



Advanced Motion Systems, INC.

Application Story: “No moving parts” saves customer over \$150,000

Problem: High rate of failure with Laser Scanners on Vibration Welder

A manufacturer using raster scanners on their vibration welding equipment continually had to replace their laser scanners due to mechanical failures. There were 2 common failures; internally the readers rotating mirror mechanisms were fatiguing and failing due to the machine vibration. In addition, external failures were occurring as operators would accidentally bump the readers, cracking the glass viewing panes.

The customer was grappling with repeated downtime and lost production, in addition to the over \$150,000 in replacement costs each year.

Solution: Cognex DataMan [100 & 200 ID Readers](#)

With DataMan image-based ID readers there were no moving parts. This removed the largest weakness in the laser scanners, virtually eliminating the need for replacements due to internal causes. Externally the DataMan products utilize an industrial hardened plastic lens material which made it less susceptible to damage from accidental bumping.



Additionally the various industrial protocol options available with the DataMan readers made it easy to integrate into the factory floor.

DataMan Key Features:

- No moving parts to malfunction or break down with use
- Choice of Industrial Protocols: RS232, EtherNet/IP, PROFINET, USB, Ethernet and Add on profile for Control Logix
- Simplified setup with a single touch
- Rugged – resistant to shock, vibration and wear
- Expanded reading capability with exceptional depth of field and field of view range
- Available with industry leading 1DMax and 2DMax reading tools