

CUSTOM ENGINEERING LEVEL III

COMPLETE SYSTEMS ENGINEERING

An Apple a Day...

A CASE IN POINT

A customer is designing a system for storing apples. Apples are very abundant during the summer, but during the cold weather seasons the fruit must be imported. Using a large warehouse, the user wants to store apples during the off season, keeping them fresh for distribution year round.

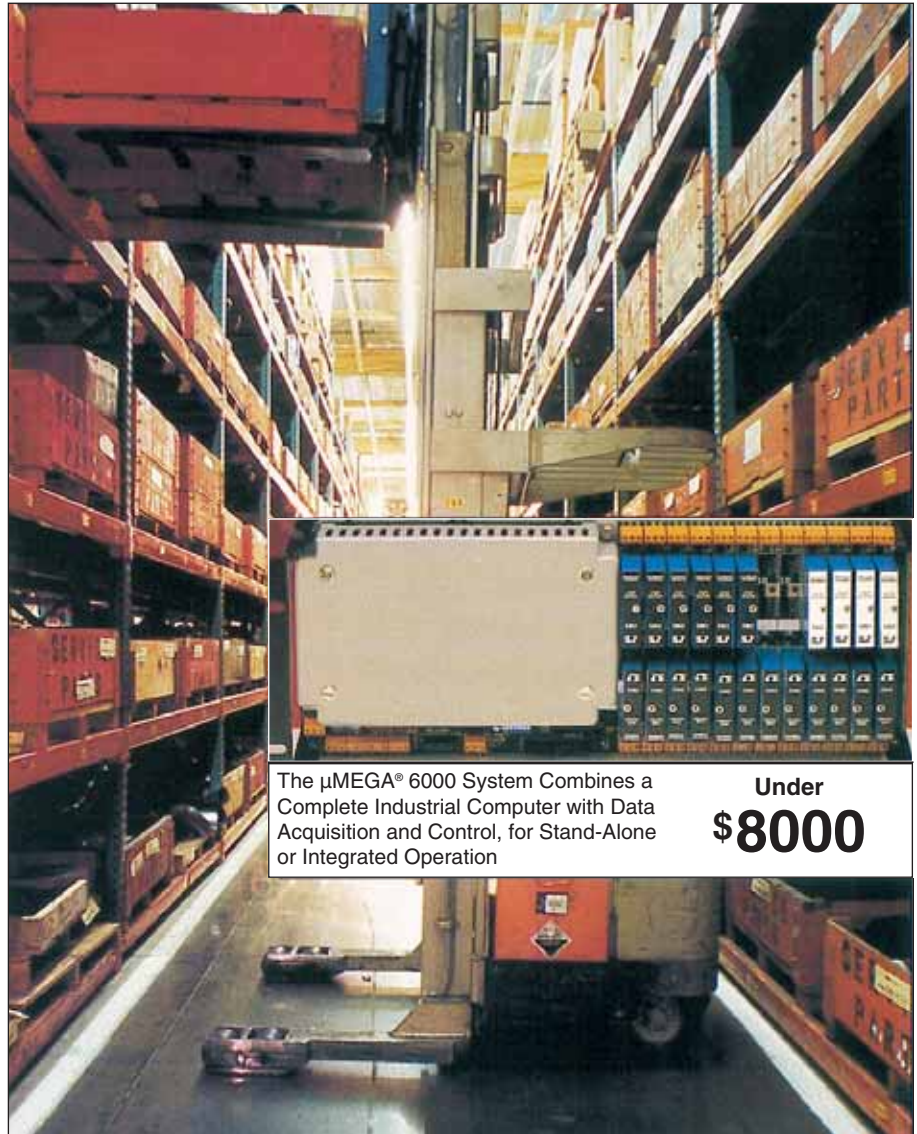
PROBLEM

This situation provides many challenges. The apples must be kept fresh in the warehouse, thus requiring temperature control. Oxygen must also be purged from the environment to prevent spoilage. Lastly, apples should be removed for distribution on a first-in, first-out basis. The entire warehouse operation should be completely automated, with an automated crane selecting the proper crates of apples to be distributed.

OMEGA® SOLUTION

As the apples are needed, a crane located in the warehouse picks up each crate and loads it into a purge chamber to be removed from the warehouse. The crane is controlled by a pair of μMEGA® 6000's from OMEGA®. The μMEGA® 6000 features stand-alone capability, based on a 16-bit microprocessor. Individual channels can be configured for any combination of inputs and outputs. Signal conditioning modules are chosen for thermocouple and RTD temperature sensor input, and for analogue outputs to drive and position the crane.

Customer ordered 40 Type T thermocouples and 35 air probe RTD's in addition to the μMEGA® 6000 system. Total cost: under \$8000.



The μMEGA® 6000 System Combines a Complete Industrial Computer with Data Acquisition and Control, for Stand-Alone or Integrated Operation

Under
\$8000

Other System Components...

OMEGA PROVIDES COMPLETE SYSTEMS ENGINEERING

- ✔ We Can Engineer Any System to Your Needs (Simple to Sophisticated)
- ✔ One Source (from Sensors to Instrumentation) Ensures Complete Systems Integration
- ✔ Easy-to-Use Software



Combined Pressure, Temperature and Flow Metering System

\$3400



Eighty-Eight Various Sensor Inputs Are Measured in This Self-Contained System Enclosure

\$2900