too has to be pretty sturdy. Rarely do manufacturers take up such a challenge. However, Elscint has developed standard heavy duty models of Rotary / Centrifugal Feeders which take care of these points and hence can be used to feed large and heavy parts. Additionally, in the "double disc" design perfected by Elscint, there is no need for using air jets for orientation of the parts!

Coming to the advantages of Rotary Feeders vis a vis vibratory bowl feeders, the major one is the speed or feed rate. Rotary or Centrifugal Feeders work at very high speeds and one can achieve a total feed rate of upto 50 meters per minute as against just about 12 meters per minute in case of even high speed vibratory bowl feeders. Secondly, there being no vibrations and only mechanical items, rotary feeders are more acceptable to a lot of customers who are afraid of the reliability of vibratory bowl feeders in the long run (however, using a vibratory bowl feeder from a reliable supplier like Elscint can eliminate this inhibition). Nonetheless, the major drawback of a Rotary or Centrifugal Feeder is that it is not possible to orient a lot of parts in it, especially due to the fact that there are no vibrations and the movement of the parts is very fast.

One major disadvantage of a Rotary feeder is that due to the positive pressure generated because of the rotating disc, the parts being fed are thrown against each other and against the wall of the feeder. This can result in damages to the parts. However, in the "double disc" Rotary / Centrifugal Feeder design developed by Elscint, even this possibility is avoided. Another disadvantage of a Rotary Feeder is that the number of components that are loaded in a Rotary or Centrifugal Feeder have to be limited to ensure there is no jamming or blockage. Hence, invariably a stock hopper or a hopper elevator is required in order to replenish the Rotary / Centrifugal Feeder on a regular basis. This adds to the cost of a Rotary / Centrifugal Feeder. To overcome these issues, Elscint has developed sizes which are big enough for accommodating a large number of components.

Due to the unique "double disc" design of the Elscint Rotary / Centrifugal Feeders and further to the fact that there construction is very rugged and highly robust, there is no possibility of any jamming of parts and the life of the equipment too is exceptionally high.

The build quality too is excellent with all the parts touching the components being made in stainless steel. Elscint uses a dual drive for its Rotary Feeder. Three Phase AC Geared Motors of Elscint Make are used for this purpose. Standard units come with a Variable Frequency Drive so that variable speed is possible, which helps adjust the feeding speed according to the actual requirement of the user.

In fact, Elscint recently manufactured Rotary / Centrifugal Feeders for bearing races and rings having diameters dia 20 mm to dia 90 mm and with widths from 15 mm to 50 mm. The parts required orientation as one part particular side had to be always up and thereafter the parts were taken forwarding in "rolling orientation". By using a Rotary / Centrifugal Feeder, Elscint could achieve high speeds. Proper changeover tooling was provided to ensure that all these sizes were accommodated in the same feeders. Elscint used Model RF 100 & Model RF 120 for this purpose having diameters of dia 1200 mm and dia 1500 mm.

You can watch the video of the Elscint Model RF 100 Rotary Feeder as well as another one of the Elscint Model RF 120 Rotary Feeder. You can find further details about Elscint Rotary / Centrifugal Feeders.

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