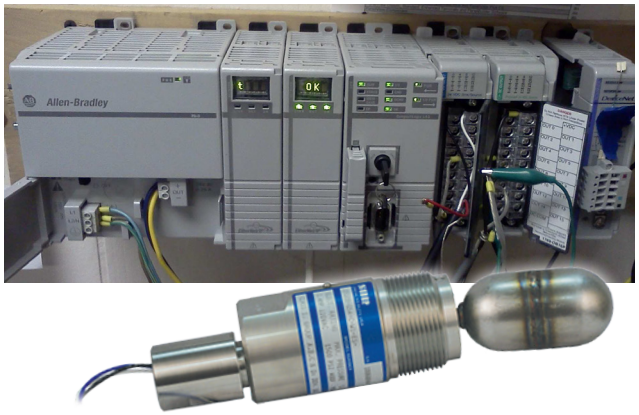
Application Case Study

Product	**1510 Level Switch**
Application	**High and Low Level Indication in Horizontal Bulk Liquid Separator Tanks**

The Application

A current SOR® customer in east Texas uses the 1510 level switches to indicate high and low levels in horizontal bulk liquid separator tanks. Depending on the configuration, the system either dumps water or pumps off oil.



The Challenge

The 1510 units were connected to an Allen-Bradley® FlexIO PLC. The PLC supplied approximately 200mW of power to the 1510 level switch. Because the standard switch used in the 1510 is not recommended for use below 1 Watt, this caused many of the 1510's not to work in the customer's application.

Point level electromechanical devices were originally designed to operate process control devices such as pumps and valves. These control devices require several watts of power to operate. With the trend to monitor the process at a central location, these electromechanical devices are no longer being connected to the control devices, but rather to the Programmable Logic Control (PLC) and Distributed Control System (DCS) which use much lower power. The lower current and voltage is not high enough to keep the switch contacts from oxidizing or getting corroded. This eventually resulted in no indication back at the control system.

The Solution

SOR responded to the customer by engineering in a different switch for the 1510 to accommodate lower currents and voltages used in processes today. The customer then tested the new units to ensure that they worked. The switch contacts did not oxidize or corrode and the 1510 units performed successfully.

The Result

The 1510 will assist the OEM in improving the efficiency of their operations and reduce operational costs. The use of the 1510, 1520 and 1550 products will allow SOR to be the leader among level switch manufacturers that provide a product for low power operations.

According to this OEM,
no other competitor offers a product
specifically designed to address this growing need.

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