



The KEY to Reducing Milk Loss Data Logging

Accurate Metering Systems, Inc.

Accurate Metering Systems (AMS) was organized in 1975 to provide accurate and sanitary flow meters and flow metering systems to the food, dairy, beverage and pharmaceutical industries in an effort to provide more value than alternate methods of measurement.



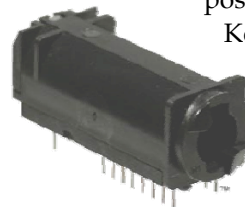
Pin-point Accuracy and Efficiency

"The truck-mounted systems in Europe are very well developed and very sophisticated in terms of not only their capability, but their ability to store and manage data," says Bill Ramond, Director of Operations, AMS. Most American farmers were still depending on calibrated dip sticks to measure the volume of milk stored in refrigerated tanks that can vary in size from 500 to 3,500 gallons. Ramond says another efficiency problem is the way mandatory sampling is handled under traditional collection systems. Before a sample can be taken, milk in a huge tank must be agitated for five minutes to reintegrate its component parts (cream and whey). *"So, there's at least five minutes of standing around,"* he says. Like their European counterparts, AMS wanted to:

- make sampling more efficient
- make measurements more accurate
- reduce milk loss

The Solution is KEY

To deal with the milk sampling problem, AMS developed an in-line sampling device as an addition to its flow-metering device. *"It takes very, very small increments of the milk as it's passing by during collection,"* says Ramond. *"The sum total of all increments equally spaced throughout the entire transfer is a true representation of all the milk that's in the tank."* In addition, no time is wasted



waiting for milk to be agitated. AMS developed DataLogger, an on-truck computer with PC card memory, a small fluorescent screen, and a numeric, input-only keyboard. For the data capture component of its DataLogger, AMS turned to Datakey Electronics. AMS chose a serial read/write memory Key. Out in the field, all alpha input is entered into the DataLogger with Datakey Electronics Keys. This saves space on the truck and also eliminates data entry for the driver. *"When it's 20 below zero, no driver in his right mind is going to be standing out there tapping a lot of information into the DataLogger,"* says Ramond. The system prints receipts, for both the driver and the farmer, listing the information input by the Key and the information captured by the flow meter sensors: volumetric data, time, temperature, and quantity.

Fully Engineered

The Key inserts into a high-cycle (200,000 insertions minimum) mating Keyceptacle[®]. Datakey Electronics' KC4210PCB Keyceptacle provides intuitive operation, positive Key retention and an ergonomic "click" into position to offer tactile confirmation when a Key is inserted and turned. There is also a LOFO contact that may be used to protect the host bus by ensuring the Key has made secure contact with the Receptacle before any signals are transmitted.

Over, please...





AMS, cont.

They Chose Datakey Electronics

By choosing Datakey Electronics, AMS was able to procure a proven, off-the-shelf product that enhanced their system's usefulness by providing convenient storage recording data. Additional features that make the Key well-suited for this application are its ruggedness and ability to tolerate the harsh outdoor and farm environments.



www.datakey.com ■ 800-328-8828 ■ 952-746-4066

