

Planning for Success

**Creating, Implementing, and
Improving an Effective Quality
Management System**

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What's the plan?

- Who
- What
- Why
- How



Who is Quality Control?

- Quality control is the actual person or persons who are performing the inspections or verifications required by the contractor's program or code.
- Is not necessarily one person.
- May have other duties within the company.
- May be referred to as a QC Manager or QC Inspector.

Difference between *Quality Control* Inspector and *Quality Assurance* Inspector

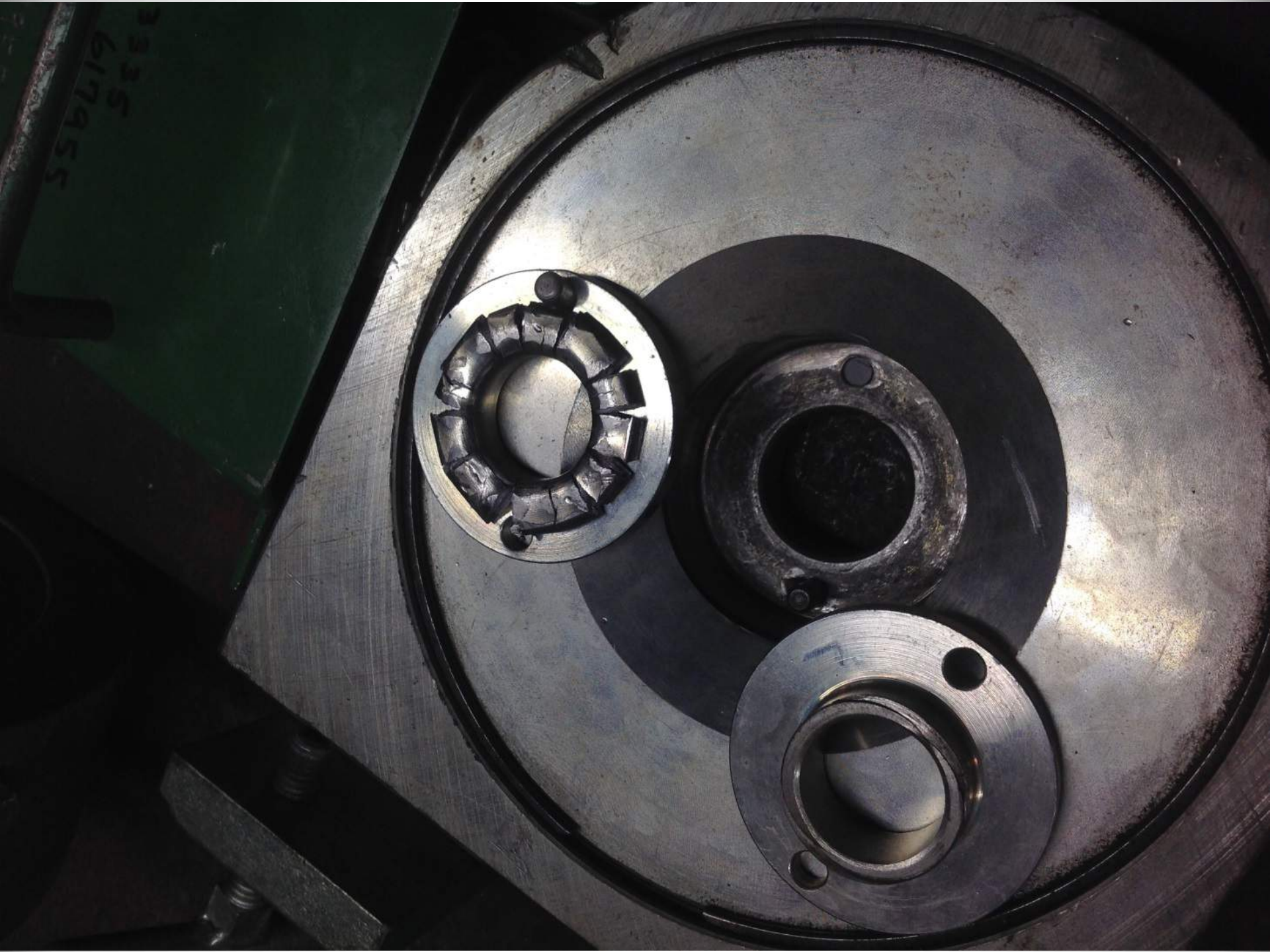
- QCI is the agent of the contractor (fabricator or erector).
- QAI is the agent generally employed by the Owner or Owner's representative to *assure* that the work purchased meets the requirements of the specific contract. Sometimes referred to as the 'third party inspector'.
- *They two different positions who often perform the same types of inspections, but for different purposes.*

What benefit does a QC Inspector Bring to a Contractor?

