

we handle it !



AUTOMATION & FEEDING SYSTEM SOLUTIONS

Vibratory Bowl Feeders are the most sophisticated reliable and robust units available in the marketplace today. Kalapremi's bowls feeds and orientates your products carefully, at the same time guaranteeing a consistent and accurate flow of components into your production machinery.



KALAPREMI AUTOMATION & MECHATRONIC SYSTEMS (I) PVT. LTD.,

www.kalapremiformatics.in



Welcome to **Kalapremi Automation & Mechatronic Systems (I) Pvt. Ltd.**,
your market leader in the field of feeding technology!

ABOUT US

Kalapremi Automation & Mechatronic Systems (I) Pvt. Ltd., is a Startup Enterprise that has its head office and Manufacturing Facilities in Ahmedabad, (Gujarat) India. Established in 2020. and Incorporated in 2023 with the team of Engineers and Technocrats,. With two production locations and a network of partners, we are there for you countrywide. For many decades. our name has stood for top-class performance regarding technology, quality and reliability of our Feeding Systems.

Our two business segments are the development and manufacture of complete custom-made feeding systems and their corresponding components. With many years experience in the automation and parts handling industry and nearly 200 complete feeding systems supplied annually,

Our commitment to research and development maintains our position at the leading edge of feeding technology. We provide an extensive range of the most efficient drive units, controllers and accessories for either standard or special requirements. All equipment is manufactured to the highest standards of quality upon which we have built our reputation. We offer first class service and standard equipment, immediate delivery from stock.

Our product range is manufactured to meet the highest demands of the food and pharmaceutical industries and also includes equipment manufactured to IEC and CE standards. Quality has always been of central importance to us, with each employee committed to make their own personal contribution to the achievement of quality standards and customer satisfaction. We know that long term success in business can only be achieved by providing high quality equipment, which fulfills the customer's requirements.



WHAT IS A VIBRATORY BOWL FEEDER?

Vibratory bowl feeders are the most common part feeding devices used to feed components in Industrial Assembly Automation Applications. Vibratory feeders are self-contained systems, comprising of a specially tooled bowl feeder that orients the components, a vibrating drive unit upon which the bowl feeder is mounted and a variable-amplitude control box.

APPLICATIONS OF BOWL FEEDERS

Vibratory feeders are utilized in many industries including **Pharmaceutical, Automotive, Electronic, Foods & Beverages, Fasteners & Fixing, Fast Moving Consumable Goods (FMCG), Packaging and Metal working industries**. It also serves other industries such as Glass, Foundry, Steel, Construction, Recycling, Pulp & Paper and Plastics.

Vibratory feeders offer a cost-effective alternative to manual labor, saving manufacturer's time and labor costs. Several factors must be considered when selecting a parts feeder, including the industry, application, material properties, and product volume.

Kalapremi Automation engineer and manufactures the most reliable and highest quality of vibratory part feeding systems providing low maintenance and accurate handling solutions for a wide range of material parts processing applications.

Vibratory Bowl Feeding Systems

We Kalapremi provides customized feeding systems

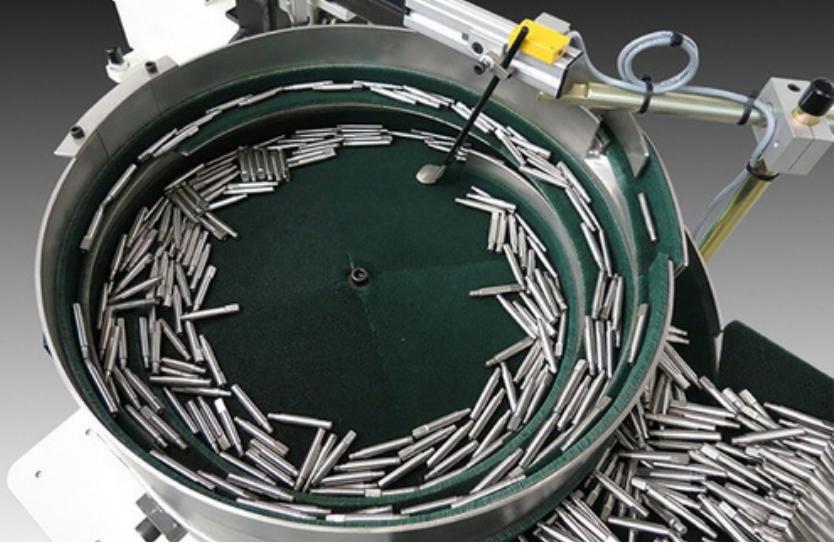
Kalapremi's bowl feeders are renowned for being the most sophisticated reliable and robust units available in the marketplace today. Our bowls feeds and orientates your products carefully, at the same time guaranteeing a consistent and accurate flow of components into your production machinery.



