The Business Case for Fuel Cells

By LAUREN KIESOW, Associate Editor, Manufacturing.net [1]

The catchphrase “going green” has been around for awhile now, garnering a strong following for those who care about the sustainability of the planet. In an effort to become more energy and cost efficient, increasing numbers of companies are utilizing fuel cells as part of their daily operations.

Fuel cells are an electrochemical device that combines hydrogen and oxygen to produce electricity. The fuel cell relies on chemistry, not combustion, so emissions from this type of a system are significantly smaller than emissions from the cleanest fuel combustion processes.

Recently, Fuel Cells 2000 [2] published a report entitled The Business Case for Fuel Cells: Why Top Companies are Purchasing Fuel Cells Today [3]where benefits of incorporating fuel cells into a routine are discussed, as well as brief case studies of thirty-eight recognizable businesses that currently employ the use of fuel cells in some capacity.

Big names such as Coca-Cola, Michelin, Kimberly-Clark, and Verizon are showcased as fuel cell users and promoters. And while fuel cells and their usage is not a new phenomenon, the point of the report is to elucidate consumers and manufacturers to the notables who operate with fuel cells, highlight the efficiency and reliability they experience, and underscore the monetary benefits gained.

Jennifer Gangi, Program Director for Fuel Cells 2000 and coauthor of the report, believes that fuel cells are integral for manufacturing success in the United States. Most of the major fuel cell manufacturers are located in the U.S., and countries such as Korea, Japan, China and Germany are “hot on [our] heels.”

Gangi explains that “if the U.S. doesn’t support fuel cells, these companies could potentially move operations overseas where there is more support. This could be an industry that helps bring manufacturing back to the U.S. because we make [fuel cells] here and the technology can help other industries with their manufacturing by powering their facilities.”

Highlighted in the report is the fact that companies are not only cognizant of being more green, but of saving more time and money as well. It's a welcome combination because one can reduce emissions and reduce expenditures on electricity and supplies. Additionally, the report showcases the reliability of fuel cells as an attractive feature of the technology. Fuel cells used as generators and as secondary power separate from the main grid practically vanquish the probability of experiencing the effects of a blackout or brownout. That alone is a money saver because the company will never experience down time. And as everyone knows, time is money.

Despite the optimism, Gangi believes it's going to take more than a positive report to elevate fuel cell usage to the next level. There needs to be more public and government support—and not just monetary support, either. The industry needs to be lauded with words and inclusion, such as listing fuel cells with other technologies.

Many people associate the energy source with cars because that's the spin that the media has created about them, but the fact of the matter is that fuel cells have a wide range of applications -- primary power, combined heat and power, and forklifts, to name a few.

"My hope is that the names of the companies using fuel cells are impressive to people to garner a closer look at the technology. If big companies…are using them, they must be providing some benefit," Gangi contends.

With new installations on the rise, their dominance is increasing. Aggrandizing the implementation of fuel cells in places such as residential units, telecommunications, universities, and supermarkets will bolster exposure and further illustrate the positive outcomes of this energy. Ultimately, Gangi is optimistic that the report will showcase fuel cells in a new light, spurring further interest.

The report doesn't cover every instance of fuel cell usage or highlight the positive gains in every possible sector, but it offers a substantial sampling of companies' testimonies. The more exposure fuel cells get, the probability of people taking interest in them -- or advocating for their implementation -- increases. Overall, one can ascertain that the primary purpose of the report is to inform, yes, but also to continue a dialogue on a particular energy source that may have started to stall.

What are your thoughts? Send them to lauren.kiesow@advantagemedia.com *[4] or post your comments below.*

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