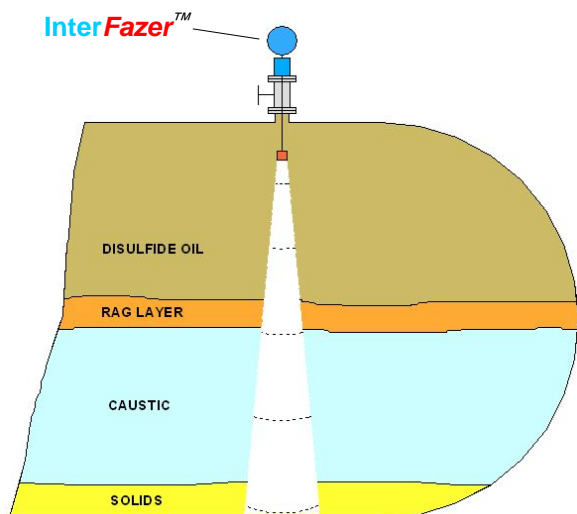


Application Setup

The InterFazer™ has been installed through existing 4" valve located on the top of the Disulfide Separation Drum without any process interruption. The drum is 5 feet OD by 22 feet long. The drum operates liquid full and contains disulfide oil top layer and caustic lower layer. During process upset rag layers form in the middle and the



bottom, 10 inch solid build-up is present. Spent caustics enter drum through a proprietary filtration system. Kerosene and chemicals are injected to improve the Disulfide Oil separation. Disulfide Oil discharge is controlled by the InterFazer™ through automatic valve positioning.

The Challenges

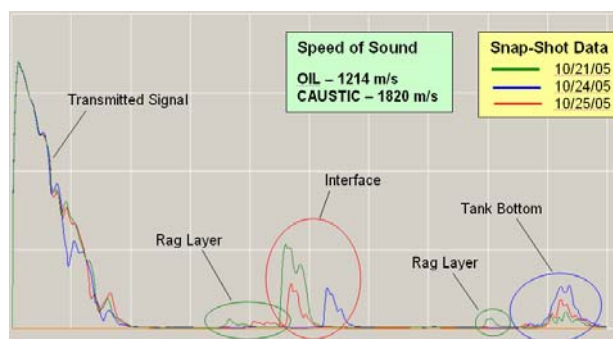
Because of varying fluid properties and the process operating procedures emulsion often is present. As a result of this conditions rapid interface loss takes place. Once Interface is lost restoring good interface takes days and lack of understanding how the interface quality is affected by process creates confusion resulting in adverse operator's actions. Previously tried devices could not maintain their calibration and provide a reliable interface indication; e.g. Sight Glass does not rely on fluid properties, but it very quickly gets coated and the interface location can not be seen. The InterFazer™ with its probe insertion and easy to use software features eliminated countless sample taking and process adjustments during the upset.

Major Benefits

- H2S Reduction from 50ppm to 10ppm
- Excellent Process Diagnostic Tool
- Improved Safety
- Increased Unit Capacity
- No Maintenance

Process Upset – Data Analysis

Raw signal data has been collected and three signals (single shots) representing three days are placed on the top of each other.



The Results

The InterFazer™ has been working since September 2005 with only minor software adjustments required during start-up. The initial installation and calibration was simple. The interface was maintained by manual valve until operator's complete confidence was earned. Transducer USA collected and analyzed considerable amount of data, the results were consulted with the customer and diagnostic procedures were developed. At present DCS is maintaining the interface at the mid vessel level on Automatic Mode. According to the operators, the InterFazer™ is working very well. Prior to the InterFazer™ installation, sulfur contamination stood at 50ppm and customer goal was contamination reduction to 30ppm. At present sulfur contamination has been reduced down to 10ppm - considerable improvement to the unit profitability. Now operators are no longer climbing the ladder every few hours to verify interface position. The unit is, by far, more efficient, safer, and more easily complies with demanding environmental requirements.

The content of this document has been approved by the customer.