Kalapremi's bowl tops and drive units have been designed to work in harmony alongside each other and handle components from all areas of industry. The widest possible range of shapes and sizes made of many kinds of material can be catered for.

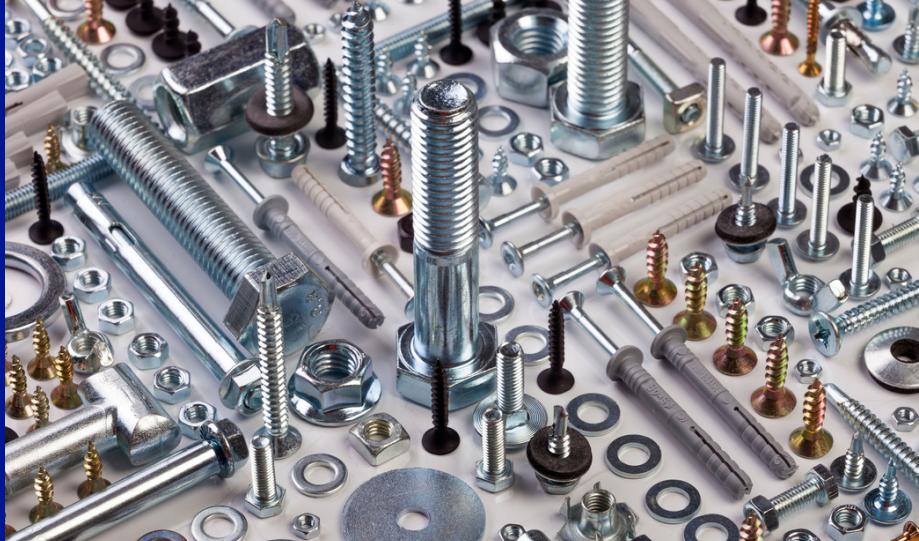
Special requirements are available upon request,

- 1. Bowl Top**
- 2. Drive Unit**
- 3. Control Box**
- 4. Hopper**
- 5. Linear Feeder**
- 6. Escapements and Nests**
- 7. System Mounting Table**



With relentless effort, **Kalapremi** has further developed the vibration feeding fasteners series, including thread rolling machines, drilling tail machines, groove milling machine, end milling machines, washer assembly machine and video screening series, which received overwhelmingly positive feedback and trust from local and international users. Besides standard products, **Kalapremi** is also capable of designing, manufacturing and installing any non-standard products.





OUR STANDARD SERIES

LKBF-220 - (220mm Bowl) - M2 to M4
LKBF-320 - (320mm Bowl) - M3 to M6
LKBF-420 - (420mm Bowl) - M3 to M8
LKBF-520 - (520mm Bowl) - M4 to M10
LKBF-620 - (620mm Bowl) - M6 to M14
LKBF-720 - (720mm Bowl) - M8 to M16
LKBF-820 - (820mm Bowl) - M8 to M20



TYPICAL CASES OF APPLICATION

Classical fields of application are for example;

- Feeding of Different types of Screws, Rivets and Bolts,
- Feeding of Different type of Nuts and Washers,
- Feeding of Special type of Studs and Special Components Etc..



KEY BENEFITS



LOW NOISE

Low noise with very little referred vibration due to the multi magnet system



HIGH OUTPUT

Multi-lane part feeding available for higher output to accommodate high demand



FEED COMPLEX PARTS

All-purpose devices for nearly all components; Suitable for complex-shaped components



DURABLE

Durability, smooth feed characteristics, simple to service



COST EFFECTIVE

Cost effective alternative to manual labour, saving manufacturer's time and labour costs



EASY RE-TOOLING

Easily retooled for further changes in various product design, style and size



Kalapremi's engineers and manufactures the most reliable and highest quality vibratory part feeding systems providing low maintenance and accurate handling solutions for a wide range of material parts processing applications.

Our experienced persons will be responsible for the entire feeding systems of your production process and application. If you are looking for a high quality vibratory feeder or other special purpose handling system, please do not hesitate to contact us either by phone or email.

