

SUCCESS STORY

VFD ENHANCES EFFICIENCY IN BOTTLING LINE

INFORMATION

Industry

Food and Beverage

Application

Bottling Line

Product

Yaskawa GA500 Series VFD



Yaskawa GA500 Series VFD
increasing efficiency for bottling line.

COMPANY HIGHLIGHTS

A leading beverage producer faced a critical challenge in their bottling line operation. With multiple palletizers responsible for stacking bottles and preparing them for distribution, any downtime in these machines could halt production entirely, leading to significant financial losses. Understanding the importance of reliable production, the company sought to modernize their outdated drives to avoid disruptions and improve efficiency.

THE VFD APPLICATION

The palletizers were originally equipped with non-Yaskawa micro drives, which had become obsolete. These drives played a key role in the overall operation, and their integration with the Programmable Logic Controller (PLC) was critical for the seamless functioning of the bottling line. With the demand for greater reliability and longevity, the company needed to find a modern Variable Frequency Drive (VFD) solution that could integrate easily with their existing PLC systems, while also benefiting from advancements in networking and control technologies.

APPLICATION CHALLENGES

The desire to find the best drive for their application brought forward concerns that drives from another manufacturer might not integrate properly with their existing PLC setup. In addition, the customer wanted to leverage modern network topologies to reduce wiring complexity and installation costs; a process that could risk costly downtime if the proper practices were not followed. The drive upgrade project also had to be completed during night shifts to minimize downtime, as the palletizers were an integral part of the production process.

THE YASKAWA SOLUTION

Yaskawa's regional drive specialists, together with the local distributor, held a session to introduce the benefits of Yaskawa's **GA500 VFD**. The session focused on the drive's ease of programming, extended longevity, and robust networking capabilities. The company was particularly impressed by the **GA500's** ability to work with Ethernet/IP protocols using the SI-EN3 dual port ethernet card. Having two ethernet ports on each drive allowed the drives to be installed in a linear (daisy chain) network topology, which would save cable and installation cost.

SUCCESS STORY

VFD ENHANCES EFFICIENCY IN BOTTLING LINE



CONTACT YASKAWA

Yaskawa America, Inc.

Drives & Motion Division
2121 Norman Drive S
Waukegan, IL 60085, U.S.A.
+1-800-YASKAWA (927-5292)
www.yaskawa.com
Email: info@yaskawa.com

More GA500 Series VFD information:

<https://www.yaskawa.com/ga500>



Find a Yaskawa representative:

<https://www.yaskawa.com/support-training/support/sales-search>



The GA500 VFD was chosen for the project. Commissioning was performed within the scheduled downtime thanks to Yaskawa's world class 24/7 support. Guidance involving proper grounding, bonding, and cable routing, along with rapid resolution of communication faults kept the project on schedule.

The company appreciated the seamless integration of the GA500 with their non-Yaskawa PLC, as well as the cost-saving benefits of the streamlined Ethernet architecture. The GA500 is providing the customer with reliable performance, data feedback, and improved machine control, making it the optimal solution for the company's bottling line.

KEY GA500 FEATURES

The Yaskawa GA500 Series VFD brings a set of notable advantages:

- Standard control inputs which include seven digital, two analog, two safe torque off, and one pulse input
- The Overvoltage Suppression feature eliminates typical VFD faults related to the excess energy of overhauling loads
- Stall Prevention & Torque Limit features to manage motor current and limit machine stress to acceptable levels
- Capable of controlling various motor types, including induction, permanent magnet (both SPM & IPM), and synchronous reluctance motors
- Alternate acceleration and deceleration times along with s-curves to tailor speed changes and reduce shock loading during acceleration
- Standard monitor outputs include three digital, one analog, one pulse, and a 24 Vdc supply
- The GA500 Series VFD allows programming without connecting main power by use of the DriveWizard Mobile application. Simply plug into one of your PC's USB ports or any USB on-the-go device and start programming
- Yaskawa's award-winning 24-hour technical support department is free of charge

Contact Yaskawa today to learn more about how you can use Yaskawa AC drives to perfect your food and beverage industry applications!