

Application Story



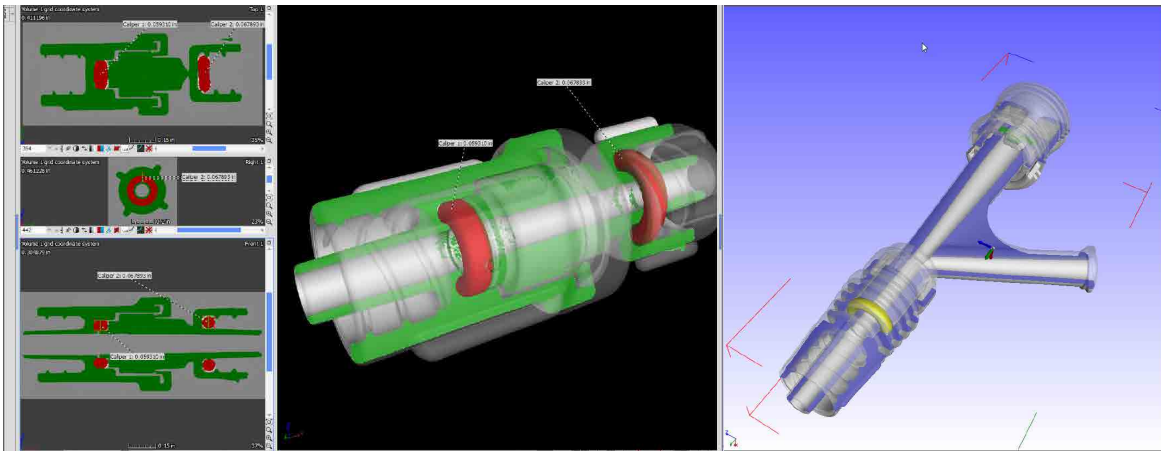
Medical Device 3D CT Scanning with DeskTom CT Scanner

The DeskTom 3D CT Scanner is the industry best for Price Performance with both High Accuracy (5µm) and High Resolution (4µm), as well as a small footprint for any office or lab utilization. This metrology grade CT scanner measures precisely and is ideal for First Article Inspection, Defect Analysis, and Material Science applications.

Medical Fluid Handling Devices

Medical Fluid Handling Devices often suffer from liquid leaks that can be catastrophic and have grave consequences for ongoing business with the market. Finding these quickly using non-destructive testing with CT scanning, ensures you can isolate the issue with the device still assembled.

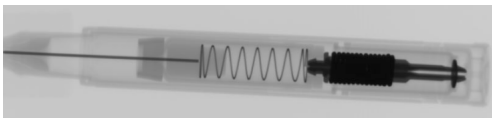
3D CT (X-ray) Inspection of Assembled Device



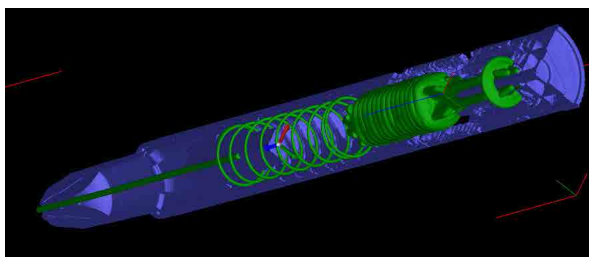
Multiple materials separated and measured. Seal deflection exam.

Injection Syringe Products

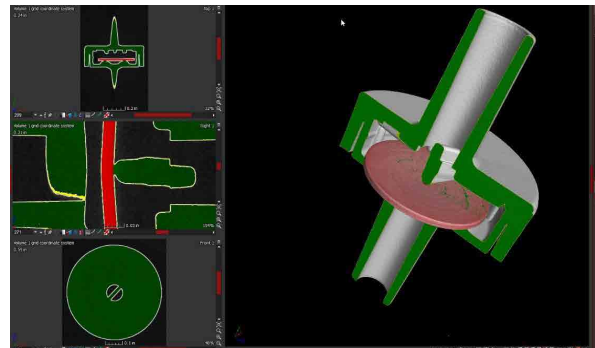
Injection Syringe products can be assembled with components that pass Quality Assurance testing, but don't operate properly when assembled. 3D CT Scanning or Radiograph Inspection of the assembly can quickly find what is wrong when components are fully assembled under load.



2D CT Radiograph of Injector



3D CT Scan of Injector

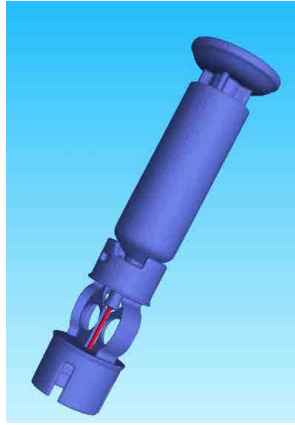


3D CT Scan for Inspection of Interior Diaphragm under load in assembly

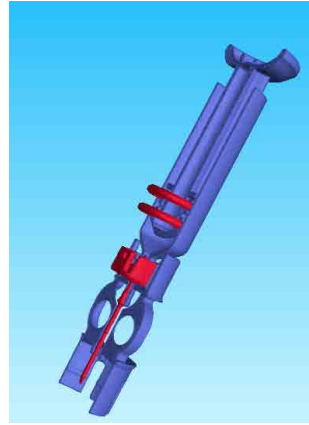
Medical Devices can be scanned while still in their original packages. Scanning in packaging is used for proving that counterfeit products are being sold as original manufacturer products by not compromising the packaging. Inspection of packaged products can be made without sacrificing the medically sealed packaged product, further lowering QA costs.



3D CT Scan of Syringe in Bubble Pack



Full Syringe CT Scan



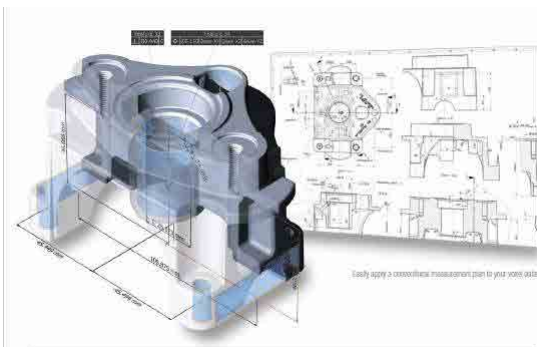
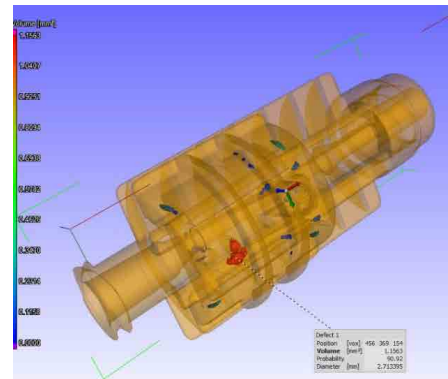
3D CT Scan of Syringe Assembly for Inspection of Components as Assembled



Segmented Syringe Metal Components

Internal Porosity Defects of Plastic Components

Porosity analysis as shown in the CT scanned plastic molded assembly below, shows weakness in the plastic at locations that may be critical to function. If too much porosity is found, the molding process must be corrected.



First Article Inspection Reports

3D CT Scans provide full internal and external feature measurements. Inspection Report generation using PMI inspection requirements with full GD&T or manually determined feature measurements for automated inspection reporting.

For more information on Laser Design system solutions and services, visit our website at www.LaserDesign.com



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