

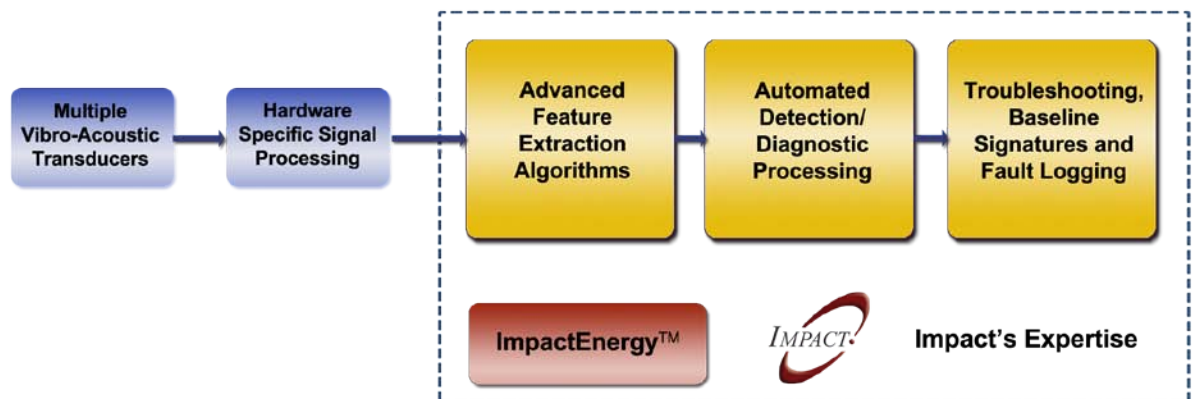
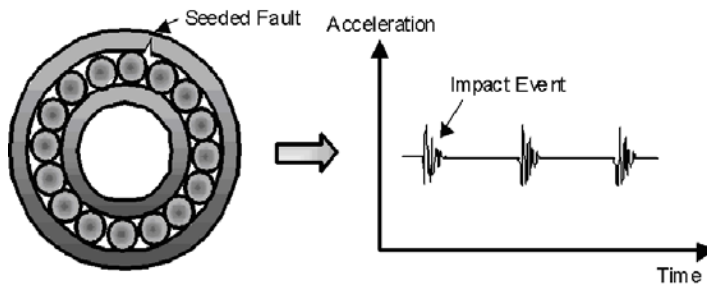
## Early Bearing Fault Detection

Propulsion and driveline system bearings are routinely subjected to stressful operating environments where high mechanical and thermal loading can cause significant reductions in remaining useful life. Early detection of bearing failure modes such as spalling, pitting, and corrosion are critical to the success of prognostic and health management approaches. ImpactEnergy was specifically designed to extract low-energy incipient fault information from a noisy operating environment.



## The Analysis Process

Reusable software components (feature extraction, automated detection/tracking and troubleshooting) work in conjunction with commercial off the shelf (COTS) sensor hardware to produce a low-cost, state-of-the-art solution for your bearing problems.



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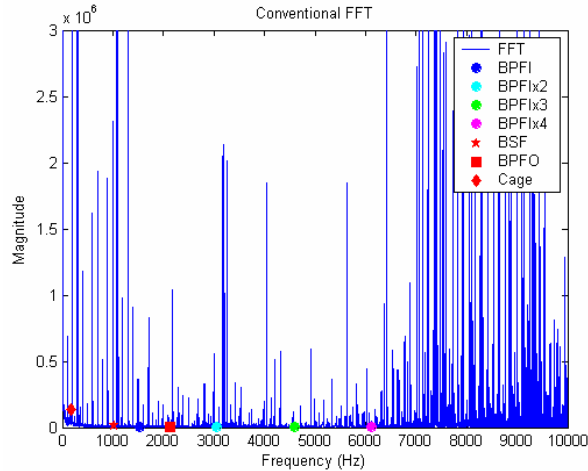
**Headquarters  
New York Office**  
200 Canal View Boulevard  
Rochester, NY 14623  
Phone: 585.424.1990  
Fax: 585.424.1177

**Pennsylvania Office**  
270 Walker Drive, Suite 200W  
State College, PA 16801  
Phone: 814.867.5122  
Fax: 814.867.7550

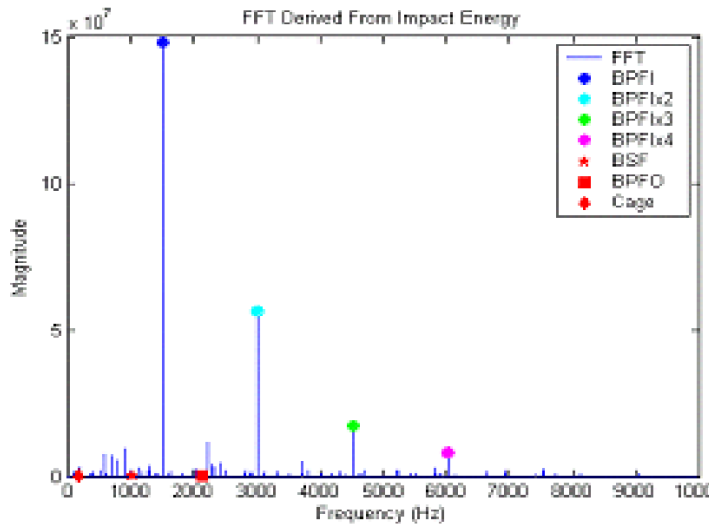
**Georgia Office**  
75 Fifth Street NW, Suite 312  
Atlanta, GA 30308  
Phone: 404.526.6188  
Fax: 404.526.6189

## The Result - Now You See It, Before You Couldn't

Without the ImpactEnergy™ advanced signal processing of high frequency data, incipient fault detection and damage tracking would not be possible.



*Inner Race Fault Without ImpactEnergy™*



*Inner Race Fault With ImpactEnergy™*