

Zamil Industrial's HVAC Division Boosts Performance and Realizes Efficiencies with Windchill+



Zamil Industrial, a leading business group that develops innovative design and engineering solutions for the construction industry, is now more agile and collaborates more efficiently internally and externally thanks to Windchill+. As a core tool for Zamil's engineers, Windchill+ provides all the benefits of cloud security and the ease of automatic scaling and predictable upgrading of the deployment.

An innovator and pioneer in the construction and HVAC industries

Founded in 1998, Zamil Industrial is a publicly listed company headquartered in Dammam, Saudi Arabia. With more than 9,000 employees worldwide, Zamil Industrial develops various materials and equipment for the construction industry. Its product portfolio includes pre-engineered steel buildings, steel structures, HVAC systems, telecom and transmission towers, process equipment, precast concrete products, fiberglass and rock wool insulation, pre-insulated pipes, and solar power projects.

Zamil Industrial identified its HVAC Sector to lead its digital transformation journey. The goal was to quickly onboard new design and manufacturing teams to support its expansion needs. Zamil Air Conditioners, a pioneer in the HVAC industry, was founded in 1974. Since then, it has grown into a leading international manufacturer of air conditioning systems. Today, Zamil Air Conditioners is the number one manufacturer of HVAC/R systems in the Middle East.

ZamilAC

The HVAC Sector needed to accelerate product development and innovation

The global air conditioning market is on the rise and is expected to reach USD 202.34 billion by 2031.* This is resulting in high demand from both end users and contractors. To capitalize on the high demand from both end users and contractors, Zamil needed to respond more quickly to customer needs. They also faced intense competition from well-established global brands.

Internally, Zamil was struggling with legacy IT processes that were impacting their engineering and manufacturing efficiency. Using manual, "paper-based" digital processes, their projects took a long time to complete. In addition, global teams were disconnected and unable to collaborate early in the development process.

Windchill+ is a game changer

Zamil Industrial (HVAC Sector) selected Windchill+ to quickly onboard new design and manufacturing teams to support their expansion needs. As they transition to a cloud-first future, the decision to work with Windchill+ is a game changer. No longer reliant on legacy software that has hindered their progress, they can move to full PLM capability with speed and simplicity, accelerating adoption across the enterprise.

Windchill+ makes it faster, easier, and more secure to collaborate between design and manufacturing sites, as well as with external supply chain partners.

Zamil will leverage the SaaS architecture of Windchill+ to take advantage of software updates and the latest security patches and to add new PLM functionality more quickly over time. With the latest release, users will benefit from both performance and workflow enhancements.

DxP Services led the implementation with a top-notch team of PLM consultants and expert practitioners who leveraged tools jointly developed by DxP and PTC (Windchill Compare Utility, Migration Factory, CCD/WAVE, etc.) to get up and running in record time.

The Solution: Windchill+

For Zamil, it was a no-brainer. They turned to Windchill+, a feature-rich PLM solution delivered entirely as a service. Windchill+ enables Zamil to increase speed, improve product quality, and reduce costs.

Zamil is still in the early stages of adoption. Currently, the engineering and design teams are using Windchill+ primarily for product data management. They use it to create product renderings in Creo and manage the CAD files in Windchill+. Building on this solid foundation, Zamil will be able to expand its capabilities within Windchill+ for a complete digital transformation.

ZamilAC

More than just moving to the cloud

With the out-of-the-box functionality, seamless collaboration, and dynamic data visualization provided by Windchill+, Zamil Industrial realized tangible benefits, including:

1. Secure Platform – Zamil's stakeholders were concerned about data breaches and cybersecurity. It was a daunting task to recover their own data, which was in both paper and digital formats. Today, Zamil benefits from the integrated, full-stack IP protection provided by the world-class security of Windchill+.



The migration from the old version of the on-premises application to a secure SaaS model on the cloud reduces risk and enhances security.

2. Premium performance and stability – Zamil wanted to improve its customer service and customer interaction. With Windchill+, they were able to respond faster to customer requests and status updates. Engineering teams can check into shared folders and access files more quickly – more than 40% faster. Processes and operations are much faster, and product data is available immediately. In addition, Creo integration enhances the CAD design process and enables seamless assembly management.



The system can be easily scaled to accommodate increasing user demands.

3. Instant capability – The manufacturer needed an innovative and functional solution that would increase their efficiency from day one. They found it in Windchill+. Zamil plans to integrate its product structures from Oracle Fusion (SaaS ERP solution) into Windchill+ within the next year. Their PLM functionality will then extend to BOM/Configuration Management (revision control, change management, and supplier management).

