



RWTUV



Elscint Automation



Low Cost Automation Products

www.elscintautomation.com

Elscint Vibratory Bowl Feeders are known for their flexibility, innovation and reliability in feeding and orienting parts for all types of Industries. Elscint Automation is the only **ISO 9001:2000 certified** manufacturer of Vibratory Bowl Feeders in India. Elscint is manufacturing Vibratory Bowl Feeders in India **since 1983. Elscint Vibratory Feeders are having CE marking, thus conforming to the stringent European safety standards.**

Elscint Vibratory Bowls are suitable for feeding components for subsequent operations on special machines in cosmetic, electrical, mechanical, pharmaceutical, optical, bearing and many other industries. The components can be plastic caps, spouts, capsules, pins, rollers, needles and electrical connectors, bearings as well as heavy parts such as anchor bolts, bearing races and metal sockets. Even oily parts can be fed!

Elscint manufactures 5 models of Vibratory Bowl Feeders, i.e. 100, 160, 250, 400 and 630. Its wide variety of Models makes it the first choice of Machine Builders.

Bowls: Elscint Bowls have many distinct tooling features built into the basic bowl designs, with tracks varying in width and shape to accommodate different types of components. The Bowls are made in either Cast Aluminum or Stainless Steel. Elscint has the largest variety of shapes available in Cast Aluminum. In addition fabricated Stainless Steel Bowls are also available in various shapes and sizes. In Stainless Steel various types of Bowls are available like Conical, Step Design, Cylindrical and Outside Track Bowl.

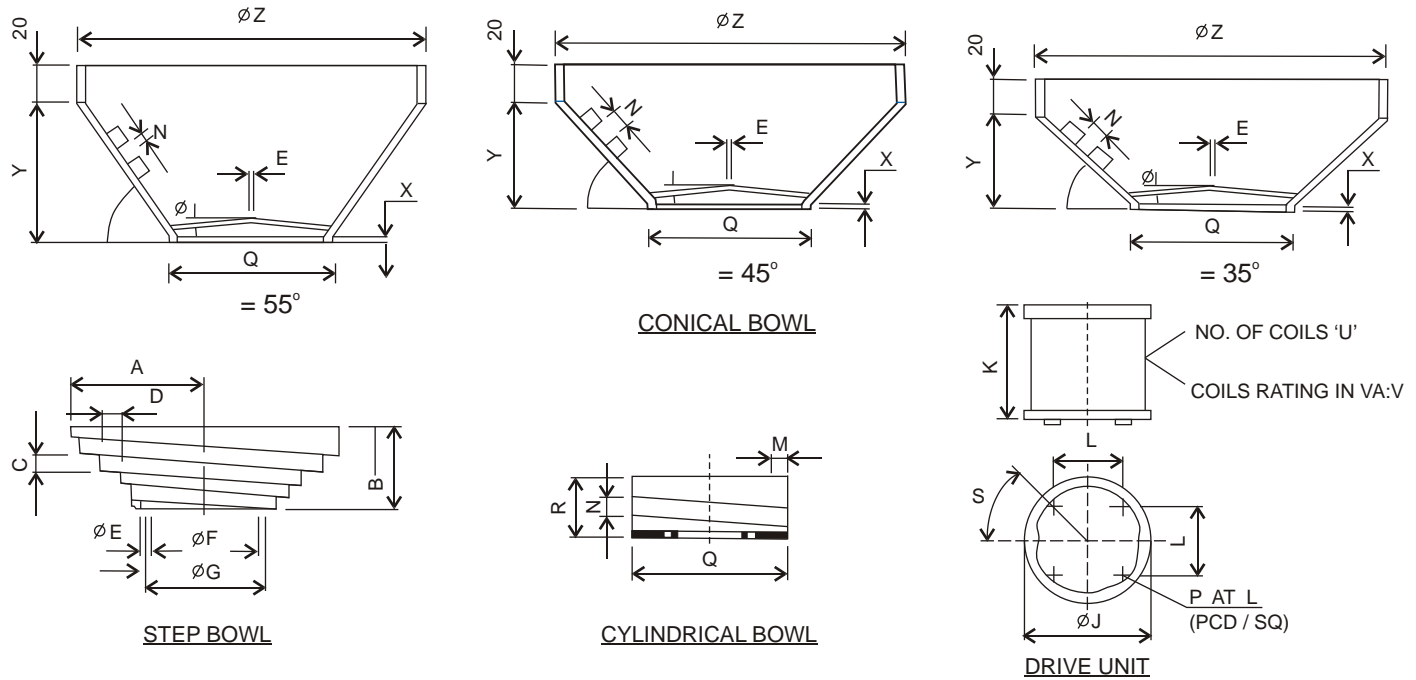
Drive: All drive units are correctly engineered to give stable performance at high speed with minimum maintenance. Totally Encapsulated Type coils having adequate power are used. A removable Guard / Cover on Toggle Clamps is provided for easy removal and safety.

