COOL& CONTROLL

MAINTAINING PROPER OPERATING ENVIRONMENTS



YASKAWA SUCCESS STORIES

In semiconductor manufacturing, every second counts—and even a moment of downtime can cost millions. To protect the performance of critical pumps and fans, a leading chipmaker needed deeper visibility into its variable frequency drives (VFDs). The goal: prevent disruptions, safeguard production, and keep high-value wafers moving without interruption.

Product GA800 Series VFD

Industry Semiconductor & Electronic Assembly

Application Semiconductor Production

CHALLENGE

The customer needed a faster, more reliable way to diagnose issues when faults occurred. While their existing GA800 VFDs already captured key fault data, they needed deeper diagnostics. Specifically, they wanted access to data leading up to a fault. Information that could enhance root cause analysis, speed up troubleshooting, and reduce downtime risk.

SOLUTION

The GA800 offers the option to insert a microSD card (up to 32GB) into the keypad module, enabling advanced data logging and trending capabilities. This includes Short, Medium-Mixed, and Extended Trending Logs, with configurable settings to capture data before and after a trigger or fault.

To gain deeper diagnostic insight, the customer configured a high-sample-rate short-term log to capture detailed conditions leading up to each fault. They also set up a long-term, lower-sample-rate log to track broader system behavior. All data could be exported for analysis using Yaskawa DriveWizard® or third-party software, giving the team a clear view of both immediate and long-term fault trends.

COMPANY HIGHLIGHTS

A leading semiconductor fabrication facility in Texas, known for its cutting-edge fabrication techniques, is committed to minimizing downtime and material waste. To meet strict operational standards and avoid costly disruptions, the facility relies on highly dependable technology.

IT'S PERSONAL





By configuring a Medium-Mixed Trending Log to capture 90% of data before a fault and 10% after, the customer was able to pinpoint process instabilities leading to system disruptions. This insight enabled proactive adjustments that helped eliminate downtime events and improve overall system reliability.



KEY GASOO FEATURES

- Standard control inputs which include eight digital, three analog, two safe torque off, and one pulse
- Standard monitor outputs include four digital, two analog, one pulse, and a 24 Vdc supply
- A high-resolution keypad equipped with a real-time clock, copy and backup functions, and microSD storage for fault history storage
- Normal Duty and Heavy Duty ratings for use in variable torque and constant torque motor applications
- Capable of controlling various motor types, including induction, permanent magnet (both SPM & IPM), and synchronous reluctance motors
- Global certifications such as UL, CSA, CE, TÜV, EAC, RCM, KCC
- Yaskawa's award-winning 24-hour technical support, free of charge

Looking to optimize chip making processes? Contact Yaskawa today.





For more information on the GA800 Series VFD visit: www.yaskawa.com/GA800



