

### Examples of Industries Served

- Centrifuge Manufacturers
- Pellet Mill Manufacturers
- Heavy Machine Manufacturers
- Irrigation Equipment Manufacturers
- Tool and Die Manufacturers
- Food Service Companies
- Medical Equipment Manufacturers
- Medical Researchers



# Case Study

### Opportunity:

A customer needed a way to confirm if a part actually had been welded before the part continued to the next stage of assembly. This welding check would be critical because sending a non-welded part further down the assembly line would result in the final customer receiving a faulty part. The company wanted to ensure that the product it created and sold would be of excellent quality. Controlled Motion Dynamics was contacted to design a solution.

### Solution:

Controlled Motion Dynamics designed a "check station" that would monitor the welding status of the parts as they passed by on the existing conveyor. The temperature of the part revealed whether or not the part had been welded-- if the part was not above room temperature then the part had not been welded. The Controlled Motion Dynamics check station used a non-contact temperature sensor to check the part's temperature.



Controlled Motion Dynamics utilized a small Allen Bradley PLC with operator interface to read the sensor input and decide whether or not the part had been welded. If the part had not been welded, a Humphrey air cylinder removed the part from the conveyor line. The use of the operator interface for this Controlled Motion Dynamics solution allowed for easy setting access in the field without the use of a programming PC.



The solution to the customer's problem was managed by Controlled Motion Dynamics check station design.