

Solution Note

More Stable pH Measurement with Durafet to Control Costs



Challenge

Analytical measurements are essential in virtually every industrial process. Plants require precise and reliable measurement of variables such as pH for a wide variety of applications to safeguard product quality, monitor effluent discharge, and control the addition of chemicals for the optimal chemical reaction.

For accurate measurements, sensors and analytical instruments must be calibrated correctly and periodically recalibrated, adding the workload on maintenance engineers. The stability of the sensor determines how frequently recalibration is required, and has a significant impact on the total cost of ownership over the lifecycle.

Solution

Honeywell offers a comprehensive portfolio of solutions for analytical measurement and control. As part of this, its Durafet[®] pH Electrodes pioneered state-of-the-art pH measurement as the first industrial, non-glass, ISFET (Ion Sensitive Field Effect Transistor) based pH sensors. They are used in a wide range of both industrial and sanitary applications:

- Wastewater influent/effluent monitoring
- Neutralization
- Food and dairy quality control
- Reagent addition control
- Plating
- Pharmaceutical

Suitable for non-glass pH measurement, they eliminate the need for grab samples, boosting efficiency, cover a wide temperature range, for lower inventory costs, and provide response rates 10 times faster than glass sensors and automatic temperature compensation for better, more accurate process control.



Durafet pH Electrodes

They are also designed to minimize costs over the lifecycle, with the ISFET-based, solid state pH sensor minimizing the costs of electrode replacement, maintenance and reagent usage. IP68 watertight cables ensure high reliability in harsh environments, and vario pin electrode connection and optional twist fock fitting reduce replacement costs.

Most significantly, Durafet electrodes offer high levels of sensor stability, staying accurate for longer. That means fewer trips to the field to recalibrate them.

The Honeywell Advantage

Honeywell's Durafet electrodes offer robust, fast, versatile pH measurement with accuracy that lasts, for a more efficient solution to monitoring and controlling the process.



It Matters. [Learn how](#) Honeywell solutions help solve what matters.

For More Information

To learn more about Honeywell's pH measurement solutions, visit our website www.honeywellprocess.com or contact your Honeywell distributor.

Honeywell Process Solutions

Honeywell
1250 West Sam Houston Parkway South
Houston, TX 77042

Honeywell House, Arlington Business Park
Bracknell, Berkshire, England RG12 1EB UK

Shanghai City Centre, 100 Junyi Road
Shanghai, China 20051

www.honeywellprocess.com

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