

Large Part Flex Feeder Automation

Flexible Feeding Automation is a scalable process which can be applied from the smallest to the largest items. Typically used on parts, packages or materials with physical characteristics not well suited for passive or active tooling. **CDS-LIPE** has been producing Flex Feeders since the late 1980's in various forms and for varied application environments. The "flex design" generally includes bulk part supply, linear and lateral distribution elements or devices to create materials, package or part distribution to vision guided robot. Items not "picked" are then recirculated. Ideally the items are re-oriented during recirculation. Both "Pick to Field of View" and "Pick on the Fly" control plans can be accommodated.



Pick on fly
or
Pick field of view

Flex Feeders are "open tooled" meaning they rely on the part, package or materials natural orientation bias and speed to affect general orientation and distribution at the pick zone. In many cases the return pathway can be used to re-orient flow to increase efficiency at the robot. In most cases our Flex Feed process designs do not drop parts back into bulk hopper to reduce handling damage.

Design experience in motion...



Bulk Part Supply

- Intelligent Bulk Dumper
- Pan Feeder



Distribution to Robot

- Metering Elements
- Separation Elements
- Pick Belt- Encoder Feedback



Return System

- Return Elements
- Orientation Elements



Washdown Systems Available

