

A New Inspection Tool for Pipeline Flaw & Leak Detection

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The shear wave EMATs for detecting flaws in pipelines has been developed and is being integrated into a platform for field testing (see Figure 1). The data acquisition system and the sensors all travel inside the pipe for detecting the flaws. The system will be ready for field testing in September 2003.

The wavelet algorithm that will be used to distinguish flaws is able to distinguish flaw and no-flaw features for corrosion, SCC cracks, axial, and longitudinal gauges. The next step in the development effort will be to distinguish the type of flaw being encountered. After collecting a larger set of data, the algorithm will be refined to not only classify but also characterize the flaw.

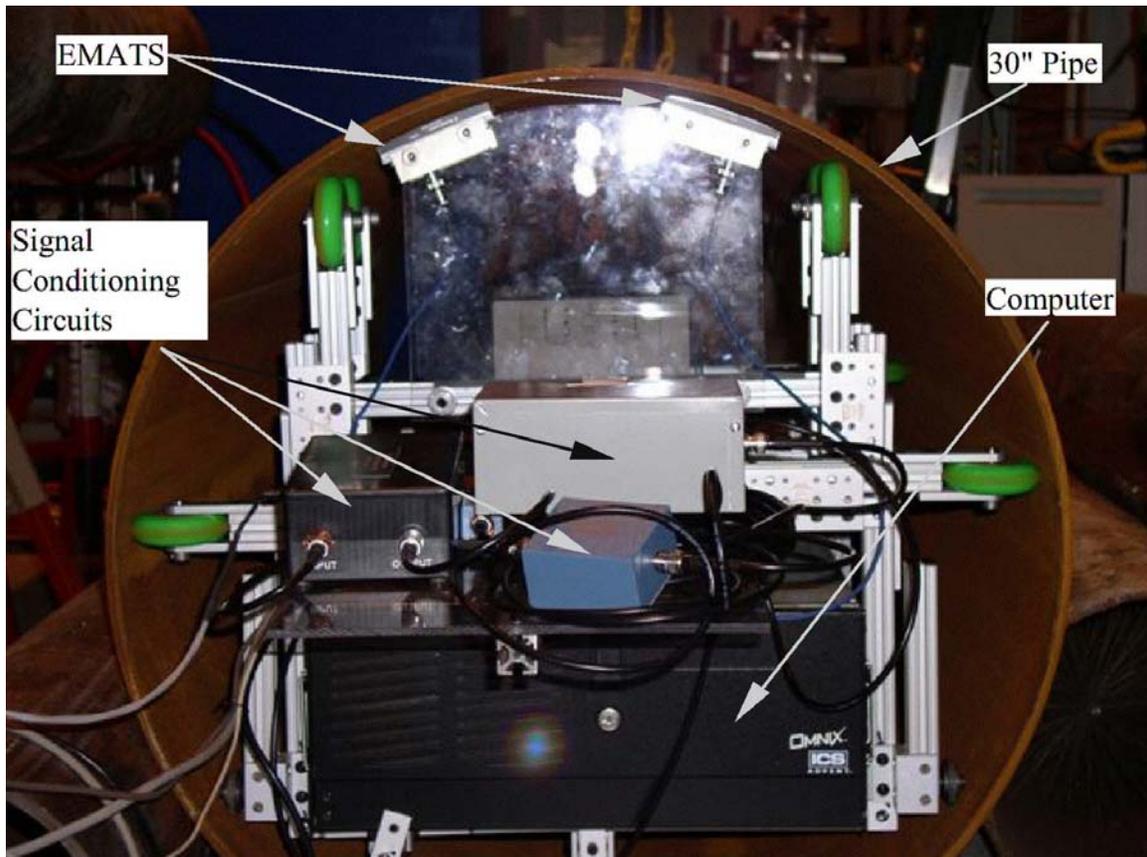


Figure 1: EMAT mounted inside 30" pipe for flaw detection

[Read more about this project.](#)