CARPET FEEDERS



The Kalapremi's Carpet Feeders are particularly suitable for loading hoppers, orienting and feeding sensitive, heavy or noisy components,. The heart of the feeding system is formed by the Kalapremi's proven and powerful linear feeders., Brush lining materials increases the conveying effects and lead to the directional transport of parts. Carpet feeding systems can be adapted to many applications with these linear modules.

- Gentle Handling of Components,
- Suitable for Polished and Sensitive Surface Components,
- Suitable for Medium, Large and Heavy Components,
- Flat Surface Tooling Ensures no Damage from product re-circulation,
- Low Noise Levels.

ELEMENTS OF THE CARPET FEEDING SYSTEM

1. Hopper (Belt Hopper or Vibrating Hopper),
2. Carpet Feeder with Brush Lining,
3. Sorting Line (Conveyor Belt or Linear Feeder),
4. Accumulation Line.,

TYPICAL CASES OF APPLICATION

Classical fields of application are for example;

- **Feeding of Center-less / Duplex Grinding Machines,**
- **Manufacture of Roller Bearings,**
- **Automotive Industry and their Suppliers.**

GENTLE PARTS HANDLING

Even Sensitive components like green products, parts made of glass or surface refined components can be conveyed to the planner arrangement of the hopper and sorting line without troughs and edges and in the combinations with the brush coatings.



SIMPLE RE-TOOLING AND FLEXIBLE

Standardize linear sorting units permit simple and quick re tooling within families of parts. In combination with position recognition



HIGH FEEDING SPEED

The conveying capacity is 2-10m/min, depending on the nature of the components and booth linear feeders and conveyor belts are used in the sorting process.



QUIET AND ACCESSIBLE

The noise level of usual carpet feeders normally lies below 75 dB (A) - without additional sound insulation and what isn't surrounded doesn't disturb accessibility.



OPERATIONAL CHARACTERISTICS

The components are randomly filed in to the hopper (Belt or Vibrating Hopper); from here they are dosed to the sorting unit of the carpet feeder. The parts are then presorted and continuously transferred to the linear orientation tooling. The number of components in the sorting unit can therefore be considerably reduced. Components that have been rejected in the sorting line are sent back - after a minimum dwelling time - to the sorting unit again via the parts circulation of the carpet feeder. Through a clever choice of the orienting tooling it is possible to deliberately change the position of the component.

STEP FEEDERS



Kalapremi's step feeders are capable of feeding small cylindrical and spherical parts. They offer numerous advantages over conventional feeding methods, including quiet operation, space savings and gentle handling of parts. Our step feeders are available in several configurations ranging from standalone units to completely tooled feed systems.

Our step feeders can be tooled to your specifications, allowing for a turn-key parts feeding solution. A tooled step feeder includes the sensors and controls that are required to operate the unit, and the linear feeder is tooled to orient the parts to your specification.

STEP FEATURES

- Vertical Step Configuration
- Simple, Air-Powered Operation
- Integrated Hopper Bin
- Quiet Operation
- Gentle Part Handling
- Extremely Durable
- Automatic metering of parts into the step feeder bin, increasing bulk part storage capacity.
- Linear feeders for returning rejected parts to bulk storage.
- Bulk part level sensors.
- Part escapement and isolation devices.
- Part position sensors (part-in-place, high track, etc.)
- Custom sensor and control packages.



LINEAR FEEDERS



Linear feeders from Kalapremi enables a linear sorting (linear sorting track). They can also be used for the orientation of components and provide higher outputs with a multi-track design.

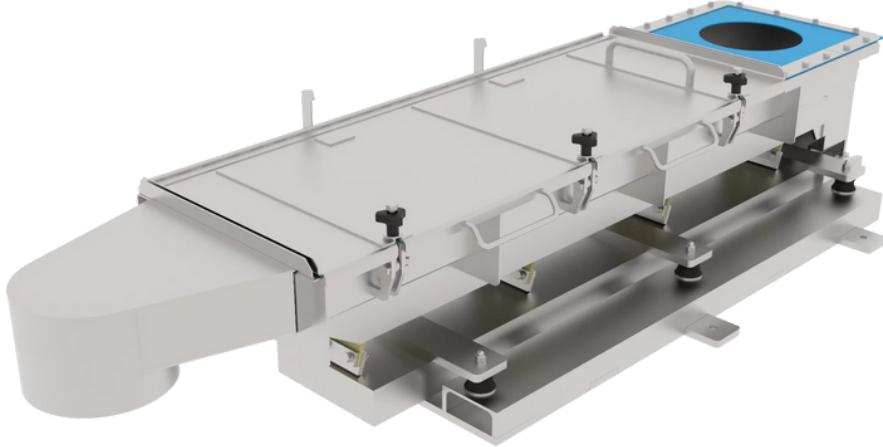
Linear feeders convey oriented components from bowl feeders over short or relatively long distances, thereby creating a buffer storage. They enable a consistent flow of orientated components from the bowl feeder to escapement devices creating product accumulation prior to a machine or handling unit.

