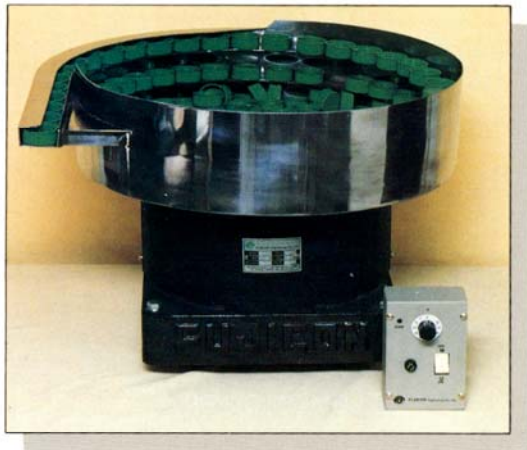


Vibratory Parts Feeder

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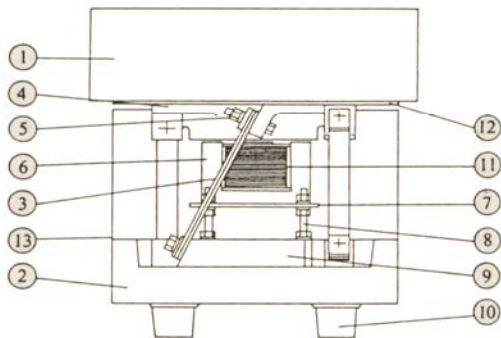
Our company is the major seller of vibratory parts feeder, designed and tooled to your requirements. In addition, we supply standard parts feeder, straight or linear feeder, vibrator and sub-hopper. We also design and tool orientating devices, escapement tracks for your automatic feeding system.

The parts feeder comes in various sizes to suit your needs and lower your cost. Many parts feeding and orientation applications have been successfully solved by us and subsequently installed in all types of industries.

For your enquiry, please provide:-

- | | |
|--------------------------------|-----------------------------|
| (1) Samples | |
| (2) Orientation Required | Sketch |
| (3) Feeding Rate..... | Pcs/ Min |
| (4) Direction of Feed | Clockwise/
Anticlockwise |
| (5) Power Supply..... | AC110/220V |
| (6) Other Special Instructions | |

Principal parts of Vibratory Bowl Type Parts Feeder



<u>Index No.</u>	<u>Parts' Name</u>
1	Vibrating bowl
2	Base (Vibrator body)
3	Leaf Spring
4	Bowl support & A-Core (armature)
5	Leaf-spring securing bolt and nut
6	M-core
7	M-core mounting plate
8	Stud bolt and nut
9	Leaf-spring fixture
10	Rubber Leg, vibration mounting
11	Magnet coil
12	Lid
13	Cover

The principle of vibratory feeding was invented and patented in the United States more than 50 years ago. This feeding technique was to change the movements produced by electro-magnetic power into mechanical movements.

The vibratory Parts Feeder consists of the following three principal mechanisms or units in addition to an electric controller unit:

- (1) Vibrating bowl
- (2) Vibrator body
- (3) Vibration drive system

(1) Vibrating Bowl

The bowl into which workpieces are dumped and stored is mounted freely on leaf springs. By the use of special tooling and attachments in the bowl, workpieces in a random mass are oriented into an orderly and exact position for further processing until they are fed to the discharge point at the end of a spiral inclined track.

(2) Vibrator Body

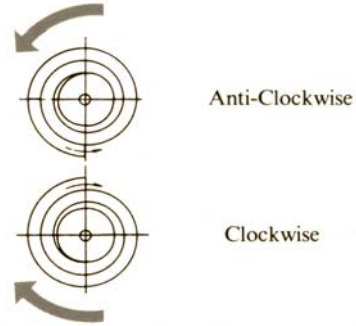
The vibrator body is the base of the entire unit, forming the counterweight which receives a reaction applied by the vibrating bowl. Four rubber shock absorbers attached below the body acts on the footings.

(3) Vibration Drive System

This is the mechanism that supports the bowl and vibrates at a nearly resonant frequency with that of vibration produced by the vibrator to impart effective oscillating movements to the bowl.

The vibratory action is derived from single-phase AC power supply. A rectifier (thyristor) in the controller unit is a half-wave rectifier that converts an AC voltage into a "pulsating" DC voltage, passing current to a winding of coils or a solenoid as the load. The solenoid cyclically induced by the current, produces the electromagnetic force that pulls the armature or movable element of the vibrator.

This attraction of electromagnetic force and retraction by the leaf springs causes the mechanical vibrating system designed to oscillate at a nearly resonant frequency with that of the armature to give the bowl torsional vibrations, i.e., the system is employed to strike a blow against the bowl in a direction opposite to that in which the parts are fed so that the parts are caused to move and pass up a circular inclined ramp and along the spiral track on the inside of the bowl, where they are orientated into the proper position and continuously fed, one after another, at a consistent rate to the discharge point.



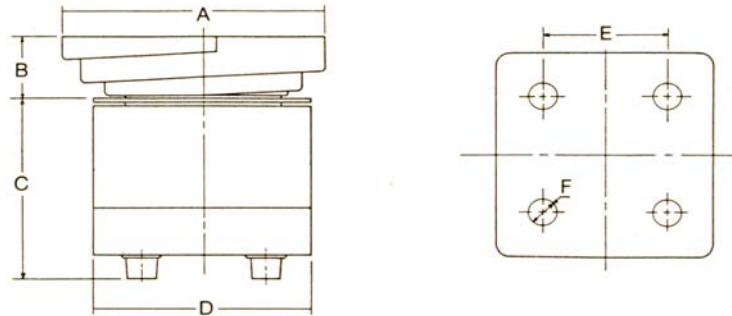
Fujicon Vibratory Bowl Feeders are available for clockwise or anti-clockwise feeding.

Please state required type when ordering.

Standard Bowl Series:

Form of Bowl	CONE 1	CONE 2	CYLINDRICAL	STEP
Material	Cast Aluminium Stainless Steel (SUS)	Stainless Steel (SUS)	Stainless Steel (SUS)	Cast Aluminium (AL) Stainless Steel (SUS)

Drive Unit



MODEL		FE-100	FE-200	FE-300	FE-400	FE-500	FE-800
SPECIFICATION							
VOLTAGE (V)		100/100 200/220	100/110 200/220	100/110 200/220	100/110 200/220	100/110 200/220	200/220
MAX. PERMISSIBLE CURRENT (A)		0.2 0.1	0.6 0.3	2.0 1.0	3.0 1.5	4.0 2.0	6.0
TOTAL WEIGHT (KG)		1.5	10	36	42	68	310
DIMENSIONS (MM)	A	100φ	180φ ~ 200φ	250φ ~ 300φ	350φ ~ 400φ	450φ ~ 550φ	600φ ~ 800φ
	B	45	60	85	100	140	200
	C	80	132	238	254	276	420
	D	80φ	180φ	260	280	330	600
	E	70PCD	140PCD	160□	160□	188□	445□
	F	—	25φ	36φ	36φ	36φ	60φ