

Pipe Strength Testing uses RMCLink, LabVIEW & Delta Motion Control Sine Move

At a Glance

- **Project:** Pipe Strength Testing uses LabVIEW, RMCLink and Motion Control
- **Company:** Advanced Machine Automation, Inc.
- **Location:** Birmingham, Alabama
- **Challenge:** To provide their customer with a motion control solution for testing industrial pipe and interface with engineering software.
- **Solution:** Delta RMC70 motion controller sine commands with RMCLink software
- **Benefits:** Best of Class products working together met the customer's objectives.

“Actual data transfer using simple read and write commands allowed the application to transmit data values seamlessly to the motion controller.” –Jason Woyak, AMA Engineer

Summary:

Advanced Machine Automation (AMA) desired to control the motion of a customer's industrial application used for testing the strength of large industrial pipe for the Oil and Gas Industry.

Challenge:

This project required AMA to design a system that bends the top of the pipe to a given degree while simultaneously pulling on the bottom of the pipe. Along with controlling the motion, AMA needed to design and implement an easy to install and reliable user interface and data capture system. The customer wanted to use NI's LabVIEW graphical development software package so that engineers can rapidly and cost-effectively interface with measurement and control hardware, analyze data, share results, and distribute systems.

Solution:

Delta Computer System's motion controllers were ideal for the pipe bending motion. AMA engineers used the RMC's Sine Move command and directly communicated using RMCLink software over Ethernet for LabView and ActiveX applications that run on PCs. The RMCLink COM component interface allows the RMC70 to function as a LabVIEW virtual instrument (VI) component.

Benefits:

AMA was able to quickly meet the customer's objectives. AMA delivered an innovative solution to the productivity challenge; increased their customer's rate of efficiency; reduced their customer's downtime and increased their profitability.

