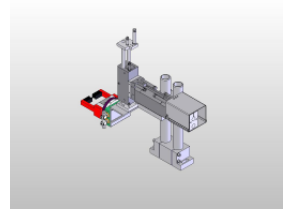


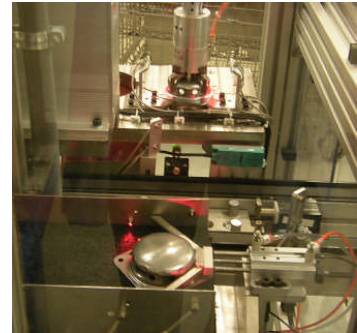
Programmable Tooling



Sensor or Vision Guided Sortation & Orientation-

All part feeders use speed and part/package or material geometry to sort or affect orientation generally using adjustable mechanical tooling. Parts/packages or material that are fragile, parts with critical surfaces or parts with difficult shapes often make programmable, active tooling the better and sometimes only option. Programmable tooling also allows large families of parts to be oriented or sorted out of part/package or materials flow using a single feeder without the time consuming set ups or change over's between runs.

The next generation in part handling solutions



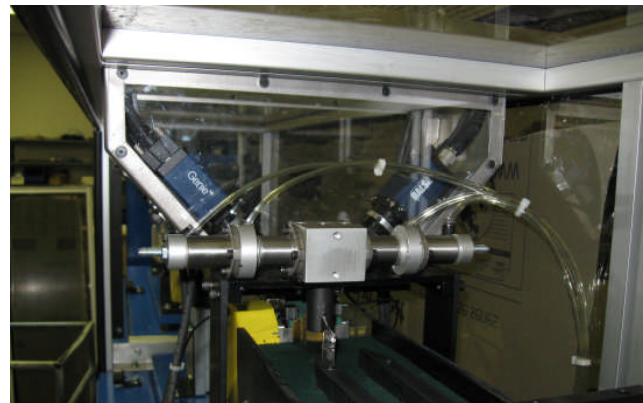
Sensor Based Sortation-Error Proofing @ assembly

FEATURES:

- Sort using programmable variables*
- Orient w/ No Recirculation*
- Orient difficult part geometries.*
- Reduces secondary handling*
- Precision Nesting of Part Hand Off*
- Standard Vision Solutions*
- May be combined with Machine Tending Functions*

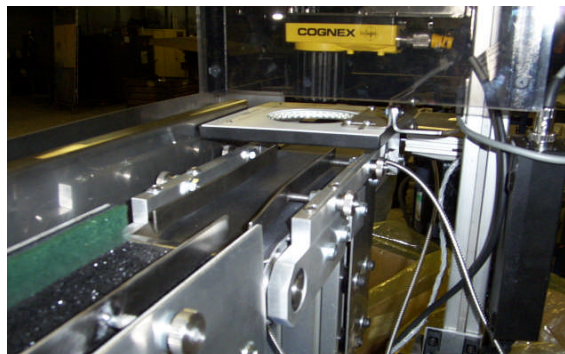
BENEFITS:

- Higher Speed without part damage*
- Programmable for rapid part sku changes using HMI interface*
- Flexibility to maximize cell performance.*

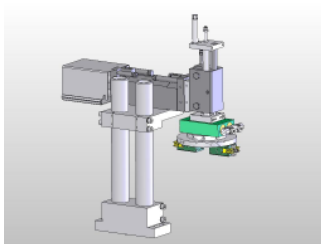


Vision Guided Selection x Color Contrast-Sort Material Flow

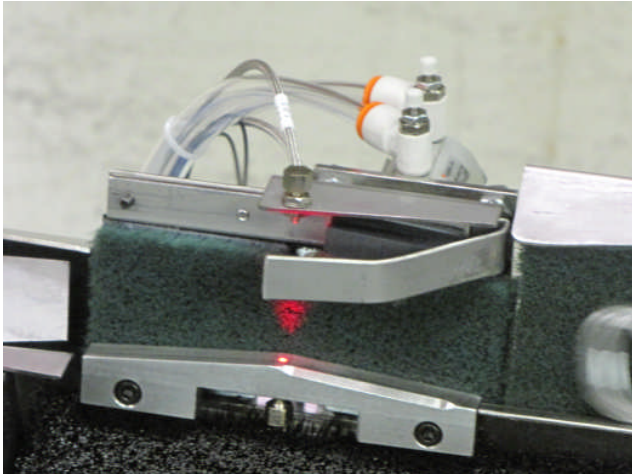
Active Tooling Systems can be designed to incorporate any make Centrifugal, Step, Vib. Bowl, Dyna-Slide or Dyna-Belt Feeder.



