

General Management

Overview

1. Does AISC have current application information? (Contact, address, phone, fax, number of employees, categories sought). See application instructions.
2. Is there a written quality policy statement describing company policy, goals and commitment to quality?
3. Is there a description of the organization with positions established to carry out quality functions?
4. Are biographical information and qualifications of key managers shown and matched to the positions filled as shown in the organization description?
5. Is there a list of major equipment and a facility plan?
6. Is there a list of recent projects showing experience in the type of work for which certification is sought?
7. Has a self-audit been conducted and submitted?
8. Are there weld procedure specifications (WPS) that would likely be required to perform the work certified?
9. Is there a bolt installation procedure?
10. Is there an acceptable inspection procedure?
11. Is there an acceptable non-conformance procedure?

General Management

Policy

1. Is there a written policy statement adequately describing company policy, goals and commitment to quality?
2. Has the statement been disseminated to proper levels of personnel as reflected by their attitude, activities and awareness of quality goals?

Organization

1. Are functions affecting quality assigned to positions that are adequately defined by job descriptions and an organization chart?
2. Are personnel qualified for and capable of, performance of their duties? (Qualifications include continuing education and/or society activities for professionals).
3. Does management review project quality requirements prior to production, allocate adequate resources, assign or contact for project activities by suitably qualified personnel and select or create necessary quality procedures for the work?
4. Are quality requirements particular to projects (like coating requirement, weld restriction, etc.) effectively communicated to plant departments?
5. Are fabrication and erection requirements (like adjustment needs, erection aids and sequencing of NDT) and priorities reviewed prior to productions?
6. Is there effective technical support for meeting quality requirements from sources outside the plant or from higher management?
7. Is there evidence the goals set in the quality policy have been implemented, communicated and achieved or approached?

8. Are drawing, material and production due dates scheduled (by suitable areas or sequences) and are schedules disseminated to appropriate personnel?
9. Are drawing, material and production schedules maintained and current throughout the year?
10. Are production meetings held on a regular basis to discuss the status of drawing, material and production schedules?
11. Are quality issues discussed at regular meetings?
12. Are requests for information documents?
13. Has the fabricator supplied complex structures or simple structure sand training with written work instructions?

Engineering & Drafting

Organization

1. Is the Drafting Manager familiar with pertinent codes and specifications?
2. Do drafters have the ability to transfer the material requirements noted on the design drawing to advance bills of material for their use by the Purchasing Department?
3. Do drafters have adequate knowledge of the applicable material specifications?
4. Do drafters have adequate knowledge of mill rolling practices as they affect structural steel?
5. Are details sublet to a qualified structural drafting firm that has a drafting manager who is an engineering technician (some trade school or college training and/or experience) and is familiar with codes and specification?
6. Does the in-house drafting manager assure that instructions are furnished to the sublet drafters?
7. Does the in-house drafting manger take action to assure quality compliance by outside detailers?
8. Is there a person capable of supervising in-house design or evaluating and coordinating outside design?
9. Does the company have adequate in-house design engineers or does it consistently use consultants qualified by registration or experience?

Engineering & Drafting

Procedure

1. Does the drafting department maintain a current log of design drawings and specification receipts with the latest revisions and dispositions?
2. Is there a procedure for the control, distribution and revision of job specifications and special provisions to appropriate plant and quality control personnel?
3. Are there provisions to assure that obsolete drawings are destroyed or isolated from use throughout the plant? (May be assured by other departments).
4. Does the drafting department maintain a current log of shop detail drawings with the latest approval, revisions and dispositions?
5. Are drafting practices coordinated with erection requirements?
6. Are the company drafting standards adequate?
7. Are shop drawings detailed in accordance with specification and good practices?
8. Are detail drawings checked by qualified personnel?
9. Are all detail drawings reviewed or approved by the owner?

Facilities and Resources

1. Is there an adequate and current library of specifications including:
 - a. AISC – Manual Steel Construction Volume I & Volume II Connections, Detailing Steel Construction
 - b. ANSI/AWS – D1.1 Structural Welding Code, A2.4 Symbols
 - c. ASTM as required based on Material (stored and being used) in the shop
 - d. SSPC Volumes I and II (for paint).

Procurement

1. Are buyers familiar with ordering information required to control variables affecting quality of purchased material?
2. Is material ordered in accordance with the design drawings and specifications?
3. Are procedures in effect to assure subcontract fabrication is ordered to contract requirements?
4. Are procedures in effect to assure purchased product and subcontract fabrication is furnished to contract requirements?
5. Where a level of certification is required by contract documents, is appropriate fabrication sublet to fabricator holding the required certification?
6. Are procurement sources adequately evaluated?
7. Are all other purchased material (bolts, paint, castings etc.) checked for conformance to purchasing documents upon receipt?
8. Are controls set up to assure adequate identification of incoming purchased items?
9. Are records maintained and is a written procedure functioning to assure traceability of grade and where required, heat numbers and material test reports for special requirements?
10. Are manufacturers test reports or certificates of conformance of bolts, weld wire, paint etc kept on file?
11. Are mill test reports kept on file?
12. Is a current copy of ASTM specifications available to purchasing personnel? (As required based on material, stored and being used in the shop)

Operations

Organization

1. Is shop supervision conversant with current workmanship provisions of AWS and AISC specifications?
2. Does the fabricator have a competent welding technician, supervisor or outside expert available on call?
3. Are welders qualified per ANSI/AWS?

