

# The PFS1 STEP FEEDER



The PFS1 Step Feeder is a "single-step" step feeder capable of feeding small cylindrical and spherical parts. It offers numerous advantages over conventional feeding methods, including quiet operation, space savings and gentle handling of parts. The PFS1 Step Feeder is available in several configurations ranging from a standalone unit to a complete tooled feed system.

### Quiet, Economical, Durable

### How it works

Bulk parts are lifted out of the integrated hopper bin by the step. The step thickness is selected so that a single row of parts is lifted. At the top of the step stroke, the parts drop onto a linear feeder (vibratory inline, belt conveyor or air track), where additional orientation can be performed. Improperly oriented parts that are ejected from the orienting track can often drop directly back into the bin, or can be returned to the bin via gravity slide, air track or conveyor in situations where more complex orientation is performed on the orienting track.

#### Features

- Vertical Step Design: Results in a reduced footprint and increased operational efficiency
- Simple, Air-Powered Operation: The air cylinder powering the step feeder operates with a 32 PSI air supply
- Integrated Hopper Bin: Provides for storage of up to 1/2 cu. ft. of unoriented parts
- Quiet Operation: Noise levels are significantly lower than that of other types of feeders
- Gentle Part Handling: Ideal for feeding fragile parts, the PFS1 Step Feeder's simple operation results in little to no wear to the parts being fed
- Extremely Durable: The PFS1 Step Feeder will operate for years with minimal maintenance



Correctly oriented parts exiting the step feeder.



## The PFS1 STEP FEEDER

### **Standard Specifications**

- Input: 32 PSI for step feeder, 110V or 220V AC for controls
- Hopper Bin: 304 stainless steel, 1/2 cu. ft. capacity
- Step Materials: Teflon hardcoat anodized aluminum; or hardened, ground and plated steel
- Step Thicknesses: 1/2", 3/4" or 1", determined by the size of the parts being fed
- Step Width: 8"
- Step Stroke: 10"

### Standard (untooled) Configurations

The PFS1 Step Feeder is available in several untooled configurations, allowing users to configure them in-house to suit their needs. Note that customized tooling on a linear feeder is required to orient parts with a step feeder.

Standard configurations include:

- Step feeder only
- Step feeder on table
- Step feeder on table with vibratory inline driver
- Step feeder on table with belt conveyor

Detailed specifications of these standard configurations are available at performancefeeders.com/products/step-feeders, or by scanning this QR code.



**Custom (tooled) Configurations** 

The PFS1 Step Feeder 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 included with an untooled unit, and the linear feeder is tooled to orient the parts to your specification. Other options available on tooled step feeders include:

- Prefeeders with 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

#### Patent applied for.



Integrated 1/2 cu. ft. hopper bin.



Vertical step design.



Can be custom-tooled to orient parts to your specs.

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