Manufacturer of Custom Parts Handling Systems, the Foundation of Automation Equipment

Performance Feeders
Keeps your products moving!
Performance Feeders is a global leader in the design and build of custom parts handling systems. Our product line includes vibratory bowl feeders, centrifugal feeders (also known as rotary feeders), custom conveyor systems, step feeders, vision systems, orienting elevators and part isolation devices. We serve manufacturers in a variety of industries, including medical, automotive, electrical, pharmaceutical, consumer products, industrial products, food processing, packaging and factory automation. Our mission is to continually improve the quality of our products and services to meet our customers’ requirements and needs.

Our primary goal is the satisfaction of our customers. We also aim to achieve sufficient profits for the continued growth of the company and the security of its employees, vendors and customers. To achieve these goals we continually strive to produce the finest products in the industry.

Established in 1973, Performance Feeders is a single source of quality part feeding and conveying systems. We have one of the most comprehensive product lines in the industry, and often build “integrated” systems that include a variety of components from our vibratory, centrifugal, conveyor, step feeder and alternative feeder lines. This diversity ensures that we can provide the best possible solutions to your parts feeding problems.

We manufacture the majority of our products in-house, which gives us maximum control over the quality and delivery of our systems. With an engineering and manufacturing staff which has many years of experience designing and building parts handling systems, we have the expertise and resources to meet the most challenging requirements.

Our dedicated, nationwide sales team includes both manufacturer’s representatives and in-house sales staff. They have extensive hands-on experience with feeding and conveying parts so they can work directly with you on determining the best system for your application. Please do not hesitate to contact them for their assistance with your application.
From the initial quote of your application all the way through design and build, you can rest assured that Performance Feeders will deliver a solution that meets or exceeds your expectations. Our engineering and manufacturing team have extensive hands-on experience in both the design and build of automatic assembly feeders and material handling equipment.

All systems are designed using SolidWorks solid modeling software. Drawings are submitted for approval prior to building your system, and a model of your system can be supplied to incorporate into your machine layout. Models of generic systems that can be used for planning purposes are also available at PerformanceFeeders.com/downloads.

With a controls engineer and trained electrical and programming technicians on staff, we are able to integrate custom controls and PLCs into our systems that are compliant with recognized electrical codes. We offer everything from standard feeder and motor controls to custom turnkey packages that control sensors, air jets, mechanisms and custom components. All systems that include custom controls are delivered with complete electrical schematics and control logic diagrams.
All of our operations are based in our 27,000 square foot facility in Oldsmar Florida (Tampa Bay area), which includes a full machine shop with 3 CNC machines, fabrication and welding equipment, and ample space for assembly and testing of parts handling systems. We manufacture the majority of our products in this facility, including the standard components used in our systems, machining custom tooling and fabricating vibratory bowls.

In-house manufacturing reduces our dependency on external suppliers and gives us the highest level of control possible over the quality and delivery of our products. This allows us to build the highest quality products in the industry and deliver them on time.
The vibratory feeder bowl remains the most economical and versatile method of automatically orienting and feeding small parts. We specialize in welded stainless steel bowls that are custom-designed by our team of experienced feeder technicians to meet the needs of your application.

With bowl sizes ranging from 6” to 36” and a variety of finishes and coatings to enhance durability, part handling and noise reduction, a Performance Feeders vibratory feed system can be designed to meet the most demanding specifications.

**VIBRATORY FEED SYSTEMS**

Other components of a vibratory feed system may include:

- **Tracking:** Vibratory straight line tracks, gravity tracks and belt conveyors that store oriented parts and transfer them between the feeder bowl and your equipment.
- **Prefeeders:** Vibratory hoppers, bulk elevators and tray feeders that store large quantities of bulk parts and automatically meter them into the feeder bowl.
- **Escapement and part isolation** devices that isolate oriented parts for your assembly operation.
- **Sensors** that automatically maintain the proper amount of parts in bowls and tracks, and provide warnings for error conditions.
- **Sound and dust enclosures** that control sound levels and protect systems from contamination.
- **Standard and custom control packages,** including programmable logic controllers.
- **Tables and baseplates** with all components mounted for a turn-key installation.

View Custom Vibratory Feeder Systems Online: tinyurl.com/vibratory-feeder-bowl
CENTRIFUGAL FEED SYSTEMS

Centrifugal feeders, which use rotating discs driven by electric motors to move parts, are often used for applications that require high feed rates or gentle part handling. Performance Feeders has partnered with Shibuya Hoppmann, a leading manufacturer of centrifugal feeders and prefeeders. As an OEM dealer, we offer everything from standalone centrifugal feeders custom-tooled by our trained technicians, to complete centrifugal feed systems using the components best suited to the application.

