DEC PHARMACEUTICAL

STREAMLINING INJECTION-MOLDING OPERATIONS TO EXPAND HEALTHCARE PRODUCT PORTFOLIO WITH DELMIAWORKS ERP SOLUTIONS

Case Study

With the DELMIAWorks ERP system, DEC Pharmaceutical has improved operational efficiency, injection-molding production processes, inventory and warehouse management, collaboration, resource utilization, and decision-making by gaining real-time access to all injection-molding production, financial, and operational data, which is helping the company expand its product portfolio.

Challenge:

Improve operational efficiency, injection-molding production processes, inventory and warehouse management, collaboration, resource utilization, and decision-making by finding a solution that provides real-time access to all injection-molding production, financial, and operational data in order to expand its product portfolio.

Solution:

Replace reliance on Access database, Excel spreadsheets, and DOS-based ERP system with the DELMIAWorks Enterprise Resource Planning (ERP) system, including the ERP, Finance, Scheduling, Inventory Management, Forecasting, Tooling Management, Preventive Maintenance (MRO—Maintenance, Repair, Overhaul), Real-Time Production Management, Warehouse Management, Purchasing, and Sales modules.

Results:

- Automated generation of bill of materials (BOM) costing information
- Enhanced ability to produce accurate business, operational, and financial reports
- Increased cost accuracy via access to data on variances
- Improved ability to comply with different governmental regulatory requirements

"With the DELMIAWorks ERP system, we not only improved the accuracy of our costing information, but have also enhanced our ability to plan, forecast, and schedule production runs, and provided transparency on variances in the system, so we can address things in real time."

— Phil Webster, CFO

DEC Pharmaceutical is a leading technology partner in New Zealand for developing both human and animal healthcare products and applications. Founded in 1941, the company works with medical specialists, inventors, and healthcare innovators who need an end-to-end solution provider that can support their efforts throughout the entire commercialization process: from R&D and product development through clinical trials and manufacturing. DEC consists of two integrated facilities that specialize in the development and manufacture of innovative technologies and pharmaceutical solutions for human and animal health.

The company's technical teams have wide experience and expertise in high-end injection-molding processes, R&D, and manufacturing technologies. DEC has 24 thermoplastic molding machines, ranging from 25 to 250 tons; 11 LSR (silicone) molding machines; extrusion systems with gravimetric feed for precision polymer/drug/excipient ratio control; co-extrusion, compression molding, and extrusion tool management systems; a pilot-scale encapsulation system; formulation/composite mixing and processing systems; a medical device assembly operation; and packaging and labeling systems. The pharmaceutical business operates in line with Good Manufacturing Practices (GMP).

Until 2022, DEC Pharmaceutical relied on the combination of an Access® database, Excel spreadsheets, and a DOS-based ERP system to manage its operations. However, the company needed access to more accurate business, operational, and financial information in order to realize the productivity gains necessary to grow its product offering, according to CFO Phil Webster. "Our goal is to increase our product portfolio, but without accurate information on our operations, it's difficult to identify areas for improvement," Webster stresses. "We simply needed to gain a better understanding of our cost structure, variances, and operations, which was very difficult with the legacy systems we had that had not been updated in a while. Our sister company had used the DELMIAWorks® enterprise resource planning [ERP] system and had tapped into its potential. We quickly saw the viability of the DELMIAWorks solution and decided to implement it to resolve our challenges."

DEC decided to implement the DELMIAWorks ERP system—including the ERP, Finance, Scheduling, Inventory Management, Forecasting, Tooling

Management, Preventive Maintenance (MRO—Maintenance, Repair, Overhaul), Real-Time Production Management, Warehouse Management, Purchasing, and Sales modules—because it supports process-specific manufacturing processes, including injection-molding; includes capabilities that would help DEC boost productivity; and provides access to vital business, operational, and financial information, all of which DEC needed to expand its product portfolio.

