

## **APPLICATION SOLUTIONS**

**Title: Potato Chip Manufacturer** 

Product(s): IAMS0011, PGMMOD00

Food processing can be a complex application for industrial equipment. Most controls are installed in a watertight cabinet that will allow high-pressure wash downs and clean up required by the FDA.

A potato chip manufacturer wants to monitor the temperature of the oil in the fryers. The application requires a high and low alarm output to monitor the oil temperature. To successfully make the potato chips, the oil must be within a certain operating temperature range. The oil temperature is measured with a J-Type thermocouple.

The IAMS is the right choice. The signal conditioner can be mounted in the watertight cabinet and provide setpoint control needed for this application. Since there are a number of similar machine set-ups at the same facility, the detachable programming module (PGMMOD00) can be used to program the other units. The programming module can store the program, which can then be easily downloaded to the other IAMS units.

## Title: Transformer Manufacturer

Product(s): IAMS0010, PGMMOD00

Needing an easy test step-up to check transformers, a transformer manufacturer chose the IAMS. After the winding of the transformers, a simple go-no-go test needs to be performed to ensure that the proper amount of windings has been made. The test measured the resistance of the windings and sent the signal to the IAMS.

The IAMS0010 setpoint model was used allowing the two setpoints to establish an upper and lower limit of resistance, which represents the number of windings. The PGMMOD00 was used to program the IAMS and then removed during normal operation, so no unwanted changes could be made to the signal conditioner.

## Title: Signal Conditioner Pumping Station Product(s): IAMS0001, PGMMOD00

A pumping station needs to control a pump. The station has a flow transmitter that offers a 0-10 VDC output. The problem is the higher the flow, the less the pump has to operate. Therefore, the signal needs to be reversed to deliver a 10 volt signal when the flow transmitter is at 0 volts and 0 volt signal when the transmitter is at 10 volts. This can easily be accomplished with the use of the IAMS0001 signal conditioner. The IAMS can provide an isolated retransmission of the signal, allowing it to be reversed just as the application requires. Further, the detachable programming module (PGMMOD00) can be left attached to provide an indication display when the unit is not in the programming mode.