APPLICATION NOTE

CAS DATALOGGERS

# Optimizing Commercial Dishwashers in a Busy Catering Kitchen

## Multi-Value Data Logger Helps Streamline the Business

A busy catering kitchen required an intelligent system to monitor the operation of their commercial dishwashers. Their goal was to determine optimum wash times in order to have their kitchenware ready for re-use, and also for identifying when any dishwashers in the 'dishwashing lane' were malfunctioning. Management hoped that getting a detailed view of the process would benefit their business in the form of faster response times and higher service volume. An automated, electronic log of the wash cycle also satisfied HACCP dishwasher temperature food safety requirements.

To collect useful data, their maintenance technician needed a device compatible with many different sensors (both analog and digital) to acquire different types of data at high speed. Alarm capability is also a must for this unique temperature monitoring application.

**Sensor Apparatus:**

- RTD temperature sensors (PT100)
- 4-20mA converters
- Product counters
- Digital sensors
- Flow meters


## Multi-Value Collection

The catering business needed to record several measurement values, including temperatures during the different washing cycles (washing, rinsing, and drying) in their commercial dishwashers. In addition to this, they wanted to record the resources used during the operation, including the amount of water, cleaning product, and rinsing and drying times. As part of this, it was also necessary to survey the cleaning arm's speed along with the total cleaning time.

As a flexible solution, the caterer sourced 2 dataTaker DT85 Intelligent Data Loggers from CAS DataLoggers for this machine monitoring application. Connected to the dataloggers were signals from a wide range of sensors, including a quantity of PT100 temperature sensors with 4-20mA converters, product counters, flow meters, and a number of digital sensors and other performance indicators in the machines. This is made possible by each logger's universal inputs which can accept nearly any analog sensor, so the DT85 can simultaneously function as a thermocouple logger, an RTD logger, etc. as needed.

The client required that an alarm be triggered whenever any of their five dishwashers in the lane suddenly malfunctioned. To determine this, the technician programmed alarms into the dataTaker DT85s based on data provided by management to identify measurement variance from the expected timing and parameters.

Using the supplied dataTaker dEX Software, the client can view the status of every dishwashing machine from their PC and also chart the different operational temperatures. In this way, the dataTaker systems function as both data collectors and temperature monitoring systems.

## Benefits

Using the intelligent dataTaker DT85 data loggers, the technician was able to optimize the kitchen's dishwasher lane by logging multiple measurement values at once. This machine monitoring application involves many different sensor types, all of which connect to the dataTakers via their universal inputs.

Viewing this data using the included software, along with alarm monitoring via PC, helped to streamline their catering operations and to reduce dishwasher downtime.

To see our new video on the dataTaker DT85, click here.

For more info on the dataTaker DT85 Data Logger, optimizing commercial dishwashers or to find the ideal solution for your application-specific needs, contact a CAS DataLogger Application Specialist at **(800) 956-4437** or www.DataLoggerInc.com.