

Accurate Documentation of Instrument Calibration Saves Time and Money on Construction Projects



RESULTS

- \$50,000 saved by cost avoidance during new instrument calibration
- 50% fewer technician hours required for calibration
- 100% acceptance of calibration documents on 1,200 field devices



APPLICATION

General, heavy industrial contractor

CUSTOMER

TIC, The Industrial Company – headquartered in Steamboat Springs, Colorado.

The company provides industrial construction services to a diverse client base across the U.S. through nine regional operations. TIC typically self-performs and direct hires the majority of the disciplines on its projects, and as such is thoroughly familiar with the requirements of commissioning and starting up control system instrumentation.

CHALLENGE

Checking out hundreds of newly arrived instruments and calibrating them prior to installation is largely a manual job, and documenting those activities is fraught with potential problems. If the documents become illegible or lost or the data itself is not secure, the calibration must be redone. Time is lost, and significant costs are incurred due to the additional labor required. Additional personnel may also be needed to collect, review, edit, and organize turnover documentation to be certain that the calibrations have been done correctly and that all documentation is complete and accurate prior to presentation to the owner. The extra work may even lead to missed milestones or completion dates.

At the Front Range Power Project more than 1200 field devices in a 480 MW power station had to be documented before the newly constructed plant could be turned over to the owner.

“Without question, fewer technician hours were required to complete all calibration activities, and labor for preparation of the turnover package was reduced substantially. Finally, the turnover package was completed on the first pass, and no rework was requested by the owner.”

Jim Mitchem,
Technology Manager, TIC



For more information:
www.assetweb.com



SOLUTION

Engineers at TIC had been evaluating calibration management systems for years looking for a more effective means of documenting essential instrumentation. Although not looking for a predictive maintenance system, the AMS™ Suite: Intelligent Device Manager fit their needs perfectly because it is capable of providing device data and calibration parameters for all commonly used field instruments.

The AMS Device Manager also stores the data required for calibration of any given instrument. Downloading this data to a Fluke 744 or similar calibrator is fast and certain, since it is not necessary for the technician to painstakingly enter the information into the calibrator through its keypad. Each instrument is then calibrated on the bench using established procedures, and the results are uploaded to the database. This data transfer is fast, easy to accomplish, and free of written errors that might be made by a weary technician at the end of a long day.

Calibration results for each instrument are automatically archived, providing the basis for documentation. No handwritten notes or reports are needed. If the calibration history of any field device is wanted later, it is immediately available on a PC monitor for review or printout. At the Front Range Power Project, the instrument database was updated throughout the commissioning and startup activities. At the appropriate time, the data was retrieved, transferred over for editing, and printed out for inclusion in the turnover package. That was it!

TIC has elected to use of the AMS Device Manager for instrument calibration on three more large construction projects, largely because the favorable results from the Front Range Power Station.

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AMS Suite: Intelligent Device Manager powers PlantWeb through predictive and proactive maintenance of intelligent field devices to improve availability and performance.

