HDPE Pipe Electro-Fusion Coupling Inspection and Imaging Using Evisive Scan™ Technology
Electro-Fusion Coupling

4” Polyethylene Coupling and Piping
4 Inch Electro-Fusion Coupling Proper Insertion

Edges of pipe shown at proper location
4 Inch Electro-Fusion Coupling
Poor Insertion

Edges of pipe not at proper location

Evisive NDT file
Wednesday, May 19, 2004 13:07:21
Right Circular Cylinder - Sample Rate (Hz): 120
4 Inch Electro-Fusion Coupling
Poor Insertion w/Melting

Edge of pipe at wrong location

Edge of pipe at correct location

Melt zone
The scan image at left represents the inspection results for the electro-fusion coupling shown at right. These couplings achieve fusion with the pipe ends by resistance heating caused by passing a precise amount of power through wires embedded in the coupling body. Note the small indication near $X=24$, $Y=6.5$. This indication was caused by a small air bubble trapped in the molten plastic, and does not represent a rejectable defect in the electro-fusion coupling installation.
24 Inch PE Pipe Coupling
Field Scan
Advanced materials require advanced NDE methods.

Let Evisive, Inc. help you push your envelope.