

Denison Consulting Group

Providing a Holistic Approach to Monitoring Energy and Power Quality

“**M**anufacturing requires predictable, cost-effective, and reliable sources of input in the production process.” And perhaps nowhere is the input more critical than in the area of energy and power quality. US Manufacturing consumes approximately 30 percent of the nation’s energy, and for many industry sectors, energy represents over 50 percent of the total cost of production. Failure to properly measure, monitor, and manage energy creates then a large opportunity for manufacturers capable of understanding the drivers of energy cost, consumption and power quality to make decisions that impact current operations and ongoing maintenance. Further, industry experts report that 30-70 percent of production line disruptions are attributed to poor power quality. Production line failures can cost millions per hour of production downtime.

Without a holistic approach to measure and monitor energy and power quality in real time, even the root cause of areas for improvement in operations efficiency, maintenance, and prevention of production becomes difficult. Pennsylvania-based Denison Consulting Group’s comprehensive approach to solving these complex issues—providing engineering assessments and customized monitoring solutions— with its real-time SCADA based data analytics software provides an end-to-end solution suite providing manufacturing and large industry with solutions – and results.

Stepping up their game, Denison has developed their own web-based application allowing for Denison and its customers to measure and manage

energy and power quality attributes in milliseconds. Denison’s platform is built on a SCADA industry-standards based platform, today supports over 100 devices, and is able to manage an unlimited number of I/O tags, supporting an unlimited number of users. The platform was designed to support global manufacturers as well as smaller operators—offering scalability and a clear technical evolutionary path in mind. The platform supports almost all standard protocols including DNP3 for secure time stamping of data so that the team can quickly connect, collect, interpret, analyze, and report time-stamped data in real time.

Data is polled from customized monitors every 137 milliseconds and visualized on a series of user-friendly HMI and dashboards. The platform also includes a built-in historian, trending and standard reporting, alarming and notification of alarming provided to key, assigned personnel via SMS, text, voice to text, or page, to name but a few features.



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“Cloud based solutions provide our team fast access to data, fast delivery

of customized services without need to access smokestacks of data often orphaned on individual servers. Customers pay for actual connections, I/O tags measured and stored – offering a flexible pay as you need and grow option,” says Dianne Denison, founder and CEO of Denison Consulting Group.

Denison’s cloud-based, “pay-as you need” and “pay as you grow pricing” model delivers a rapid return on investment. Denison hosts this same application itself in a fully redundant and secure SOC data center. Denison uses the software itself as a tool to deliver insights and reports as part of its Comprehensive Energy and Power Quality Assessment service, in addition to licensing the software and hosting the application via a managed service.

Denison’s Managed Service is hosted in a fully-redundant SOC data center, affording customers the added option of paying a monthly service fee for Denison’s tenured team to monitor, report, and provide added insights to its customers in near real time. The company has negotiated tier-1 agreements with global manufacturing companies already, purchasing its comprehensive suite of solutions.

Denison also works with some of the world’s largest OEM players in automation and controls, which allows it to engineer and design needed customized monitoring, energy and power quality solutions that are then fabricated and delivered to its customers. This enables the company to continue doing what it does best—acting as both a solutions-based systems integrator and solutions provider and focusing on today’s basic analytics and soon-to-follow announcements in preventive and predictive analytics solutions. 