

Which Sensor Company is Right for Your Needs?

There is a sensor company that fits your needs. How to make the right choice.

- Technology Alternative and Opportunities
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- Start Early to Succeed

When choosing a sensor or control device for the product you are manufacturing you have many choices. Yet, anyone with experience knows that for ultimate long-term success, the attributes of an individual component are just the tip of the iceberg. What about the company that manufactures that sensor? What is their culture and overall capability? You might ask, "Can they be relied upon to make a great partner in achieving the success of my product?" All good questions, so let's address them as they relate to Gems Sensors & Controls—a manufacturer of fluid sensors for level, flow, pressure and temperature, and control devices including miniature solenoid valves and solid-state relays.

Let's start with the most obvious: Gems is not the "right" sensor company for everyone. Of course no single sensor manufacturer is. If you need a handful of very exotic custom-built sensors, there are other smaller, specialized companies better suited than Gems. Likewise, if your production calls for a 100,000+ sensor units quarterly, and where a very low price is the leading attribute, Gems will not be your best choice either.

In a nutshell: Gems is a sensor company optimized to provide a high level of custom engineering that huge manufacturers don't want to touch, while providing manufacturing volumes that smaller companies cannot achieve. A few hundred units to tens of thousands units is the "value" sweet spot for our sensors, controls and sub-assemblies.





Technology Alternative and Opportunities

Founded in 1955 by Gordy Seigle and Ed Moore (whose initials were used to create the GEMS company name), their first liquid level sensor used a dissolvable aspirin as the actuation component. Nearly 60 years later Gems Sensors & Controls now makes use of a wide variety of sensor technologies light-years advanced from the aspirin, but promote none. Unlike some companies that have been built around the core of a single technology or sensor type, Gems has embraced many technologies to bring special attributes and capabilities to its fluid sensor lines. The company focuses on solutions, and the many technologies employed are but a variety of means to many ends.





Gems Sensing Technologies

Level

- Buoyancy (floats)
- Electro Optic
- Conductivity
- Piezo-Resonant
- Ultrasonic
- Capacitive
- Magnetostrictive
- Potentiometric
- Submersible Pressure
- Magnetic-Visual

Pressure

- Sputtered Thin Film
- Capacitance
- Chemical Vapor Deposition (CVD)
- Micro-machined Silicon (MMS)
- · Blades Switches
- Micro Switches
- Solid-State Switches

Flow

- Piston Reed Switch
- Shuttle Reed Switch
- Paddle Reed Switch
- Turbine Hall Effect
- Paddle Wheel Hall Effect
- Thermal Dispersion
- TemperatureThermistor





If you call an ultrasonic sensor manufacturer about a liquid level sensing application, an ultrasonic solution will be recommended. The same call to Gems will result in a few questions about your application—media, tank or vessel size, temperature and pressure requirements, etc. The Gems recommendation might be ultrasonic, but it could easily be a float- or capacitance-type sensor, or even a pressure transducer. Gems operates with the belief that "method" is secondary when suggesting potential routes to a quality, functioning and cost-effective solution to any application.

A Culture of Excellence: Quality First, Always!

Serving a broad range of customers takes sophisticated manufacturing capability and exceedingly organized management processes. And this is just what Gems Sensors & Controls brings to its OEM customers. Gems is part of the Industrial Technologies Group of the Danaher Corporation. Danaher (NYSE: DHR) is a Fortune 500 company that owes its success to a culture of continuous improvement in what we call the Danaher Business System (DBS).

The DBS engine drives Gems through a never-ending cycle of change and improvement: exceptional People develop outstanding Plans and execute them using world-class tools to construct sustainable Processes, resulting in superior Performance.

The company employs a process called "Voice of the Customer" (VOC) to get to the heart of the important issues, so your unique perspectives and requirements are fully understood early on. Only then does Gems launch design and manufacturing work.

Guiding all efforts is a simple philosophy rooted in four priorities targeted to the customers: Quality, Delivery, Cost, and Innovation. Gems goal is to satisfy their customers beyond expectations.

Sensors for Coffee Makers to Nuclear Power Plants

Throughout nearly 60 years of operation, it is amazing the breadth of applications brought to Gems by its customers. It's evident that the people at Gems really enjoy working with other engineers to bring great ideas to fruition. And each decade of operation has brought a wealth of knowledge in real world application development. Each day the in-house team of sensing experts at Gems share their knowledge with customers reaching out for solutions. You'll find that working with Gems personnel is very collaborative.





Gems goal is to satisfy their customers beyond expectations.

LEVEL | FLOW | PRESSURE | TEMPERATURE | SOLENOID VALVES



The faultless operation of a boiler is just as important to the company's engineers as a life-saving respiratory control device in the operating room. Assuring the proper measure of water for a perfect cup of coffee delivers the same satisfaction to a Gems engineer as protecting the safe cooling of a nuclear reactor. When you share your project with the people of Gems Sensors & Controls, you will experience the remarkable excitement, dedication and satisfaction embodied by a group of fluid sensing experts that really like what they do.

Worldwide Manufacturing and Service

Gems Sensors & Controls maintains manufacturing facilities in the United States, Asia and Europe. It manufactures variations of its sensors that are at home any place on the globe. And, as necessary, sensors from Gems carry important agency approvals including CSA or UL-recognition and CE Marking.

With representatives, distributors and customer service around the globe, Gems has made a huge effort to make itself available to engineers worldwide. This global reach simplifies logistics and after sales service.

Gems maintains websites in English, German, Chinese, and Portuguese languages for customer support. Here engineers and specifiers can instantly obtain valuable product information such as installation instructions and wiring diagrams. Gems has invested to make it easy and convenient for their customers maximize the value from their products long after the purchase.







For More Information Please Contact:

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