

Fibos: Determining Market Potential and Strategy for Fiber-Optic Sensors.

Executive Summary

Fibos is a startup company that was founded in July 2016. The company has created fiber optic sensors that can improve worker safety in harsh environments, unlike electrical sensors, while remaining affordable and provide accuracy in wavelength measurements up to 50kHz. This technology can be applied to industries like oil and gas, energy, and aerospace, with the capacity to measure changes in pressure, temperature, load, strain and many more. The oil and gas sector was the primary focus of this report with the large potential to enter the growing market and the numerous applications in both upstream and downstream oil drilling.

The final report sought to understand the feasibility of entering the intrinsically safe sensor market and the main factors that influence transducer manufacturers decisions when purchasing sensors. A breakdown of the technology Fibos used in their fiber-optic sensors was provided, in conjunction to their advantages over both competing fiber-optic and electrical sensors on the market. The Global and North American Hazardous Sensor market was assessed to provide an in-depth analysis of the target market segment and the factors related to entering that area of the market. Two specific types of certifications and the process of obtaining the certifications Fibos will need to acquire for their products was provided. The prevalence of sensor failures and a longitudinal study using off-shore oil well data from Chevron highlighted the cost of non-productive time in the oil and gas industry. A case study from the aerospace industry highlighted the negative impact of sensor failure in a dangerous/harsh environment.

Finally, the team building processes, roles and responsibilities, the scope inclusions and exclusions, prioritization of project tasks, industrial meetings, and lessons learned were highlighted in the report. Conclusions from the market research were provided to help Fibos present a detailed and innovative strategy to highlight the value they will bring to their target manufacturers.