

# Q U A L I T Y   C E R T I F I C A T I O N & C O N T R O L

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**O**ver the years, I have been involved in a number of certification audits in different shops located in Illinois, Indiana and Texas. Although these were all Major Steel Bridge certified facilities, I observed different administrative and quality control managers attempting in their own ways to achieve the same goal, or at least what I perceive to be the goal: to make a quality product in accordance to the specifications.

In some shops, I have seen outright panic ensue in preparation for the certification audit. But in other shops, little or no preparation is needed.

The reasons for the differences in these shops were obvious, and I found the fully prepared shops had three basic and common characteristics, shown below.

## Here's a simple breakdown:

The reasons for the differences in these shops were obvious, and I found the fully prepared shops had three basic and common characteristics:

- 1** A cooperative team approach to quality
- 2** Knowledgeable, trained employees
- 3** An adequate system of inspection and documentation

To elaborate, the cooperative team effort includes support from all levels of management for the Quality Control Program, requiring a positive approach from management to comply with the specification, working together with Quality Control in communicating information to shop personnel, training and motivating personnel as needed, and working together with Quality Control to resolve quality issues. Second, the company that invests in the training of employees benefits in many ways. In addition to production efficiencies, the trained

employee benefits the working relationships within the shop and also between the shop and customer representatives. Third, inspection, monitoring and documenting have always been a part of the Quality Control procedures. But the questions remain the same: how much inspection is required, when should it be done, and who should be conducting the inspections?

The answer is that it varies from shop to shop and is dependent upon demonstrating the ability to satisfy items 1 and 2 listed above.

**QUESTION:**  
How much of the fabrication process should be inspected?

**ANSWER:**  
All of it. We are responsible for this product in its entirety, and it needs to be checked / inspected, verified, measured, and documented.

**QUESTION:**  
When or at what stages of fabrication should we begin the inspection process?

**ANSWER:**  
At the earliest opportunity. Again, we are responsible for fabricating a quality product and to insure this, we should begin the inspection process as soon as it is practical to do so.

**QUESTION:**  
Who should conduct inspections?

**ANSWER:**  
Whomever we deem capable. This will scare some authorities, but it is the best method. With proper training, motivation and supervision, the person doing the checking need not and should not be an "Inspector" in most cases. This is again totally dependent on how well the employees are trained or informed, how checks / inspections are documented, and how "quality minded" shop supervision is.

So, where does the certification program fit in? It gives fabricators a level playing field. It sets the structure for the quality control program and makes all levels of management accountable for their part of the program, with the evaluation checklist spelling out guidelines and rules for Quality Control, Operations, Administration, Procurement and Engineering.

Do we need a "separation" between Quality Control and Production? Unfortunately, the answer is yes. Not all shops are fortunate enough to always have the necessary cooperative effort between Quality Control and Management. Not all production managers would make quality the priority over a tight ship date, and Quality Control Managers may overlook the job quality requirements if they thought their job was in jeopardy. In order to do the job effectively, Quality Control must have reassurance that they have the authority to maintain their quality program without risk of losing employment.

In conclusion, the combination of more stringent requirements to obtain certification and auditors who take more of a 'hands-on' approach to the auditing system have made the Certification Program a much stronger and needed tool for today's Quality Control Manager.

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