FEEDING PROFILES

The adjustable vibrating profile allows either a narrow or wide feed on the linear track.

The continuous channel on the vibrating profile allows the track to be fastened wherever required. This flexibility allows the linear feeder to be easily tuned for smooth and continuous feeding.





Kalapremi's Electromechanical Vibrating Feeders are suitable for conveying all sort of bulk materials are capable of handling high capacities of product flow. These reliable & robust feeders are custom designed based on the customer requirements such that it is the most suited for their environment. Our Vibratory Feeders are 100% Maintenance Free & their easy manual clean design makes it extremely suitable for the Food & Pharma Industries too.

FEATURES

Handling Capacities:

10 Kgs – 10000 Kgs (10 Tons)

Trough Options:

Flat Pan, Custom Designed Pan, Taper Pan, Tubular, Grizzly & Perforated

Material Of Construction:

Mild Steel, Stainless Steel 304 OR 316L (GMP Designs Available)

Liner Options:

Sail Hard, C-45 Grade, SS 202, Salima, HDPE, Ceramic

Drive:

Highly Durable Electromagnetic

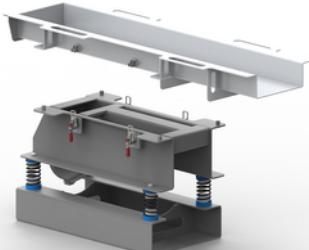
Speed Control:

Electronic Frequency Control

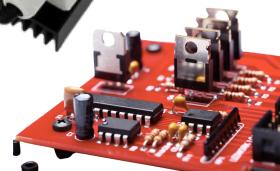
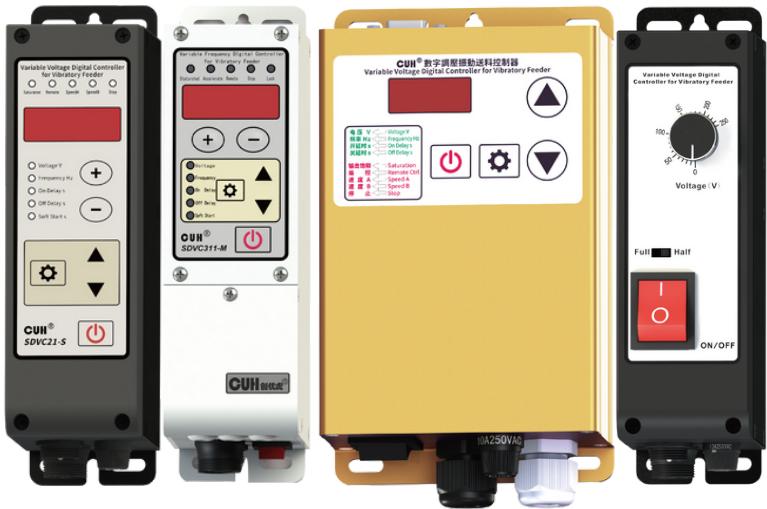
Environment:

It is suitable for all types of good & harsh environments including dusty, wet & hazardous.

Robust Design, Consistent Performance, Life Long Non Stop Service



FEEDER CONTROLLERS



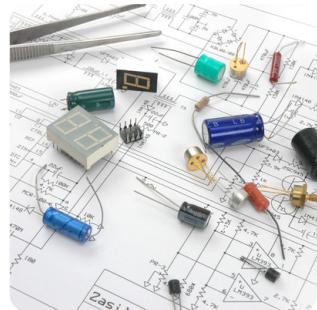
SENSORS AND ACTUATORS





INDUSTRIES USING

- Food & Packaging Industry,
- Pharmaceuticals & Healthcare,
- Automotive,
- Jewellery & Diamond Industry
- Electronics & Electrical Industry,
- Fast Moving Consumable Goods (FMCG),
- Defence & Ammunition Industry
- Fasteners & Fixing,
- Bearings Industry,
- Chemical Industry
- Cosmetics Industry
- Mining / Coal Industry



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INNOVATION | DEVELOPMENT | MODIFICATION | MANUFACTURING



KALAPREMI AUTOMATION & MECHATRONIC SYSTEMS (I) PVT. LTD.,

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