

FABRICATION PROCESS CONTROL

1.0 PURPOSE

- 1.1 This procedure provides instructions and assigns responsibilities for preparation, review and issue of work packages for fabrication process control.

2.0 SCOPE

- 2.1 The instructions in this procedure apply to planning of quality related fabrication activities. These instructions are implemented by General Welding and Fabricating Project Management, Quality Assurance, and Shop personnel involved in fabrication, inspection and testing activities.

3.0 DEFINITIONS

- 3.1 The definitions shown below apply to terms commonly used in or unique to this procedure.

Work Package: Also referred to as a Traveler Package - a collection of drawings, instructions, forms and references that describe and plan a specific task or combination of tasks, such as fabrication, inspection and/or testing. The Work Package defines what the task is and how it is to be performed; materials to be used; Hold and Witness points to be observed; records, including inspection records to be generated; and testing required for acceptance of the task.

Work Procedure: A generic or specific procedure identifying how work is to be performed and records required to document the work. Work Procedures are controlled documents that identify performance parameters and often include inspection/acceptance criteria, with reference to forms that help document installation and acceptance.

Witness Point (WP): A point in fabrication, installation, or testing activities, assigned by Quality Assurance (QA) that requires the notification of the group assigning the WP in a timely manner, so a part of the activity may be witnessed. A WP may be waived at the discretion of the assigning group. If the WP is waived the activity may continue to the next WP or Hold Point (if any).

Hold Point (HP): A point in fabrication, installation, or testing activities, assigned by Quality Assurance, that must be witnessed, reviewed, inspected or tested prior to proceeding with the next activity. Notification to QA of the Hold Point must be made in a timely manner to obtain the required release. A Hold Point may not be passed without documented authorization from Quality Assurance.

Hold Point Release: A signature or initials on a routing document, traveler package, or installation/inspection form that documents QA acceptance of the work step and authorizes continued processing.

Work Package Cover Sheet (WPCS): The front page of a Work Package that provides summary information and instructions for the included task(s).

Work Package Number: An identification number assigned to a work package for tracking purposes. The number may consist of any appropriate numbering system provided that the Work

Package log describes what work is to be accomplished by the Work Package.

4.0 RESPONSIBILITIES

4.1 Positions shown below are responsible for the activity shown. Performance of these activities may be delegated to subordinate positions, but the responsibility for implementation remains with the identified position. In all activities, assurance of employee safety is the responsibility of that employee's first-line supervisor or manager.

4.1.1 **The Project Manager (PM)** shall ensure the implementation of this procedure.

4.1.2 **The Quality Assurance Representative (QAR)** or designee shall ensure implementation of the instructions in this procedure by monitoring and surveillance of the specified activities. The QAR shall ensure review and approval of Work Packages.

4.1.3 **Work Supervisors** shall coordinate with the PM to break down scheduled work into related tasks, identify hazards associated with the task(s) and provide protective measures to prevent injury or illness that could be caused by the work.

5.0 WORK PACKAGE PLANNING PROCESS

5.1 Planning, Preparation, and Review of Work Packages

5.1.1 The PM or designee shall review drawings for scheduled work and coordinate with appropriate Work Supervisors to break down the work into related tasks.

5.1.2 The PM shall continue preparation of the Work Package(s), each of which will include the following, as necessary:

- a. Work Package Cover Sheet, form Qform 12.0, with the planning section completed which includes:
 - ⑩ the Work Package number with revision number
 - ⑩ the main drawing number(s) and rev.(s) to be used
 - ⑩ summary description of the task to be performed
 - ⑩ materials to be used
 - ⑩ procedures to be used
 - ⑩ work steps to be accomplished, including sequential steps to be followed (if any)
 - ⑩ any Engineering or QA witness or hold points to be observed
- b. copies of all drawings to be used with applicable ECNs or FCNs (if any).
- c. copies of inspection forms that apply to the task, including forms for welding, concrete anchors, dimensional inspection, etc..
- d. customer's packaging instructions

5.1.3 The PM shall route the Work Package to QA for review.

a. QA shall review the Work Package and assign witness or hold points as required

to ensure inspection requirements are met, and sign/date the WPCS Hold/Witness Point block, signifying review and concurrence with the contents of the Work Package.

b. QA shall route the Work Package to the PM for review and further processing.

5.1.4 The PM shall review Work Package returned from QA and route the Work Package for logging and filing.

5.1.5 Work Package number and description shall be logged onto form Qform 12.0.1, Work Package Log, and shall be filed in numerical order by work package number.

6.0 ISSUING WORK PACKAGES

6.1 PM shall issue the Work Package to the Work Supervisor, or QA as applicable for work completion.

6.1.1 The Work Supervisor shall:

Direct work in accordance with the Work Package. The Work Supervisor shall contact the cognizant PM if changes or revisions are needed to the Work Package, as shown below.

6.1.2 The PM shall remain cognizant of the progress of the Work Package.

a. The PM shall ensure required forms and records are completed as required by procedures referenced on the Work Package.

b. The PM shall coordinate fabrication work and inspection/testing witness and hold points in a timely fashion.

c. The PM shall ensure secure storage of the Work Package at the end of shift work.

d. If work is stopped prior to completion of the Work Package, the PM shall return the Work Package for secure filing. When work is restarted, the PM shall issue the Work Package in accordance with the applicable sections 6.1 above.

6.1.3 The PM shall review the completed work package and sign/date the WPCS signifying acceptance of completed work.

a. The PM shall return the Work Package for secure filing when the all the work shown in the Work Package has been completed to the degree possible and the package has been reviewed.

b. Work shown in the Work Package that was not completed shall be reviewed by the PM periodically and the Work Package planned and issued to accomplish the listed work.

c. Required changes to work package shall be in accordance with section 8.0.

7.0 LOGGING, REVIEW AND TURNOVER PREPARATION FOR COMPLETED WORK PACKAGES

- 7.1 PM shall receive the completed Work Package from the Work Supervisor and log the completion date on form Qform 12.0.1.
 - 7.1.1 PM shall file the completed work package in the closed Work Package file numerically.
- 7.2 Quality Assurance shall withdraw completed work packages for record review, validation and preparation for turnover in accordance with written procedures.

8.0 CHANGES TO WORK PACKAGES

- 8.1 Work Packages affected by Engineering Change Notice (ECN), Field Change Notice (FCN), Nonconformance Report (NCR) or field conditions unknown at the time of planning shall be retrieved by the PM.
 - 8.1.1 The PM shall update (revise) the Work Package to show the new or changed work scope, to include recording of the ECN, FCN, or NCR number(s) on the WPCS, along with instructions for completing the work scope change or correction.
 - a. The revised Work Package shall be screened/reviewed by the same departments who reviewed the original, for additional witness or hold points by QA (if required).
 - b. Supplemental WPCS may be added to the WP as needed to document additional instructions and/or reviews of the revised Work Package.
 - c. New, revised or additional documents, as required by the change, shall be added to the Work Package by the PM.
 - 8.1.2 The PM shall route the updated Work Package for logging.
 - 8.1.3 PM shall record the reason for updating in the comments section of the original Work Package entry in the Work Package Log.
 - a. PM shall record a “reissue date” in the “issue/reissue column” of the Work Package Log when the updated Work Package is issued for work.
 - 8.1.4 Reissued Work Package shall be stored and issued in a manner identical to the original Work Package.

9.0 FORMS

- 9.1 Forms used as a result of implementing this procedure are QA Records, and include:
 - QForm 12.0 Work Package Traveler Sheet
 - QForm 12.0.1 Work Package Traveler Log