Elscint Vibratory Bowl Feeders are with **FULL WAVE** Operation. They **CONSUME 40% LESS ENERGY** as compared to HALF WAVE Vibratory Bowl Feeders thus reducing day to day running costs.

Vibrator Controller / Regulator: Every drive unit is supplied with separate European make Vibratory Controller (refer page 4 for details).

Durability and performance are guaranteed due to extensive In-house testing. Elscint offers total design, tooling, and manufacturing services for custom Vibratory Feeders.

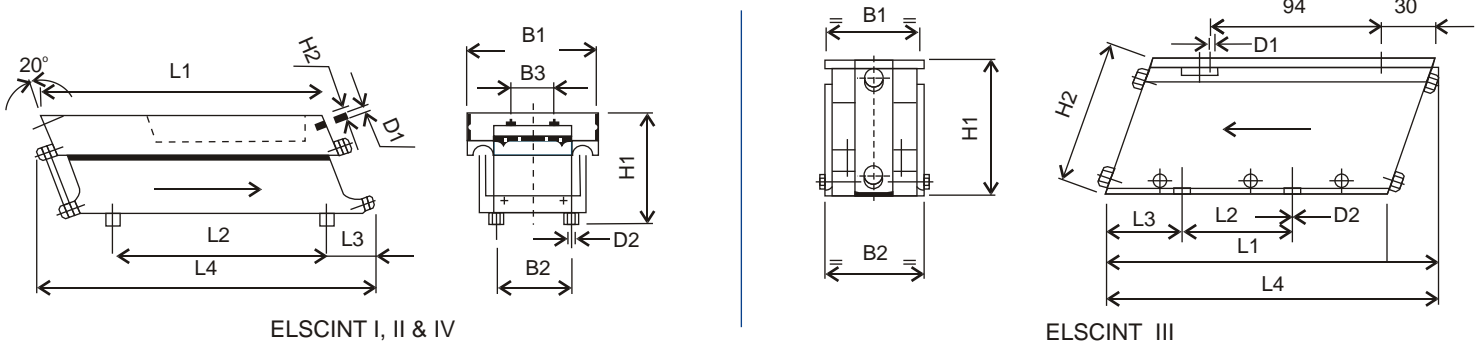
Elscint Vibratory Bowl Feeder:



MOUNTING DIMENSIONS

Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	Q	S	T	U	V	X	Y	Z	ϕ°	8°	Wt (Kg)	Bowl Capacity		
																											Volume (Ltr.)	Wt. (Kg)	
100	60	20	12	6		6.5	PCD		120	98	110 ϕ PCD	6	12	5 ϕ	20/40	120	60°		1	100							2.5	0.015	0.50
160	115	70/20	20	10		8.5		5	213	220	SQ. 170	12	30/22	M8	20/70	200/215	45°		1	170	6/8	70/50	300	55°	5/8	17	0.8	6/8	
250	206	124	42	20/32	6.8	165	186	4	290	257	SQ. 220	30	50/35	ϕ 8.6	50/110	288	45°	145	3	520	8/10	135/170	470/520	55°	5/6	45	3	10/12	
400	275/335	157/196	52/68	51	6.8	300	320	5	500	245	SQ. 325	30	70/50	M10	80/162	443	45°		3	780	10/8	135/170	520/570	55°	5/6	125	9	25/28	
630	480	192/200	80/100	50-65	6.8	500	525	5	750	276	SQ. 488	50-60	60/80	M12	190	600	45°		4	1320	10/8	190	960	45°	5/6	200	18	50/55	

Elscent Linear Vibrator:



ELSCINT I, II & IV

ELSCINT III

TECHNICAL DATA

Model	L1	L2	L3	L4	B1	B2	B3	H1	H2	D1	D2
ELSCINT I	247	200	45	320	122	70	40	105	13	M6	M6
ELSCINT II	340	270	63	440	160	100	60	140	15	M6	M6
ELSCINT III	155	55	35	183	52	54	-	76	80.9	Ø 4.5	Ø 6.5
ELSCINT IV	450	340	69	510	200	140	180	176	-	M6	M6

Model	Coil Rating 220 V - VA	Approx. Wt. (Kg)	Chute / Tray Wt. (Kg)	Max. Chute Length (mm)	Counter Wt. Range (Kg)	Linear Speed Mtr. / Min.	Volts
ELSCINT I	45 VA	7.5	0.8	380	0.5 to 3.00	5 to 8	200 AC
ELSCINT II	170 VA	17	2.5	750	2.5 to 5	5 to 8	200 AC
ELSCINT III	10 VA	1.8	0.2	300	0.1 to 0.4	5 to 8	200 AC
ELSCINT IV	330 VA	34	10 to 16	1000	2.5 to 7	5 to 8	200 AC

Elscent Linear Feeder:

Elscent manufactures 5 models of Linear Feeders, i.e. Elscint I, II, III, IV and V.

