



# GUIDED WAVE TECHNOLOGY



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A two-pronged strategic move is already helping Structural Integrity set a new standard for guided wave inspection in the energy industry.

In August, Structural Integrity acquired the Inspection Services Group from FBS, Inc. of State College, Pennsylvania, a recognized leader in guided wave technology. The acquisition will bring us a new level of expertise in ultrasonic guided wave technology, which is extensively utilized in the energy industry to inspect insulated, buried, or otherwise inaccessible piping. Structural Integrity created a new Guided Wave Technology Group dedicated exclusively to this relatively young and rapidly-evolving technology.

In parallel with the acquisition, we formed a strategic alliance with FBS to develop new guided wave inspection technologies for piping and other critical plant components. Structural Integrity will also open a Guided Wave Technology Center in State College to function as an epicenter for the development and implementation of advanced guided wave applications.

The strategic alliance has also expanded our offering with the addition of the PowerFocus™ guided wave pipe inspection system. The lightweight tool is a heavyweight when it comes to tackling tough inspection conditions and is built on a universal platform, making it available for use for other guided wave applications now under development. Structural Integrity is the first company to offer the PowerFocus™ technology as an inspection solution.

Pipes in tight locations that were previously inaccessible can now be inspected, thanks to the compact size of the PowerFocus system. This will help our clients avoid costly alternatives such as excavation or in-line inspection. This new technology also brings improved accuracy to inspection challenges such as buried or heavily coated piping. Improved focusing capabilities can direct concentrated wave energy to specific axial and circumferential locations or can be used to generate a visual representation of the inspected region, effectively pinpointing areas of the pipe for further evaluation.



Ultimately, this new relationship, new technology and new tools will allow Structural Integrity to provide best-in-class assessment capabilities and, most importantly, will bring our clients greater insight into the fitness of their plant components and systems.

Grouping like components will help ensure that meaningful, representative sampling is performed that satisfies NRC expectations.

As with the other modules in the MAPPro suite of applications, MAPPro Cable uses a common industry platform where sites can utilize the risk insights as a decision-making tool, compare themselves to the industry as a whole, eventually collaborating for more meaningful data mining of operator experience to predict future cable aging management needs. The MAPPro Cable application provides the ability to easily: generate Cable Health Reports; facilitate the prioritization of plant walkdowns, store inspection and testing results; audit program condition; and evaluate remediation options.

Structural Integrity has teamed with Kinetrics, Inc. to provide an integrated, comprehensive solution to cable system aging management. Kinetrics' competencies include cable and electrical component field testing, material and electrical cable forensics, condition monitoring, life estimation, and unique analytical capabilities. MAPPro Cable provides the opportunity to synergistically leverage this decades-long experience cable reliability. This partnership will provide our clients with the most complete cable analysis and management tool available to the industry.