# Part Inspection Systems

**CDS Manufacturing** designs and builds automatic inspection equipement and precision sorting systems including eddy current inspection systems, laser inspection equipment, LED inspection equipment, vision inspection systems, precision roll sorters, pharmaceutical pill & tablet sorters, length sorters, outside diameter sorters, inside diameter sorters, and more...

### **EDDY CURRENT INSPECTION**

CDS Manufacturing designed and built this machine to inspect Automotive Fuel Pressure Connector Bodies. This fully automatic system uses a vibratory bowl feeder and Eddy Current technology to sort out defects including cracked parts, undersized threads, missing threads, deformed features, long parts, short parts, bar ends, material defects, chamfer deviations, and soft parts. Good parts are fed via a cleated conveyor to an automatic tote handling unit for packout.



### **LED INSPECTION**

CDS Manufacturing designed and built this LED Inspection System to automatically inspect the journal diameters of a part produced on a screw machine. The operator loads parts into the bulk hopper. The bulk hopper supplies parts to the vibratory bowl feeder. Parts in the proper orientation are fed down a gravity track to two LED measurement units. The journals on each end of the part are measured. Good and reject parts are gated accordingly and exit the system via their respective output chutes.



#### VISION INSPECTION

CDS Manufacturing designs and builds vision inspection systems. This system utilizes a linear vibratory feeder system and vision system for automated inspection of the head height of a brass insert. Oriented parts are fed past the vision system camera where the head height is measured. Good and reject parts are gated accordingly and exit the system via their respective output chutes.





1133 Mount Read Boulevard, Rochester, NY 14606
Ph: 1-800-724-6735 Local: 585-254-0050 Fax: 585-254-0711
Email: cdsmfg@netacc.net Web: www.cdsmanufacturing.com

# **Part Inspection Systems**

(continued)

### **ROLL SORTERS**

CDS Manufacturing designs and builds Precision Roll Sorters capable of sorting to within 20 MILLIONTHS OF AN INCH!! Standard system includes a one cubic foot bulk hopper, a standard linear vibratory feeder system, a pair of precision rollers, locking roller adjustments, adjustable fallout baffles, and five output chutes.



### **LENGTH & DIAMETER INSPECTION**

CDS Manufacturing designs and buils automatic length and diameter inspection systems. This system measures eight different diameters and the overall length of pistons using laser measurement equipment. The operator loads parts into the Bulk hopper. The bulk hopper supplies parts to the vibratory bowl feeder. The number of parts in the vibratory bowl feeder is automatically maintained. Parts in the proper orientation are fed to a nest at the laser inspection station. When sensors detect a part present, tooling automatically lowers the part in front of the laser, and stops at each of the eight diameters to take a measurement. Finally, the overall length of the part is measured. Good and reject parts are gated accordingly and exit the system via their respective output chutes.



### PHARMACEUTICAL SORTERS

CDS Manufacturing designs and builds pharmaceutical pill sorters. This screening system automatically sorts pharmaceutical tablets for broken tablets and particles at rate of 3,000 tablets per minute. The operator loads tablets into the bulk hopper. The bulk hopper supplies tablets to the screen sorter. Broken tablets and particles are screened out of the good part population and collected in a reject container. Good tablets are fed out the end the system and exit the system via the output chute.



**CDS Manufacturing** designs and builds custom automated equipment specifically for your application. Contact us today for a free consultation with one of our experieced automation specialists. We look forward to hearing from you.



1133 Mount Read Boulevard, Rochester, NY 14606
Ph: 1-800-724-6735 Local: 585-254-0050 Fax: 585-254-0711
Email: cdsmfg@netacc.net Web: www.cdsmanufacturing.com