Drive:

All drive units are correctly engineered to give stable performance at high speed with minimum maintenance. Totally Encapsulated Type coils having adequate power are used.

Application:

Elscent Linear Feeders are suitable for feeding components for subsequent operations on special machines in cosmetic, electrical, mechanical, pharmaceutical, optical, bearing and many other industries.

You can buy either only the Linear Vibrator or along with Chute or Tray.

Vibrator Controller/Regulator:

Every drive unit is supplied with separate European make Vibratory Controller (refer page 4 for details).



Elscent Spring Disentangler

Elscent manufactures the **Elscent Spring Disentangler** for disentangling of various types of Springs. The **Elscent Spring Disentangler** feeds out the Springs through tubes to the point of use. Various types of Springs can be used in the same Unit with slight change over tooling. Capacity and separation rate depends on the shape and size of the springs. An output of up to 200 springs per minute can be achieved through each feeder tube! Elscint also offers other accessories like Hand Pick Off, Escapement etc. to go with this equipment.



Elscont offers various types of Stands, X-Y Tables, Z Adjustments, Hoppers etc. This leads to Elscint Vibratory Bowl Feeders being a Plug and Play Solution for most customers while Machine Builders find this easy for integration in their systems.

a. Stands

These are useful wherever the Vibratory Bowl Feeder is to be placed at a height. Height Adjustment of 200 / 220 mm is available.

b. X-Y Tables

These make X & Y Adjustments possible.

c. Z Adjustments

Portable Jacks are available in various Models with 40 mm to 100 mm height adjustment

d. Bowl Linings

Elscont is the pioneer in India in the supply of Bowl Linings. Linings not only generate better friction in case of smooth components but also reduce the Noise Levels substantially. They also eliminate component damage, if any. Following types of Linings / coatings are available:

- Polyurethane
- Synthetic
- Special

e. Hoppers

These are available for augmenting the capacity of the Vibratory Bowl Feeder and increasing the manual loading time. Hoppers of the following capacities are available:

- 50 Ltrs
- 130 Ltrs
- Special (According to requirements)

f. Level Controllers

Level Controllers are available to indicate when the level of components in the Bowl Feeder goes down.

g. Noise Suppressors / Enclosures

Noise Suppressors / Enclosures are available to reduce the Noise Levels by 10 to 15 Decibels. These are available either in Mild Steel or see through Acrylic.

h. Silos

These are also available for augmenting the capacity of the Vibratory Bowl Feeder. Silos of the following capacities are available:

- Model 250: Capacity 8 Ltrs.
- Model 400: Capacity 19 Ltrs.

i. Elscint Auto-switch off mechanisms

Elscont offers Auto-Switch Off Mechanisms whereby the Vibratory Bowl Feeder is switched off when the Chute is full and automatically restarted when the Chute is empty. This reduces the Energy consumption as well as the Noise Level.

J. Chutes

Gravity or Linear Chutes can be offered depending upon requirements. Linear Chutes as long as 1200 mm can be offered!



Some of the components for which systems are available

Elscont Automation offers Soft Start electronic controllers for vibratory feeders. Various Models are available. The controllers are specially designed for controlling the amplitude of vibration in Vibratory Bowl Feeders. The system is based on an integrated circuit which guarantees perfect synchronisation of the triac firing pulse with the waveform of the working voltage under all conditions. The controllers also include a suitable circuit for soft start with provision for choosing the ramp time. HALF WAVE & FULL WAVE options are available.

Frequency Controllers:

Elscont also offers Frequency Controllers which among other things guarantee constant Voltage and constant Frequency. These are of tremendous value in case of intermittent usage of Genset. In all Models, DOUBLE SPEEDY is available i.e. two Potentiometers are given whereby one is used for course adjustment and one for fine adjustment in case of weighting and batching systems.

All Circuits are CE Marked and can either be given with Box made of ABS Plastic or Mild Steel or even only Circuits can be given to Machine Builders for integration in their Control Panels.