- a. A full migration to Windchill+ will allow Zamil to take advantage of all the best practices. This includes a comprehensive bill of materials after validation. Zamil engineers will no longer miss revisions for changes or new product configurations. In the past, this would cause them to review the wrong versions. Engineering will now be able to minimize errors and rework.
- b. Windchill+'s out-of-the-box functionality will enable Zamil to benefit from efficient lifecycle management, version control, document control, engineering change notices, collaboration, and customization options.

ZamilAC

4. Predictable upgrade cadence - For Zamil, every software upgrade was a hassle. With Windchill+, Zamil now has access to well defined upgrade processes that require very minimal from them on an 18 month, predictable cadence.

5. Enabling the everyday engineer - Engineers at Zamil have already begun to realize the agility and quick response time involved in validating and publishing new designs or changes. They can save time and money and reduce risk. This migration to the cloud provides several benefits to the engineering community. They can benefit from built-in best practices and standards and spend less time validating software and integrations and more time designing and innovating.



We anticipate a significant return on investment with considerable time savings and increased team efficiency.

6. Frictionless integrations - Smooth integration with Oracle Fusion and other technologies opens the door to more automation opportunities. Zamil will extend Windchill to the factory to gain manufacturing efficiencies. Their IoT vision is to integrate all of their factory machines into Windchill. The first step for Zamil engineers is to use ThingWorx in one factory (a steel plant) as a proof of concept and then expand from there.

7. Seamless collaboration - In the past, teams were disconnected, working in silos because of global licenses. With Windchill+, they can work

and collaborate from anywhere in the world at any time. They are no longer stuck in one location with no access to data because of Single Sign-On (SSO). Zamil is also extending PLM to downstream users. Now both internal and external teams (customers and suppliers) have real-time access to the right data. SSO is configured to ensure smoother and more secure user access.



The global availability of licenses provides geographical flexibility, enabling our engineering teams to work from anywhere in the world.

A remarkable journey to be proud of

With inconsistent product data, Zamil faced challenges in transferring this data from the on-premises system to Windchill+. Although the journey from on-premises to the PTC cloud was arduous, it was an exciting experience. It is an accomplishment of which they are proud.

Stakeholders needed to understand their current on-premises environment and assess the data and applications to be migrated. Once this data was stored in a secure and centralized repository, teams could easily access, share and manage it. This was critical for Zamil. Product Data Management enabled by Windchill+ ensures that every version and revision is tracked and that manual tasks have been automated.

The successful completion of the Windchill+ migration demonstrates the company's commitment to embracing the digital transformation landscape.

ZamilAC



The PTC Cloud migration journey has been filled with proud moments, from the successful transition to the cloud to the realization of numerous benefits and the cultivation of a culture of innovation. It stands as a testament to the company's unwavering vision.

New partners working closely

The PTC and DxP teams worked hand-in-hand with Zamil's IT and implementation teams to address and support any specific requirements or challenges that might arise during the migration process DxP

ensured best practices, migration methodologies, and recommended cloud infrastructure configurations. They also helped resolve any compatibility issues.

What's next for Zamil Industrial

Zamil has embarked on a journey to add value to the organization. They're excited about what lies ahead and all the exciting opportunities for growth. The seamless integration of Windchill+ with other systems at Zamil allows for expansion into other systems. They plan to migrate their product structures from Oracle Fusion (SaaS ERP solution) to Windchill+ within the next year. The manufacturer is also looking forward to extending Windchill+ to the factory to ensure smooth collaboration and information flow between engineering and manufacturing. One of the goals is to connect all of their factory machines to Windchill+ via IoT. Initially, they'll use ThingWorx in one factory (a steel plant) as a proof of concept and expand from there. This will enable them to reduce time to production and rework, as well as reduce operating costs.

*<https://straitresearch.com/report/air-conditioning-system-market>

© 2024, PTC Inc. (PTC). All rights reserved. Information described herein is furnished for informational use only, is subject to change without notice, and should not be taken as a guarantee, commitment, or offer by PTC. PTC, the PTC logo, and all PTC product names and logos are trademarks or registered trademarks of PTC and/or its subsidiaries in the United States and other countries. All other product or company names are property of their respective owners. The timing of any product release, including any features or functionality, is subject to change at PTC's discretion.

432551_Zamil_CS_0324