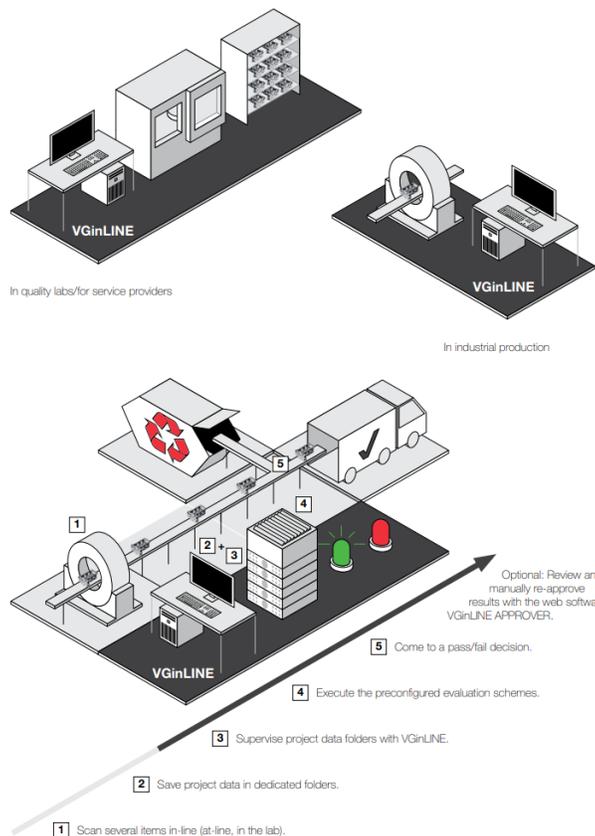


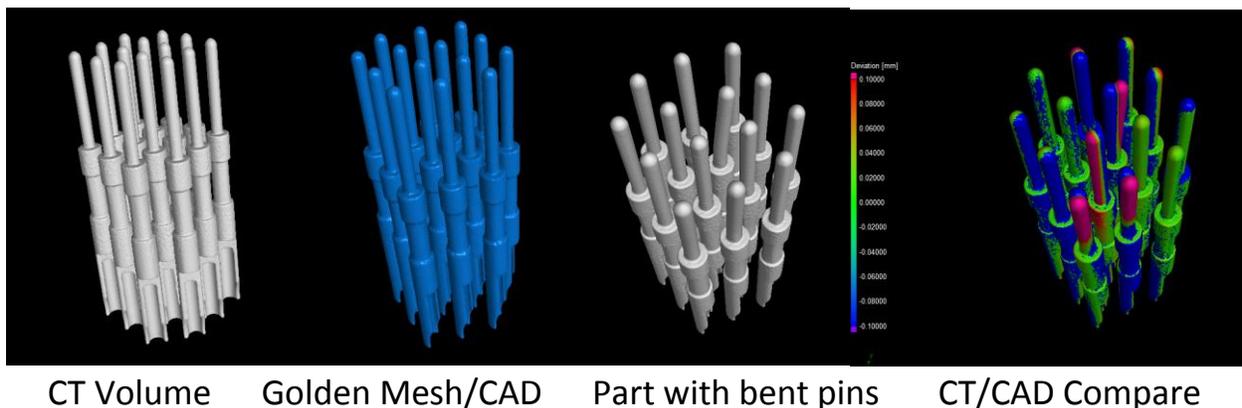
## Automated 100% Product Inspection for Connectors

A recent report by the McKinsey Global Institute predicts that between 39 and 73 million jobs in the United States could be changed due to automation, with emphasis on early adopters benefiting the most. With that in mind, some x-ray system manufacturers have made the technical investment that is required to integrate systems with existing production lines. The system manufacturers who have chosen to do this see the function of quality as a production control at the point of manufacture, rather than a secondary operation. Doing this limits the overall cost and results in less product needing to be quarantined and later sorted.

The obvious benefits from integrating this technology are reduction in scrap, real-time feedback, statistical analysis, identifying product issues early in the manufacturing process, along with many others. With this continual feedback loop, engineers and quality departments can analyze their entire production process. The use of automation allows for removal of the user from the equation, resulting in repeatability and minimization of error.



Traditionally, X-Ray CT has been used in R&D environments or to inspect on a sampling basis. Due to the advancements in technology and the massive return on investment, many companies are turning to 100% in-line CT solutions. With the use of Volume Graphics software (VGInline), it is easier to have a fully automated, production-based CT system to perform analyses simultaneously. VGInline allows the user to analyze porosity and wall thickness, compare to CAD/Mesh, verify assembly and dimension, and test volume data in simulation. Pinnacle X-Ray Solutions ([www.pxsinc.com](http://www.pxsinc.com)) has implemented this inline process to CT systems all over the world. In one instance, the CT system is meeting a tact time requirement of 5 seconds per part (CT scan, analyze, accept/reject).



Pinnacle X-Ray Solutions Inc. is a digital x-ray system manufacturer located just outside of Atlanta, Georgia. Their latest advancement has been the integration of fully in-line systems, capable of running CT acquisition and volume analysis in just a few seconds per part. With more than 100+ DR (2D) and CT (3D) systems in service across North America, PXS is a world leader in benchmark and custom digital x-ray solutions.

**Peter Davis**  
[pdavis@pxsinc.com](mailto:pdavis@pxsinc.com)  
704-593-9790