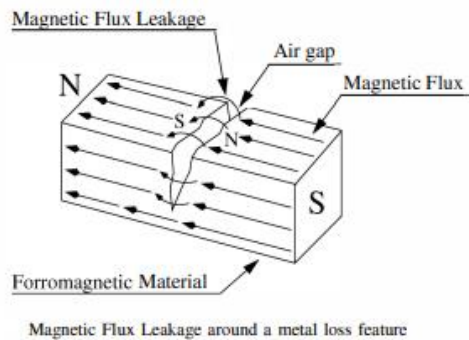


**Background:** ILI (In-Line Inspection) inspections involve using specialized tools, often referred to as "pigs," to assess the condition of pipelines from the inside. These inspections help detect anomalies such as corrosion, cracks, dents, or metal loss, ensuring the integrity and safety of the pipeline. ILI tools gather high-resolution data while traveling through the pipeline, enabling pipeline operators to make informed maintenance decisions.

**Aim:** To adjust the O'clock positions of longitudinal weld seams in ILI inspection data. This adjustment compensates for common offshifts caused by improperly calibrated ILI tools during inspections.



MFL-based pipeline inspection tools (Source: Baker Hughes Inc., [www.bakerhughes.com](http://www.bakerhughes.com))



**Results:** The program reads inspection data from a DBF file, processes the O\_CLOCK column, and shifts time values by a specified number of minutes. The adjustment is applied only to valid entries associated with a weld seam (J\_NO column not empty or null). The updated data is saved to a new CSV file.

## Content:

### 1. reference.dbf

- *Description:* The input file containing ILI inspection data with columns like O\_CLOCK (weld seam time positions) and J\_NO (weld identifiers).
- *Purpose:* Serves as the source of data for processing.

### 2. updated\_reference.csv

- *Description:* The output file storing the updated data after applying the O'clock position adjustments.
- *Purpose:* Provides a processed dataset with corrected weld seam positions for further analysis or reporting.