

case history

Market: Sugar and Confectionery Products

CUSTOMER

Godiva Chocolatier's manufacturing plant in Reading, Penn.

PROBLEM

The facility previously made its chocolate products by using a manual, push-button batching method. Operators would respond to digital readouts and push buttons to control the flow of liquid sugars batched into product recipes. The facility wanted to upgrade this outdated method in order to improve product quality.

APPLICATION

First, in 1983 the facility installed Kistler-Morse Load Blocks on 12 jacketed storage tanks, each of them holding liquid chocolate maintained at a temperature of 110 degrees Fahrenheit. The carbon steel tanks ranged in size from 3,000 to 50,000 lbs. in capacity.

Next, Load Discs and Kistler-Morse Programmable Batch Controllers were installed on a small mixing tank (in 1988) and a large melder tank (in 1990). The 300-lb. stainless steel mixing tank is located in a wash-down area. This tank mixes together three forms of liquid sugar: high fructose, fructose corn syrup and another sugar, then is cooked. The larger 30,000-lb. melder tank typically blends together liquid chocolate and solid chocolate with an agitator, and is usually kept at 130 degrees Fahrenheit.

BENEFIT

According to Mike Dower, Maintenance Manager at the Godiva plant, the plant has greatly improved batching accuracy. Batched weights on the small mixing tank are usually accurate within one pound; batched weights on the large melder tank are accurate within ten pounds. "They work excellent," Dower says, "We're very pleased with those."

CONCLUSION

The Load Discs and batch controllers have improved product quality on the small mixing and large melder tanks. "After installation of the load cells and batchers, we saw a noticeable improvement there in product consistency," Dower says. He added that Kistler-Morse provides good post-sale service. "We installed quite few of the units ourselves, and one of the problems we ran into is that they weren't properly installed at first," Dower says. "They were more than willing to come out here and help us correct the problem."