

Part Inspection Systems

CDS LIPE designs and builds automatic inspection machines & sorting systems. Vision inspection machines, laser inspection machines, eddy current inspection machines, LED measurement systems, ultrasonic inspection, linear vector displacement transducers, roll sorters, pin inspection systems, bar code, laser marking, color sorting and more.

EDDY CURRENT INSPECTION

CDS 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.



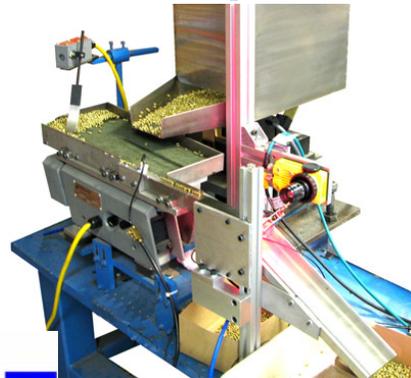
LED INSPECTION

CDS 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

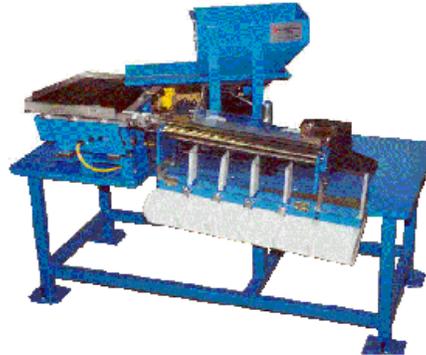
CDS designed and built this vision inspection system to provide automatic sorting services to a brass insert manufacturer. This system utilizes a linear vibratory feeder system and vision system for automated inspection of the head height. Oriented parts are fed past the vision system camera where the head height is measured. Good and reject parts are gated accordingly and exit the system via their respective output chutes.



Part Inspection Services

ROLL SORTERS

CDS manufactures 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 designed and built this automatic length and diameter inspection system. 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.



SORTATION SCREENING

CDS designed and built this pharmaceutical pill sorter. 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.