Vibrator Controller Selection Chart

Vibratory Bowl Feeder / Linear Feeder	E3FC	E5FC	Elscont_06	FQ_01	FQ_02
Model 160/200	✓		✓		✓
Model 250		✓	✓	✓	
Model 400		✓	✓	✓	
Model 630		✓	✓	✓	
Elscont I	✓		✓		✓
Elscont II	✓		✓		✓
Elscont III	✓		✓		✓
Elscont IV	✓		✓		✓

- | | | |
|------------|---|----------------|
| E3FC | -Amplitude Control / Voltage Compensation | - Upto 300 VA |
| E5FC | -Amplitude Control / Voltage Compensation | - Above 300 VA |
| Elscont_06 | - Extra Stabilised Circuit | - Upto 1000 VA |
| FQ_1 | - Frequency Controller | - Above 300 VA |
| FQ_2 | - Frequency Controller | - Upto 300 VA |



Elscont Small Parts Conveyor Feeder

Elscont Small Parts Conveyor Feeders come in lengths from 500 mm to 10,000 mm as per requirements. Standard Belt Widths of 80, 120 150, 200, 250, 300 mm are available while other sizes can be made available on request.

Belt Speeds:

Constant belt speeds from 0.5 M/min to 20 M per min max with fixed speeds and Variable Belt speeds are available on request.

Loading Capacity:

Elscont belts are suitable up to 25kg load in horizontal position.

Application:

Elscont Small Parts Conveyor Feeders find application in all types of industries where efficient and speedy movement of material from one workstation to another is to be achieved.



Elscont Hopper Elevators

In case of heavy parts, where ground level loading is required even though the feeding height is very high, Elscint offers Hopper Elevators which can be fed at a very low height. Additionally it can allow large quantity of loading in the Hopper. These can be either made of Belts or Slats according to requirements. Capacities ranging from 50 Ltrs. to 300 Ltrs. are available.



Elscint Vibratory Weld Nut / Bolt Feeder

Elscint Automation manufactures a Nut / Bolt Feeding Accessory for Resistance Spot Welding Machines. This consists of an Elscint Vibratory Bowl Feeder which feeds the Nuts / Bolts. The Nut / Bolts are fed to a Pneumatic Pusher and then to an Escapement, which places the Nut / Bolt on the Work Station for Spot Welding. It is then held at that position through Magnetic Property. This reduces the manual intervention required for feeding and placing of the Nuts / Bolts.



Automatic Riveting Machine

Elscint Automation manufactures an **Automatic Riveting Machine**. The rivets are fed through a Vibratory Bowl Feeder to the Riveting Station. The other part (Spring, Strip etc.) can either be placed manually or automatically from another Vibratory Bowl Feeder. Alternatively, the Strip can be fed through a De-reeler and cut as per the requirement and fed automatically. At the riveting point, the riveting takes place and the completed riveted assembly is blow out or removed manually as the case might be.

Auto Loading and Unloading System for Centreless Grinding Machines

Elscint Automation manufactures an **Auto Loading and Unloading System for Centreless Grinding Machines** for longer length Shafts having length from 150 mm upto 1 metre. The Shafts have to be kept on an inclined table, from where a Pneumatic Cylinder singles out and feeds one Shaft at a time to a Belt Conveyor which feeds the Shaft to the Centreless Grinding Machine. A **Special Elscint Unloading Belt Conveyor** can also be offered for unloading of the Shafts. Special care is taken so that the Shafts do not collide and push each other so that the quality of the Ground Shafts is maintained.



Rotary Feeder

Elscint Rotary Feeder is a mechanical unit that can be used for feeding special components. Where it is not possible to orient the component in the Vibratory Feeders. Elscint single reduction unit drives the main rotating plate that picks up the components while moving upwards. These can be made to work at speeds of upto 600 pieces per minute or more depending upon the shape and orientation needed for the component.

Automatic Tapping Machine

Elscint Automation manufactures an **Automatic Tapping Machine**. The Components are fed through a Vibratory Bowl Feeder to the Tapping Station. At the Tapping Station, Tapping takes place with the help of a specially designed Tapping Head Attachment. The completed Component can be unloaded in a Bin or ejected. Tapping can also be done at two places on the same component! Speeds of upto 60 Pieces per minute are possible.

:: Elscint Systems ::

We also offer systems using various Elscint products to fulfil the need of automation where reliable operations are needed. These systems are in use in many industries where mass production requirements are to be met. Please contact for further information.

All dimensions in mm. Due to continued development specifications are subject to change without prior notice

Elscint Automation

W-191 Bhosari MIDC, Pune 411026. India
Tel: +91-20-27122059 Fax: +91-20-27122994
E-mail: sales@elscintautomation.com
www.elscintautomation.com