View Centrifugal Feeder Systems Online: tinyurl.com/centrifugal-feeders

STEP FEEDERS

Step feeders orient and feed small cylindrical and spherical parts in conjunction with an orienting straight line track. They offer numerous advantages over conventional feeding methods, including space savings, quiet operation and gentle handling of parts. Performance Feeders offers numerous configurations of these extremely durable feeders, with multiple step widths and thicknesses to accommodate a wide variety of parts, and with electric or pneumatic drives.

View Step Feeder Systems Online: tinyurl.com/step-feeders
STANDARD AND CUSTOM CONVEYOR SYSTEMS

We manufacture a wide variety of standard and custom conveyors, with styles to suit most any parts handling application. Based on our Auto-Kinetics line of standard belt conveyors, our conveyor systems can be integrated into many applications as anything from simple conveyors to comprehensive parts handling systems.

With a wide variety of belt styles, belt and frame materials and virtually unlimited sizes, we can design a Performance Feeders conveyor system to suit most any application, built exactly to your specifications.

Conveyors are available with extruded aluminum frames, or with stainless steel frames for medipharm or food processing applications. Conveyor types available include:

- **Standard flat belt** conveyors with a wide variety of belt styles.
- **Cleated belt** conveyors for isolating parts or moving parts up or down inclines.
- **Wire mesh belt** conveyors for heating and curing processes where belts are exposed to heat.
- **Modular plastic chain** conveyors that allow conveyors to curve horizontally and vertically.
- **Timing belt** conveyors that allow for controlled and accurate indexing.

View Custom Conveyor Systems Online: tinyurl.com/custom-conveyors
**TRAY AND TOTE FEEDERS**

**Tray Feeders** offer an ergonomic solution for loading or unloading parts from trays, with the flexibility to handle as many or as few trays as your process requires. Custom-designed to your specifications, our tray feeders can handle multiple tray sizes in the same system and can be configured to allow a single operator to load and unload the trays from one location.

Trays are transferred from the input conveyor into a processing station and clamped in place for accurate and repeatable part placement into or out of the trays. After processing, trays are ejected from the processing station onto the output conveyor.

**Tote Feeders** are similar to Tray Feeders and are used when the part placement is less critical. Totes are processed at the end of the input conveyor without clamping, and transferred to the output conveyor when the process is completed. This eliminates the need for multiple air cylinders and allows for a simpler controls package.

View Tray and Tote Feeders Online: tinyurl.com/tray-feeder
VISION-AIDED FEEDING

Integrating vision systems into our products allows us to sort and orient parts based on features that can’t be detected mechanically, such as internal features, color and features that are too small to detect. Vision systems can also be used instead of mechanical orienting in systems that feed multiple parts, simplifying part changeover. Vision systems can easily be integrated with any of our vibratory, centrifugal, conveyor and step feeder systems.

View Vision-Aided Systems Online:
tinyurl.com/vison-aided

ISOLATION MECHANISMS

Isolation mechanisms separate one or multiple parts from oriented parts in feed systems, isolating them for your manufacturing process, and are custom-designed to suit your application. There are many types of isolation mechanisms, ranging from simple escapement, side shuttle and escape-and-blow mechanisms, to indexing wheels and side shuttles that isolate multiple parts in a circle or row.

View Isolation Systems Online:
tinyurl.com/isolation-mechanism
**ALTERNATIVE FEED SYSTEMS**

When a combination of space restrictions, handling requirements or part characteristics prohibits the use of a traditional vibratory, centrifugal or step feeding system, Performance Feeders can design and build a special feed system to meet your requirements.

**Vibratory Floating Mandrel Feed System**

This feed system handles metallic parts that are too thin or have too much tolerance variance to be fed laying flat. Parts are fed so they are stacked face-to-face on the mandrel. Magnets at the end of the mandrel separate the parts at the discharge to facilitate picking the top part off by vacuum.

**Orienting Elevator System**

This space saving system with a floor loading height can feed large parts with simple orientation requirements without a vibratory or centrifugal bowl. Parts are carried up the elevator and dropped onto a conveyor or vibratory track where orientation is performed.

**Vibratory Corral Feed System**

This type of system is used when parts are pre-oriented or can’t be oriented in a traditional feeder. Oriented parts are loaded manually onto the vibratory corral surface. The corral feeds the parts onto a vibratory straight line track or conveyor, which delivers them in a single line to your machine.

View Alternative Feeding Systems Online: tinyurl.com/alternative-feeding
PERFORMANCE FEEDERS

VIBRATORY FEEDERS  CONVEYOR SYSTEMS  CENTRIFUGAL FEEDERS

STEP FEEDERS  VISION SYSTEMS  INTEGRATED SYSTEMS

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