



## CUSTOMER SUCCESS STORY

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# Accelerating Product Development Across the Globe



## AT A GLANCE

### Mission

Commercialize fuel cell systems as an alternative and sustainable energy option for telecommunication companies.

### Best Thing About Arena

Cloud PLM enables real-time collaboration across multiple sites and time zones.

### Bottomline Impact

Centralized global product record improves product quality and time to market.

### Key Benefits

- Enables real-time communication across locations and time zones
- Provides quick and painless onboarding of new global locations
- Gives engineers visibility into quality issues
- Offers a flexible solution to meet changing company needs

## ABOUT THE COMPANY

H2 PowerTech provides industry-leading reformer, hydrogen production, and advanced fuel cell technology along with product research and development services. Their fuel cell products offer a direct replacement for traditional power generators and provide their customers with economic and environmental benefits. By helping to commercialize fuel cell systems as an alternative and sustainable energy option for telecommunication companies, H2 PowerTech enables these companies to lower their greenhouse gas emissions and carbon footprint across the globe.

## BUSINESS CHALLENGES



Opening a new site in South Africa has H2 PowerTech product teams working around the clock. The company has three locations in different time zones. Research and development is located in Bend, Oregon, while

manufacturing and test take place in the new facility in South Africa and in Taiwan, which also provides design engineering. Before opening the South Africa location, H2 PowerTech also had a site in Mexico. At that time, collaborating around the latest product design information in real time was a challenge, as product information was managed in spreadsheets and not easily searchable. Designing and tracing items and part number information was performed using an antiquated system and Microsoft file structure that lacked revision control.

Adding to the complexity, a single H2 PowerTech fuel cell product can contain over 2,000 parts with multiple circuit boards with firmware and hardware working together. This requires interoperability between systems and increases the probability that something may go wrong. It was difficult for engineers to identify issues early on which often led to late-stage scrap and rework.

H2 PowerTech wanted to remove setbacks associated with product information being hidden in various silos and ensure communication and accuracy across all their locations.

## THE SOLUTION

Based on previous experience using product lifecycle management (PLM) software, the team at H2 PowerTech set out to adopt a new PLM solution to establish a centralized product record where information could be easily searched.



They selected Arena PLM because it was cloud-based which meant it would be easy to implement across their various sites, scalable, and cost-effective. “Arena checked off all the boxes we were looking for in a PLM solution,” stated Alex Charney Cohen, Senior Manufacturing Development Engineer for H2 PowerTech.

Purchasing, design engineering, manufacturing engineering, quality, and management teams access the Arena PLM system and have visibility into once-siloed data. “Having data in a global system is super important for our team in Taiwan so we’re aware of the work they’re doing and we can collaborate more easily,” stated Charney Cohen.

Taiwan and South Africa can now securely access the most current product design information from Oregon’s R&D center at any time and be confident that it is always accurate.

Furthermore, Arena provides a secure, role-based access model for key team members to access and review parts, bills of materials (BOMs), product documentation, and quality processes based on individuals’ roles.

## KEY BENEFITS



“Transitioning from paper and spreadsheets to Arena’s PLM solution has improved how all company sites communicate as they design, review, and approve product information across our multiple time zones,” stated Charney Cohen. “Rolling out our new South Africa facility was quick and painless because we have the Arena Cloud PLM solution in place.”

**“Having our product data in a single, secure system that scales with our growth is key to our success and our ability to deliver products to market fast and without issues.”**

– Alex Charney Cohen, Senior Manufacturing Development Engineer

Also, H2 PowerTech can better document and link quality issues to specific, impacted parts, specifications, procedures, or work instructions—providing improved traceability throughout the corrective action process. “To be able to look at any particular part and see all related quality issues is invaluable for engineers,” said Charney Cohen. “Connecting quality issues to items or assemblies enables our engineers to resolve problems and improve product designs by uncovering this information early on.”

As the world transitioned to remote work due to the pandemic, H2 PowerTech was able to continue product development operations across all sites using Arena PLM. “During the pandemic, I went from working in the new factory in South Africa to working from my kitchen table in Oregon,” noted Charney Cohen. “With these huge changes in work and travel, Arena played a key role in our ability to move designs forward and push ECOs through.”

H2 PowerTech continues to modify processes within Arena PLM as the company evolves. “Configuring the system is simple and limited only to my imagination,” noted Charney Cohen. “We can create new attributes, make them required fields, and change our routings to match how we do business as requirements change. Having our product data in a single, secure system that scales with our growth is key to our success and our ability to deliver products to market fast and without issues.”