

Elscint Automation

W-191 Bhosari MIDC, Pune 411 026
 Tel.: 27122059 Fax :+91-20-27122994
 E-mail: sales@elscintautomation.com
 Website: www.elscintautomation.com

While choosing a vibratory bowl feeder, it is important to check two basic things –

1. Whether the vibratory bowl feeder is full wave or half wave
 - a. Due to full wave operation, the vibrations are smooth and spring breakage is negligible as compared to half wave operation, which leads to regular spring breakage / bolt breakage
 - b. Further full wave vibratory feeders consume 60% less energy as compared to half wave vibratory feeders, leading to huge savings on the energy costs.
2. The weight carrying capacity of the vibratory bowl feeder. Essentially, there are two types of constructions in case of vibratory bowl feeders.
 - a. One type (mentioned as others in the table below) is a very light duty one used mainly for feeding of plastic parts
 - b. while the other type (mentioned as Elscint in the following table) is a robust one which can be used for feeding plastic as well as metal parts.

The following table shows the huge difference in the weight carrying capacity of the vibratory feeders –

	Others	Elscint	Others	Elscint	Elscint	Others	Elscint
Elscint Model	250		400 / 400 HD			630	
Drive Unit diameter	300	300	400	450	450	600	630
Max. capacity in ltrs.	3	3 & 5.5	7	7 & 9	12	22	18
Max. capacity by weight (kgs)	7	12	12	30	40	15	50
Power (VA)	550 VA	520 VA	700 VA	780 VA	1000 VA	874 VA	1200 VA

As can be observed, in case of Elscint vibratory feeders, not only is the weight of the drive unit more but the load carrying capacity of the vibrators is much more. In case in case of Model 250, it is 71% more, 150% more in case of Model 400 and 233% more in case of Model 630.

This is not only due to the weight of the drive unit being more but also the vibratory drive unit being correctly configured with respect to the weight between the bottom and top portion as well as the coils being correctly designed. Further the spring plates too play a part in this. The right type of spring steel plates, that too, correctly processed provide better rigidity to the drive unit vis a vis fiber / composite spring plates whose weight carrying capacity as well as the flexural and tensile strength is less. The fatigue life of composite / fiber springs too is less as compared to correctly processed spring steel plates.

