R&D 100 WINNER

1999 R&D 100 Awards Winner
The Sulfur Resistant Oxymitter 4000™

Features

Our product, the Sulfur Resistant Oxymitter 4000™, is the world's only sulfur-resistant oxygen sensor for automatic combustion control. This sensor comprises a patented ceramic-electrode-based oxygen cell and proprietary brazing and packaging techniques, and it has survived over 12,000 hours of continuous operation in a high-sulfur and high-temperature environment. The unique ceramic–metal oxide-electrode in our sensor decreases the need for frequent replacement or calibration and will save manufacturers and electrical utility companies money and save our nonrenewable fossil fuel resources.

Applications

The Oxymitter 4000 will replace traditional platinum-zirconia oxygen sensors and find applications in

- coal- and oil-fired industrial boilers
- sulfur-recovery boilers
- municipal utility companies burning high-sulfur coal or heavy fuel oil
- process heaters and furnaces that use waste gases
- spent-acid furnaces

Thanks to the Sulfur Resistant Oxymitter 4000, automatic combustion control will be affordable and available to more industries around the world. Because it is totally sulfur resistant, the Oxymitter 4000 has been proven to last 40 times longer than a traditional platinum-zirconia sensor in a high-sulfur, high-temperature environment. The Oxymitter 4000 does not have to be recalibrated as often as platinum-zirconia sensors, which means maintenance expenses, downtime, and staffing requirements will be reduced. As automatic combustion control becomes more affordable, more industries will be likely to use it. This in turn means there will be less wasted fossil fuel, and the air pollution, acid rain, and greenhouse gases associated with power generation and industrial manufacturing will be greatly minimized.