- Verifies to company that work is being done to code or contract requirements.
- Educates workforce in policies and procedures.
- Develops relationships with clients, owners, QA inspectors, and general contractors.
- Aids in building, maintaining, and improving Quality Management System.
- Troubleshoots.







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Requirements for QC Inspector

- “Quality Control welding inspection personnel shall be qualified to the satisfaction of the fabricator’s or erector’s QC program, as applicable, and in accordance with either of the following:
 - (a) Associate welding inspector (AWI) or higher, or
 - (b) Qualified under the provisions of AWS D1.1/D1.1M sub clause 6.1.4.
- QC bolting inspection personnel shall be qualified on the basis of documented training and experience in structural bolting inspection.”
- AISC Specification for Structural Steel Buildings, 2010 Chap. N

Suggested Additional Qualifications

- Upgrade to CWI (TAKE THE PREP COURSE!)
- Gain certification/endorsement for bolt inspection.
- Qualified in welding process(es) the company performs.
- Experience in performing the work which will be inspected.
- OSHA 30 or higher.
- Computer literate.
- An ability to communicate well with both craft and clients.
- Stay up to date on industry and code changes through periodicals, professional memberships, networking, personal research, and other means.
- Company can customize requirements based on need.

What is a 'Quality Management System'?

- A series of plans and procedures that are implemented by a contractor to assure that work is performed safely and to applicable code or specification.
- Codes may include but are not limited to publications of:
 - *AISC (American Institute of Steel Construction)*
 - *RCSC (Research Council on Structural Connections)*
 - *AWS (American Welding Society)*
 - *ICC (International Codes Council)*
 - *OSHA (Occupational Safety and Health Administration)*
 - *Individual Job Specifications and Contract Documents*

Chapter 'N'

- Drawn from the *AISC Specification for Structural Steel Buildings*.
- Provides minimum guidelines for Fabricators and Erectors QC Program
- Provides minimum requirements for submittal to EOR as well as available documents for construction.
- Qualification requirements for QC, QA, and NDT personnel.
- Minimum inspection requirements for steel construction and composite construction.
- Addresses 'Approved Fabricator or Erector' waiver.
- Addresses nonconforming work

Why Develop a Quality Program?

- By defining policies, procedures, and goals, a contractor provides a framework for jobs completed right the first time, safely, and in a fiscally responsible manner.
- Give the framework to accomplish a contractor's goals and continuous improvement.
- Demonstrates a commitment to quality and safety.
- Increases consistency of your product and minimizes mistakes.
- Improves the quality of employees.
- AISC certified erector or fabricator status satisfies eligibility for bidding on certain projects.

How do I Develop or Improve a Quality Program?

- Multiple options exist for creating new plans.
- www.aisc.org>certifications.
- Consultants are available for initiating or improving programs.
- IMPACT offers free assistance.
- Yearly audit for AISC compliance from QMC
- Annual internal review of your own program.
- Read AISC Publication 206-13. Guidelines for AISC Certification.
- Review Chapter N in the C.O.S.P.

How do I Improve an Existing Quality Program?

Ask yourself some questions:

1. Is the QC agent(s) of the company familiar with all our company's policies and procedures and *do they all make sense?*
2. Does the QC agent actively pursue issues and find solutions before they become major issues?
3. Are workers educated in policies and procedures and encouraged to bring quality and safety issues to light?
4. Does management support the position of QC?

More Information

- www.aisc.org
- Publications, articles, podcasts. Some are free, some are for sale.
- Archives of Modern Steel Construction Magazine.
- NASCC Conference, presented by AISC.
- FabTech
- SteelDay
- IMPACT offers free assistance to those seeking certification or improvement.

Questions?

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