



1. Bulk product and elevating conveyor

Process, Features & Benefits

The Farason Butch Feeder is an unconventional method of sorting and distributing product/components/parts such that they can be picking and placed by a robot. Bulk product is manually dumped into a supply hopper equipped with a flighted elevating conveyor. Product is metered by the elevating conveyor and dropped behind a paddlewheel device on demand from a level determining sensor.

A rotating paddlewheel device is located over the next product conveyor and is used to provide distribution and approximate single layering of product. Product is guided, conveyed and directed in a manner that begins to direct them in a narrow stream over and adjacent to the elevating conveyor and hopper. Product is allowed to free flow to prevent jam points and is directed to a narrow conveyor where those that do not make it simply fall back into the hopper and recirculate for another try.

Flexible Component, Part, Product, Sorting and Feeding

Robot and Vision Sorting, Feeding, and Loading



2. Paddlewheel and product distribution

Product that is maintained on the narrow belt allows for a close up look by a camera to determine orientation. Vision guidance directs the appropriate robot to pick the product up and place it in the required locations. This method can be used to provide feeding in an organized manner as depicted and similar placement into various machines including cartoning, wrapping, blistering, pouching, HFFS, or into trays, pallets, pucks or fixtures.

The system provides a flexible means of sorting a greater variety of product sizes and shapes with either no or minimal tooling than that of a conventional centrifugal or vibratory feeder. Feeding is designed without the normal catch points, guides or qualifiers that cause product to catch or jam and reduce efficiency. Product is allowed to flow through without any specific orientation and utilizes a vision system to select good parts and let the others pass through freely and be recirculated for another pass under the camera.



3. Vision acquisition – picking and placing

More Information

For more information on this, and many other Farason projects, please visit our website at www.farason.com or call us at (610) 383-6224.