

Quality Certification Issues:

Inspector Qualifications

by William G. Ashton



Does AISC Quality Certification require you to have independent inspectors checking work in your shop? Are you prohibited from letting your fitter or welder check his own work? Does separation of production from quality control make sense in small shops that have been in business for a long time? What do we really get from a forced separation of production and quality control? Are we promoting a team effort?

As the certification program becomes more demanding, we are finding that either we may have to be more creative in order to provide the amount of inspection required, or AISC will have to re-think what they really want from certification.

In our shop, we have four superintendents supervising about 110 production workers. Among the production workers 21 are working leadermen. Each working leaderman runs a crew that has between two and seven workers doing a common task—like girder fabrication, beam and processing line, blasting and painting, parts preparation, etc. The leaderman may be fitting, welding or doing whatever task he determines to be most helpful in making his crew more efficient, in addition to doing the final inspection on his crew's work. At the final inspection, leadermen check quanti-

ties, dimensions and weld quality. They check that the correct welding procedures have been used and that heat numbers have been recorded correctly. They check blast profile, record ambient and surface temperatures, humidity and paint film thickness. When they are satisfied with the work, they sign off on the shop print, meaning our fabrication process does not have any “stop and inspect” points. Instead, our quality department performs quality assurance by spot-checking and monitoring the leadermen. All discrepancies are red tagged and recorded on a spreadsheet, which plant management periodically reviews. Trends are noted and corrective action is taken. The underlying focus is for the leadermen to take ownership of the quality of their work. They do not rely on the QC department to find their mistakes.

In recent years, the higher quality and more demanding certification program has caused the auditors to question our leadermen's qualifications to be inspectors. We were told that our leaderman were lacking some of the requirements to be qualified inspectors for AISC Quality Certification. Although they had a lot of experience by having done every task on their crew, we did not have any documented formal training and we did not give them annual eye

exams, a requirement from AWS. We took care of both of these problems in short order. Our Manager of Quality started to hold quarterly “tool box” sessions with the leaderman on how to inspect work, and we documented the meetings. We contracted with our local business health center and were able to get annual eye exams done for \$25 per leaderman. (Interestingly enough, the first test revealed 7 leadermen that could not pass the simple test, which is the same as required for a South Dakota driver's license.)

In the end, we were able to have our production workers doing their own quality control. We eliminated preset fabrication “hold points” and allowed the leaderman to cross these points by inspecting their own work and initialing and dating their shop drawings. Our goal is to produce a quality product without any assistance from outside to production department. Although QC can stop work at any time, they do not have to sign off at stop points in fabrication. Our Manager of Quality and his assistants do Quality Assurance, not Quality Control.

William G. Ashton is Vice President/Production with Egger Steel Company, Sioux Falls, SD.