

ELECTROLYTIC OXYGEN GENERATION (EOG) SYSTEMS

APPLICATION SHEET

APPLICATION OVERVIEW

Since the 1950's the U.S. Navy has utilized Electrolytic Oxygen Generators (EOG) systems on their nuclear submarines. This is among the most critical of applications as it provides breathing oxygen to the submarine crew. These systems can not fail and must have a long service life. The flow control of hydrogen, oxygen, and hydrogen are critical to ensure that an optimum amount of oxygen is generated.



KATES SOLUTION

Kates Automatic Flow Controllers are self-contained units that respond to pressure changes up and downstream to maintain the optimized set flow. Kates is a cost-effective and low-maintenance solution that replaces a traditional multiple-component flow control loop. Turndown ratios averaging 30:1 and pressure classes from 150# to 2500# ANSI make Kates versatile for demanding and complicated applications. Kates combines an internal regulating valve and adjustable orifice into one unit that self-adjusts to pressure fluctuations to maintain the set flow. Orifice plates and valves alone are insufficient to maintain flow when system pressure changes occur and may require operator adjustments. Kates Flow Controllers are cost-effective and have a history of long service life; lasting decades in clean, gas applications.

