




## Automated Parts Handling



PRODUCTION THROUGH THE MIDDLE  
PRODUCTS ON THE MIDDLE  
PRODUCTS ON THE MIDDLE



## Introduction

Riley Automation, established for over 50 years, designs and manufactures a comprehensive and diverse range of parts handling and linear vibratory systems.

Our innovative solutions are used in a wide variety of applications for food, pharmaceutical, confectionery, packaging, electrical, electronics, automotive and associated manufacturing and process industries.

At our purpose built head quarters in Derby we manufacture under license from the FMC Corporation in the USA, a company whose Syntron® materials handling equipment is well known throughout the world.

As part of our ongoing commitment to quality, Riley provide customers with a comprehensive spares and aftersales service.



The Riley Automation range of product handling equipment includes vibratory, rotary and elevating parts feeders which take product from bulk storage through the processes of singulation, orientation and transportation to the next stage.

The range is complemented by auxiliary equipment and accessories including linear feeders, hoppers and escapements and placement systems, which may be incorporated to ensure maximum flexibility and efficiency in any application.

For those who have a requirement to count and bag several different products, typically self assembly furniture hardware, electrical and automotive components and multi-component kits, Riley Automation offers a complete solution.

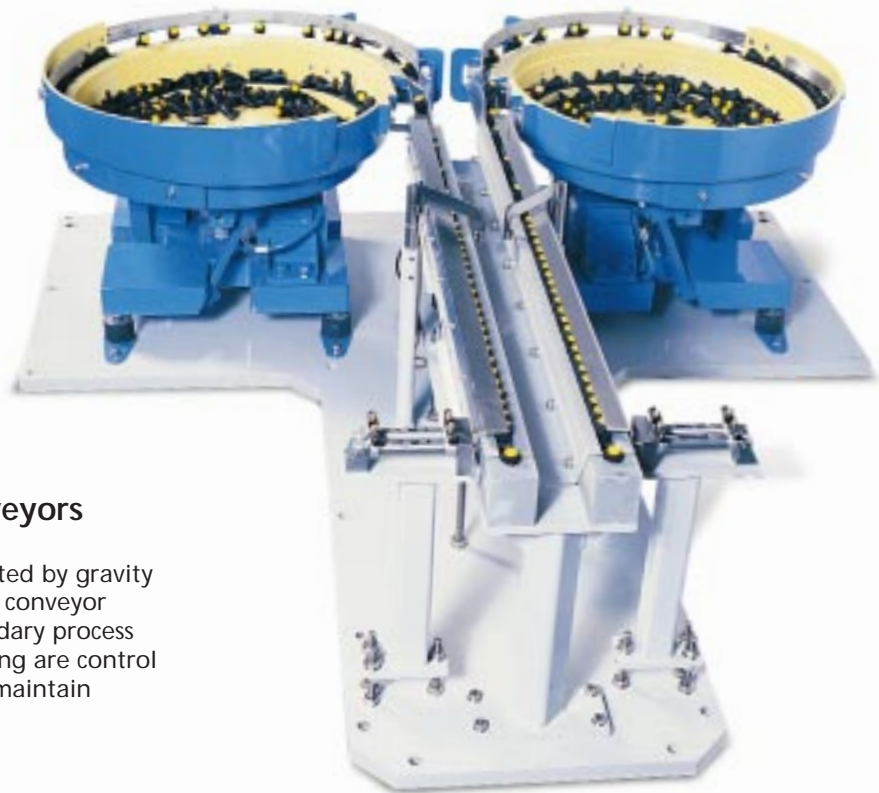


# Automated Parts Handling



## Vibratory Bowl Feeders

Riley Automation supplies vibratory bowl feeders of various designs; cascade, cylindrical and externally tooled, to suit clients applications. Materials used include cast aluminium, mild steel and 304 and 316 grade stainless steel. A variety of finishes are available including linings to reduce bowl wear and noise levels, maintain product finish and improve bowl drive characteristics. Linings complying with FDA requirements are available and stainless steel bowls can be finished to food and pharmaceutical standards.



## Linear vibratory tracks and conveyors

On exiting the bowl, products are transported by gravity chutes, linear vibratory tracks and modular conveyor systems to their destination; either a secondary process or assembly. Incorporated within the tracking are control systems to regulate the bowl's supply and maintain consistent product levels.





## Rotary feeders

For applications where gentle handling or high output rates are required, Riley Automation supplies FMC Syntron® rotary systems. Bulk product is metered onto a rotating disc which then transfers product flow onto the orienting rim of the rotary feeder, for singulation and orientation prior to discharge



## Feed systems

Riley Automation supplies complete feed systems including bulk infeed, bowl feeders, tracking, escapements and placement units. To ensure perfect alignment and integration with clients' existing systems it is usual for CAD drawings to be exchanged and approved prior to manufacture.



# Hopper and elevator loading equipment

To complement its range of vibratory and rotary feeders, Riley Automation offers a range of bulk storage and loading elevator systems.

The simplest of systems comprises a pedestal mounted hopper with a variable speed hopper vibrator attached. This, combined with an adjustable outlet gate and variable angle chute, allows relatively free flowing components to be discharged in a controlled movement. Where space is at a premium the Riley Automation elevating bulk hopper is worthy of consideration.

To give a metered flow, bulk hoppers are fitted with Syntron® linear vibratory feeders discharging into vibratory bowl and rotary feeders.



Riley Automation offers a range of loading elevators, with specification being dependant upon application. For heavy products a pre-feeder with a linear vibratory outfeed is recommended to meter the product onto the belt. For lighter products the belt is able to draw the product through the bulk hopper.

Systems are available to suit all applications, including both food and pharmaceutical. Totally enclosed systems are available as required.



PRODUCTS ON THE MOVE  
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# Counting and Bagging Systems

Riley Automation design and build product counting and bagging systems. Whether a dedicated system for a single product is required or a multi-station operation capable of feeding, counting and dispensing an ever-changing range of products, then Riley Automation has the solution to your needs.

For optimum efficiency, products should be metered into the vibratory bowl feeders by either bulk hoppers or loading elevators. Components are then discharged singularly through a count head and then either directly into the bag or into a catchment hopper, prior to being discharged into a bag or indexing conveyor pocket when the count is complete.



## Automated Parts Handling

### Vibratory Bowl Feeders

Systems to feed, orient and present components for secondary operations and assembly processes.

### Centrifugal Feeders

For gentle handling and high output rates, centrifugal feeders offer the ultimate solution.

### Linear Feeders

Transfer of orientated components by electromagnetic mechanisms.

### Hopper Elevators

For lifting product from low or ground level into bulk hoppers or secondary feeders.

### Step Feeders

Components are drawn from the bulk hopper and oriented horizontally as they travel up the staircase of flights.

## Linear and Hopper Vibrators

### Linear Vibratory Feeders

Linear troughs and systems for feeding, metering, spreading and screening of powders, granules, flavourings, spices and small components.

### Hopper Vibrators

To assist in movement of bulk product with hoppers by controlled agitation.

### Vibratory Tables

For increasing weight capacity in filling containers, these tables are used extensively for vibrating moulds and forms to eliminate air voids and settling product.

## Component Counting and Bagging Systems

Automated component counting and packaging systems for bulk, single or multiple products and packs.



**Riley  
Automation**



**Call today** for a copy of our latest Linear Vibratory and Hopper Vibrators brochure which features the Riley product range.

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