

# FEFC Improves Manufacturing Efficiency & Quality



## 7 TO 0 DAYS

change in data  
download time

## 3 DAYS

ML results, down from  
3 months

## 6 MOS. TO 1

complete data builds

### Challenge

---

Part of the Far Eastern Group based in Taiwan, Far Eastern Fibertech Co., Ltd. (FEFC) struggled with inaccessible data stored in many discrete systems. Most of its operating data was in an SAP ERP system and centrally managed by another subsidiary in the Group. Employees could only get access to this data online or via export to Microsoft Excel; Data could not be further processed, analyzed, or integrated with other manufacturing system information. Decision-makers couldn't get a good grasp of operating and financial status. The company needed all its data to be consolidated and more readily accessible.

Additionally, each subsidiary in the Group had other data distributed across various management systems outside of SAP. Each week, significant resources were needed to export and organize the data, which delayed time-sensitive insights.

But data management wasn't the only challenge. The Group itself also wanted to align with the vision of the Smart Factory and use data analytics to track performance. With the rise of Industry 4.0, the Far East Group of subsidiaries wanted to use data analytics to improve production line efficiency and product quality.

### Transformation

---

FEFC staff realized they needed a data virtualization platform to import and combine data sources and generate relevant views for various users. They chose TIBCO Data Virtualization software to provide a complete virtual view of data from the ERP and other systems. The data virtualization platform now allows users to immediately obtain needed information; static Excel data is a thing of the past.

## FEFC

Far Eastern Fibertech Company Limited (FEFC) is a subsidiary of the Far Eastern Group. The company uses the most advanced technologies and equipment to produce and sell nylon 6.6 fiber products with high functionality, comfort, and added value for a wide range of high-end applications within the apparel industry.

After unifying its data, FEFC used other solutions in the TIBCO Connected Intelligence portfolio — TIBCO Spotfire, TIBCO Streaming, and TIBCO Data Science software — to derive greater insight from unified information.

Spotfire predictive analytics is used to study manufacturing variables, detect patterns in data, and improve product quality by taking action before degradation occurs. Using machine learning (ML), engineers can predict power consumption and make adjustments as needed. According to the results of a proof of concept, Spotfire and TIBCO Data Science software helped FEFC engineers accelerate ML results from three months to three days.

Additionally, the company automated generation of operational reports using Spotfire dashboards, improving efficiency and reducing cost. Compared to a week needed to download raw data and create a manual report, Spotfire reports are just a click away.

To better align with smart factory capabilities, FEFC implemented IoT sensors on all its production equipment. It is planning to use Spotfire and TIBCO Streaming software to monitor the data and provide alerts when measurements exceed predetermined thresholds, allowing operators to investigate and attend to matters before they turn into problems.

## Benefits

Since implementing the TIBCO Connected Intelligence platform, Far Eastern Group reports improvements in several processes: financial, cross-department workflow, power distribution, and manufacturing.

The Group can mine and analyze data through a highly interactive interface to generate more productive business charts and engineering analysis diagrams. With more accurate analyses provided with significantly reduced wait times, the Group is much more efficient. It increased visibility into information from suppliers and partners; enhanced productivity with regular reporting; improved timely communication; and advanced quality control of each product line.

According to Norman Lin, senior vice president and chief data officer at FEFC, “The ubiquitous data and unlimited connection through TIBCO empowers Far Eastern’s agile development.”

FEFC plans to further invest in smart factory technologies and expand use of machine learning and real-time data analytics. FEFC is looking to use TIBCO Data Science and TIBCO Streaming to further improve manufacturing efficiency and ultimately reach the group’s goal of Industry 4.0 leadership in Taiwan and beyond.

**What can TIBCO make possible for you? Talk to an expert today at [tibco.com/contact-us/sales](https://tibco.com/contact-us/sales)**



**Global Headquarters**  
 3307 Hillview Avenue  
 Palo Alto, CA 94304  
 +1 650-846-1000 TEL  
 +1 800-420-8450  
 +1 650-846-1005 FAX  
[www.tibco.com](http://www.tibco.com)

TIBCO Software Inc. unlocks the potential of real-time data for making faster, smarter decisions. Our Connected Intelligence platform seamlessly connects any application or data source; intelligently unifies data for greater access, trust, and control; and confidently predicts outcomes in real time and at scale. Learn how solutions to our customers’ most critical business challenges are made possible by TIBCO at [www.tibco.com](http://www.tibco.com).

©2021, TIBCO Software Inc. All rights reserved. TIBCO, the TIBCO logo, and Spotfire are trademarks or registered trademarks of TIBCO Software Inc. or its subsidiaries in the United States and/or other countries. All other product and company names and marks in this document are the property of their respective owners and mentioned for identification purposes only.  
 06Aug2021