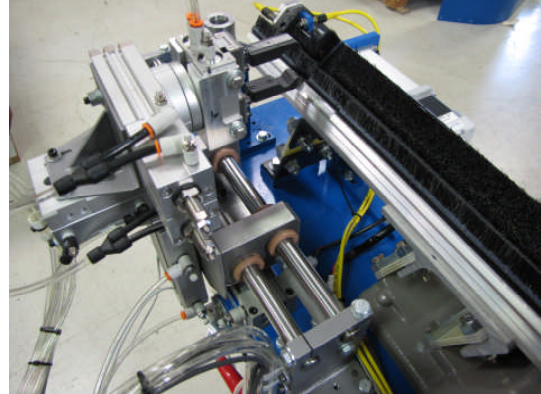
Part Feature Sortation- Controlled reorientation of incorrect part, controlled feed of correct part



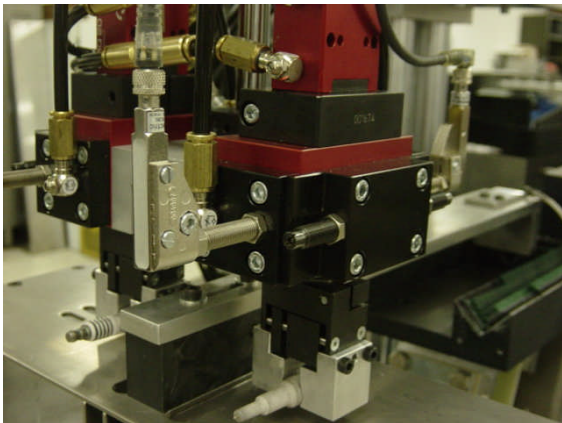
Orientation, Sortation Presentation & Loading



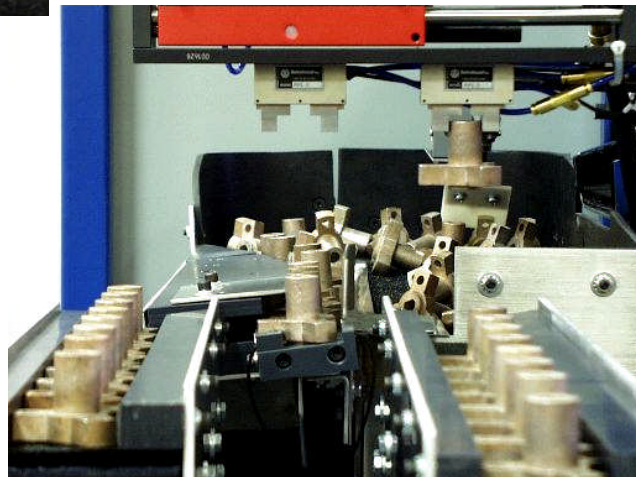
Sensor Based Sortation Tooling- Quick Change over tools



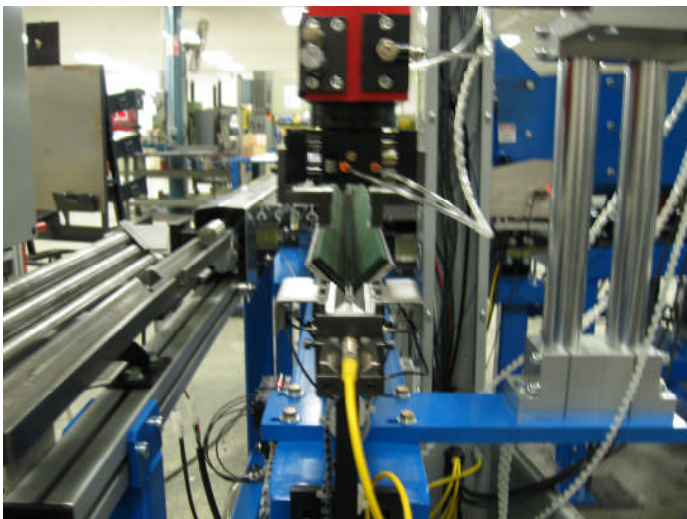
Active orientation- Defined end leading & hand off to robot



Sensor based orientation of Ceramic Spark Plug bodies @ 60 ppm using duel head rotary actuation.



High Speed Radial Orientation & Pattern Formation (Fragile ceramic part)



Prox Sensor based part orientation to create defined end leading integrated with servocontrolled lathe loader

Defined End Leading –Presentation to Machining Center

□ CDS LIPE * 800-448-7822 * www.cds-lipe.com

Dyna-Slide