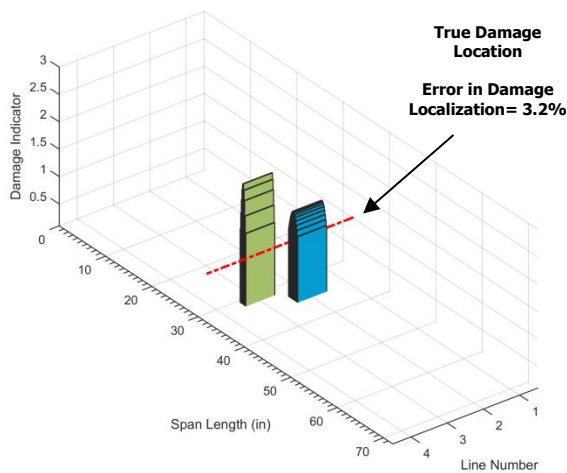
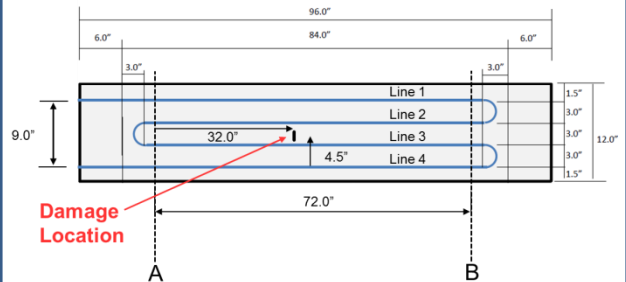
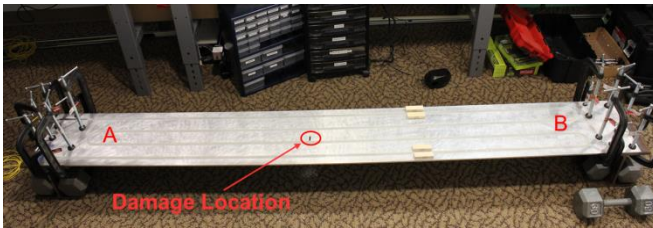


Nondestructive Damage Evaluation using Fiber Optic Sensors

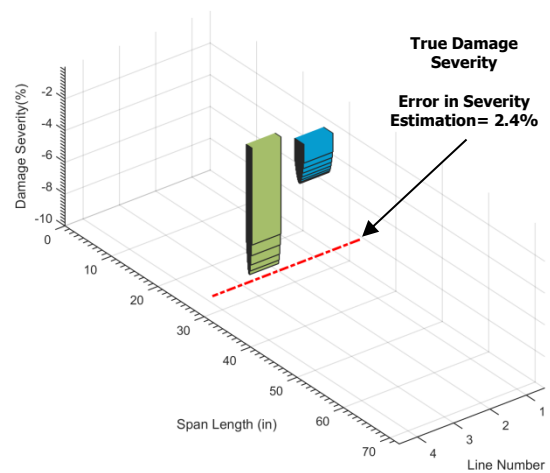
Ensyso's Nondestructive Damage Evaluation (NDE) expertise combined with Sensuron's contemporary fiber optic sensor (FOS) technology offers a fully automated continuous health monitoring tool where local damage detection is possible through the use of global vibration information.

System Integration Test

A System Integration Test was performed as the first step to achieve a complete NDE system, which can detect and locate damage on a given structure and estimate the damage severity.



Accurate Damage Localization



Accurate Damage Severity Estimation

Highlights of the Technology

- ❑ There is no need to measure the applied load for accurately detecting damage (i.e., ambient vibration data could be used).
- ❑ The methodology could be implemented either for global or local damage detection provided that defects alter the measured response quantities.
- ❑ The proposed technique has been shown to provide more than satisfactory NDE results for large-scale structures even at the presence of a coarse sensor layout.