Procedures & Practices Material Receipt & Storage

1. Is the grade of material and marking verified prior to fabrication?
2. Are welding electrodes, flux, bolts and paint stored properly and identified (including RCT lot when applicable)?
3. Are flux and rod ovens adequate and operating per AWS latest adoption?

Fabrication

1. Is fabrication in accordance with contract documents and specification and are finished products shipped in accordance with approved detail drawings?
2. Is there a procedure for handling revisions and voided drawings?
3. Is material inspected for conformance to ASTM A6?
4. Is material identity retained during fabrication and restocking?
5. During the inspection process, are the welds traceable to the welders who produce them?

6. Do welders know, comply with and check their welds to the workmanship and technique requirements of AISC and ANSI/AWS?
7. Is workmanship checked throughout the fabrication process to confirm to contract documents and specifications? Is checking in accordance with the company inspection procedure?
8. Are approved written weld procedures in close proximity to and used by the welders?
9. Are written bolt tightening procedures used?
10. Are the adequate provisions for control of surface preparation if painting is done in-house?
11. Are provisions for agitation, temperature and humidity measurement and methods of paint application adequate and functional?
12. Are provisions for wet and dry film measurement and control adequate and functioning?
13. Are there provisions for suitable loading, blocking and bracing for shipment?

Nonconformances

1. Is there a functioning, written procedure for disposition of nonconforming material or work in process rejected by QC personnel?
2. Is an effective system used to indicate conforming or nonconforming work in process?
3. Does the procedure include provision for action to avoid future nonconforming work?

Equipment Condition

1. Is there a functioning procedure for maintenance of equipment that includes periodic inspections and performance?
2. Are welding machines periodically checked to ensure correct amp and volt reading and is a record kept (except SMAW)?

Facilities and Resources

1. Does the fabricator have automatic or semi-automatic equipment for making continuous welds?
2. Does the fabricator have mechanically-guided burning equipment?
3. Does the fabricator have wheel blast or sandblast equipment? (May be NA if a qualified contractor is used for painting)

Item

1. Does the fabricator have mechanical paint agitators and other painting equipment? (May be NS if a qualified subcontractor is used for painting.)
2. If the fabricator is involved in metalizing and stud welding, is his equipment adequate? (May be NA depending on the type of work)
3. Does the fabricator have adequate and accurate hole-making equipment (punches and drills)?
4. Does the fabricator have adequate and accurate cutting and finishing equipment (shears, saw milling machine, planer and/or grinder)?
5. Does the fabricator have material handing equipment including cranes to move material without damage?

6. Is housekeeping adequate?
7. Is the air supply adequate?
8. Is the electrical supply adequate?
9. Does the operations manager have space and assistance to permit efficient performance?

Quality Control

Organization

1. Are there qualified shop inspectors?
2. Is there a functioning program for training shop inspectors?
3. Does the QC organization include at least one Certified Level II magnetic particle inspection technician certified in accordance with ASNT-TC-1A on staff or available from outside sources?
4. Does the QC organization include at least one Certified Level II ultra sonic testing technician certified in accordance with ASNT-TC-1A on staff or available from outside sources?
5. Does the QC organization include at least one Certified Level II radiographic testing technician certified in accordance with ASNT-TC-1A on staff or available from outside sources?
6. Is there a qualified testing service available and used if required?
7. Does the fabricator have a welding inspector who holds an AWS CWI/SCWI certificate or equivalent per AWS in his employ?

Procedures and Practices

1. Is there a written quality assurance system and are quality procedures followed?
2. Is there separation of responsibility for the Production Supervision function and the Quality Control Supervision function?
3. Is the in-process and final inspection procedure implemented?
4. Do all pieces receive a final inspection and is a record kept of this inspection?

5. Does Quality Control have authority to stop and responsibility to inform the operating supervisor of nonconforming work?
6. Is a record kept of all inspection such as by noted detail drawings?
7. Is a check made to ensure that (approved if required) welding procedures are distributed and following in the shop?
8. Is surface preparation (including grinding fins) checked prior to painting?
9. Is the coating checked after application?
10. Are there adequate procedures for liaison with outside inspectors?
11. Do inspectors have the following equipment available? Tapeline, Welding gages, Tag system
12. Is the following equipment available: X-ray including viewing room and viewer, UT scope, MPT equipment, LPT equipment, Isotope?
13. Are there reference standards for periodically calibrating: Paint gauges, tapeline, NDE equipment, torque wrenches (Skidmore)?
14. Are inspection tools calibrated as required to perform the intended use?