

# 'Miracle half-cell'

**Palladium:** **BORIN's** new reference electrode chemistry

Culver City, CA – **BORIN Manufacturing, Inc.** has discovered a new, fourth reference cell chemistry that is poised to dominate the half-cell market, and make industry staples of copper, silver, and zinc obsolete.

**BORIN's** new line of Stelth® reference cells uses palladium as the reference element. These half-cells are hydrocarbon-proof (HCP™), making them ideal to use in any environment, from the ocean to the desert, especially in locations rich with hydrocarbons and those with unknown chloride counts.

“We've been soaking the HCP™ in gasoline as well as other hydrocarbons for 2 years and it still has a constant stable potential.”

**Bill Borin**  
PRESIDENT  
*BORIN Manufacturing*

Until now, hydrocarbons proved deadly to all available half-cell chemistries, including industry staples copper, silver, and zinc.

“We've been soaking the HCP™ in gasoline as well as other hydrocarbons for 2 years and it still has a constant stable potential,” said Bill Borin, president of **BORIN Manufacturing**. “We sent it to a third party testing facility to validate our findings, and it exceeded our expectations. Our new hydrocarbon-proof chemistry has proven to make our Stelth® HCP™ the 'miracle half-cell.' The Stelth® HCP™ remains accurate when nothing else works.”

**BORIN's** Stelth HCP half-cell chemistry – now patent pending in both the United States and internationally – was co-invented by Bill Borin and Beth Weaver, former Director of Research and Development for **BORIN Manufacturing**, as a result of chatting about the thermodynamics of corrosion.

**US AND INTERNATIONAL PATENTS APPLIED FOR**

“The chemistry of our new reference cell is specifically engineered to survive in hydrocarbon environments,” explained Weaver. “We wanted to remove the difficulties associated with replacing failed stationary cells or maintaining portable electrodes in such corrosive conditions.”

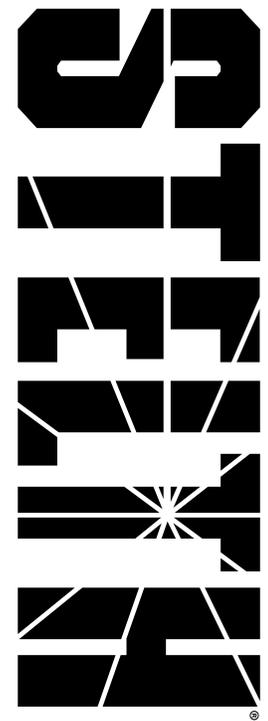
“The Stelth HCP will revolutionize the industry,” said **BORIN** Vice President Gregg Steele. “Locations with difficult situations such as gas stations, tank farms, and refineries will finally have a reference electrode that works for them, no matter what their challenges may be.”

The applications for the new Stelth HCP are limitless. Problem zones which have stunted use of traditional chemistries is another place the Stelth HCP will succeed – such as areas that have too many parts per million of chlorides for silver reference electrodes.

(MORE)



**BORIN's** new Stelth 1 using the HCP™ chemistry “remains accurate when nothing else works.”



"Having one chemistry that can work everywhere is an asset," Steele said.

The R&D Department at **BORIN** has completed an extensive 3-year testing process, prompting the release of the new Stelth HCP line.

When asked about the price of the Stelth HCP products, Borin indicated that they will make it cost effective so it can be included in specifications for general use.

"We're going to price it so you'll want to use it," said Borin. "You'll love it and want to install it everywhere."

The new HCP chemistry will be available in **BORIN's** entire Stelth product line, which spans from the Stelth 1, their flagship half-cell for saturated soil or submerged applications, to their Stelth 9, for deep sea applications. **BORIN** expects the popularity of the hydrocarbon-proof model to mirror that of their standard reference electrodes, with the original design of the Stelth dominating sales, followed quickly by the demand for the Stelth 7 – IR Free Probe model.

In addition to the problem-solving Stelth HCP, **BORIN's** full product line will remain readily available for customers with hydrocarbon- and contaminant-free areas.

Stelth HCP reference electrodes are in production and will be available through **BORIN's** worldwide distribution, encompassing 93 countries.

HCP™



**BORIN's** new line of reference cells uses palladium as the reference element.

## About **BORIN Manufacturing**

It is no surprise that **BORIN Manufacturing**, a long-time leader in the cathodic protection industry, is at the forefront of reference electrode technology. **BORIN** continues to be the largest and most innovative manufacturer of reference electrodes in the world with Stelth® standard and IR-free coupon electrodes, along with their full line of Bullet Box® CP test stations and line markers. **BORIN** expects their new Stelth HCP™ "miracle" line of reference electrodes to gain a solid foothold on the reference electrode market.

In **BORIN's** more than 38 years in this industry, they've sold more than 200,000 Remote Monitoring Units worldwide. Their **Comanche®** RMU is the most sophisticated unit on the market, and its capacity ranges from 1000s of channels – for complex applications like airports – to 1 single 1-task channel.

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