"We believed that DELMIAWorks would give us access to the information that we need to get our costs right," Webster stresses.
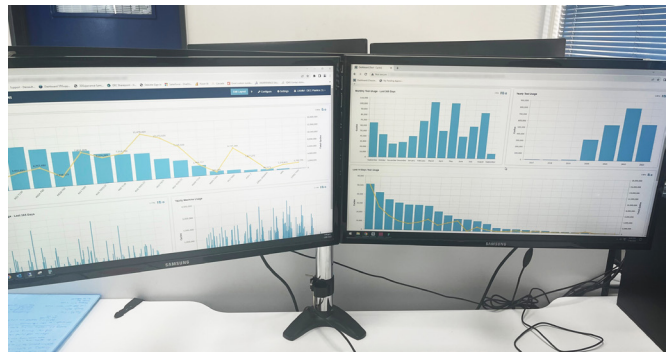
BETTER UNDERSTANDING OF COSTS, VARIANCES

With the DELMIAWorks ERP implementation, DEC management can access more accurate cost and variance information on injection-molding runs, giving them the information that they need on actual costs and variances so they can make adjustments. "With the old system, the use of the BOM's [bill of materials] for ERP was limited," notes Business Analyst Liam Mckelvy. "The lack of flexibility of the old costing information associated with BOMs is an example of why we needed better visibility of our BOMs and cost structure," Webster adds.

"With the DELMIAWorks ERP system, we not only improved the accuracy of our costing information, but have also enhanced our ability to plan, forecast, and schedule production runs, and provided transparency on variances in the system, so we can address things in real time."

STREAMLINING OPERATIONS

Following the DELMIAWorks ERP implementation, DEC is in the process of streamlining its operations, both from management and operator perspectives. "The benefits of the DELMIAWorks ERP system are substantial," Webster stresses. "Before, we couldn't access all of the information that we needed to generate reports that would help us make decisions that would help streamline our operations.

"Using DELMIAWorks, we can generate a significant amount of reports," Webster continues. "We can push

By providing real-time access to all injection-molding production, financial, and operational data, the DELMIAWorks ERP system helps DEC Pharmaceutical management gain a better understanding of costs and variances, enabling the company to streamline operations in the process.

out profit and loss reports, variance reports, goods received on inventory reports, and DELMIAWorks has also given us the ability to ascertain and monitor efficiency levels within the factory. We simply can now access accurate information from the system and use it to streamline operations and expand our product portfolio. We really couldn't grow with the old redundant systems, but are now positioned to take those steps with DELMIAWorks ERP."

ACCURATE DATA LEADS TO EASIER REGULATORY COMPLIANCE

With the more accurate operational data provided by the DELMIAWorks ERP system, DEC will be able to more easily comply with the myriad of differing governmental regulatory requirements for healthcare products and medical devices around the world moving forward. "In addition to helping us get leaner in our operations so we can grow, DELMIAWorks ERP will help us modernize other aspects of our business in the future." Webster points out.

"While regulations that govern our products vary from country to country, the one thing they have in common is being able to track a product's development from beginning to end and additional quality control requirements," Webster says. "With DELMIAWorks ERP, complying with these requirements will be easier in the future as we begin to utilize all of the functionality and capability of the system. We anticipate that this will in the future enable us to more easily access the information required for compliance. It will facilitate the information being readily accessible and at our finger tips."

DEC Pharmaceutical
558 Te Rapa Road
Te Rapa, Hamilton 3200
New Zealand
Phone: +64 7 958 8500

For more information:
www.decnz.com

VAR: DMO Solutions, Silverdale, New Zealand

Our 3DEXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3DEXPERIENCE** Company, is a catalyst for human progress. We provide business and people with collaborative virtual environments to imagine sustainable innovations. By creating virtual twin experiences of the real world with our **3DEXPERIENCE** platform and applications, our customers can redefine the creation, production and life-cycle-management processes of their offer and thus have a meaningful impact to make the world more sustainable. The beauty of the Experience Economy is that it is a human-centered economy for the benefit of all –consumers, patients and citizens. Dassault Systèmes brings value to more than 300,000 customers of all sizes, in all industries, in more than 150 countries. For more information, visit **www.3ds.com**.

3DEXPERIENCE®

Europe/Middle East/Africa	Asia-Pacific	Americas
Dassault Systèmes	Dassault Systèmes K.K.	Dassault Systèmes
10, rue Marcel Dassault	ThinkPark Tower	175 Wyman Street
CS 40501	2-1-1 Osaki, Shinagawa-ku,	Waltham, Massachusetts
78946 Vélizy-Villacoublay Cedex	Tokyo 141-6020	02451-1223
France	Japan	USA

DASSAULT SYSTEMES | The **3D**EXPERIENCE® Company