

ABSTRACT

This project was to adapt and develop an acoustic sensing instrument that could significantly reduce the amount of hydrocarbon emissions during LP Gas cylinder refills. During the course of the project, different acoustic sensing methods were developed to cope with the particular challenge of determining liquid position while filling. The project included extensive work to measure and determine gas and liquid phase LP Gas emissions through a fixed maximum liquid level gauge which typically are released to ambient during filling of LP Gas cylinders. Finally, the project included field testing and collection of feedback from LP Gas filling personnel and the LP Gas industry to make the product user-friendly and commercially viable.