



CERTIFICATION PROGRAMS

Supplemental Requirements for Hydraulic Fabricators (HYD, HYDA)

Preface

The 2024 revision is not a complete revision of the *Supplemental Requirements for Hydraulic Fabricators (HYD, HYDA)*.

Section 1 Before Your Audit

- HD1.5 Editorial
- HD1.6 Editorial

Section 2 During Your Audit

- HD2.1 Editorial
- HD2.2 Revision
- HD2.4 Revision
- HD2.6 New

Section 3 Hydraulic Fabricators - Advanced (HYDA)

- AH3.7 Revision
- AH3.9 Revision

Section 4 Fracture Control Endorsement for Hydraulic (FCEH)

- HF4.1 Revision
- HF4.3 Revision
- HF4.5 Revision

Scope

This document (hereinafter referred to as the *Supplements*) provides the additional requirements for the Certification Program for Hydraulic Fabricators (HYD, HYDA) (hereinafter referred to as the *Program*).

Section 1 Before Your Audit

- HD1.1 All Participants and Applicants are required to have available and comply with these *Supplements* and the *Governing Requirements for Certification Programs* (hereinafter referred to as *GRs*).



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- HD1.2 The *Standard for Certification Programs* (hereinafter referred to as *Standard*) is the primary normative document for all Certification Programs. Whenever there is a conflict between the *Supplements* and the *Standard*, the *Supplements* govern.
- HD1.3 *Standard* Chapter 1 (General Requirements) and Chapter 6 (Hydraulic Metal Structures Fabricator Requirements) apply to this *Program*.
- HD1.5 Participants and Applicants are eligible to apply for the Complex Coatings Endorsement (CCE). For information and requirements concerning this endorsement, refer to *GR* Section 2, “Applying for Certification,” or Section 8, “Making Changes to the Certification Scope,” and the AISC *Supplemental Requirements for Applicators of Complex Coatings Endorsement (CCE)*.
- HD1.6 Only Participants and Applicants of the Program for Hydraulic Fabricators (HYD) are eligible to apply for the Fracture Control Endorsement for Hydraulic (FCEH). For information and requirements concerning this endorsement, refer to the *GRs* Section 2, “Applying for Certification,” or Section 8, “Making Changes to the Certification Scope,” and the Fracture Control Endorsement for Hydraulic (see Section 4 below).
- NOTE: Participants and Applicants of the Hydraulic Fabricator - Advanced (HYDA) Program are not eligible for this endorsement because compliance with a Fracture Control Plan is a requirement for HYDA certification. See AH3.6, AH3.7 and AH3.8.
- HD1.7 Applicants to this *Program* must submit an application, payment, and all documents required by the *Application Document Submittal for AISC Certification—Fabricators and Manufacturers*.

Section 2 During Your Stage 2 Audit (All categories - HYD, HYDA)

- HD2.1 The Quality Management System (QMS) that this *Program* applies to will be audited. Sample jobs/contracts of hydraulic metal structure work will be used to demonstrate capability to meet the *Program* regardless of whether the job/contract requires an AISC certified fabricator.
- HD2.2 Participants and Applicants are required to be actively fabricating in the shop at the time of the audit that can be used to demonstrate compliance with the provisions of the Program. This work must be hydraulic work meeting the category. **If it is known or suspected that there will not be this type of work in the shop at the time of the audit, please notify your assigned auditor immediately.**

If you have not received your audit plan 30 days prior to your scheduled audit, please contact AISC.

Solutions may include a demonstration of capability (See *GR* 5.11) that follows the quality management system. Participants unable to adhere to this requirement prior to the expiration of their certificate will be referred to the Certification Review Group



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(CRG), who will make a decision on whether or not the certificate renewal process will be terminated.

Hydraulic Fabricators - Advanced refer to Section 3 below for further details.

HD2.3 *Standard* Section 1.3, 6.3, 6.A.3 and 6.F.3 are clarified and modified by the following:

- All references must be available in English.

HD2.4 Participants and Applicants must perform bolting method demonstrations at each Initial Certification, and as indicated in the audit plan, first in-person audit when a Participant holds a Conditional Certification, scope change audits (as applicable) and as determined necessary by the CRG.

The demonstrations shall comply with the current RCSC *Specification for Structural Joints Using High-Strength Bolts* Section 7, "Pre-Installation Verification."

HD2.5 Participants and Applicants will be audited and evaluated to ensure compliance with the current applicable AWS welding code for the work typically performed in the shop, regardless of whether this is required by the sampled contracts and specifications.

HD2.6 Participants and Applicants shall maintain the following documents in compliance with the current applicable AWS Welding Code, and have them available for review during each audit.

1. One representative Welding Procedure Specification (WPS)
2. Supporting Procedure Qualification Record (PQR), when required
3. Welder Qualification Test Record (WQTR) maintained current and qualified with records of period of effectiveness

Observation of PQRs, WPSs, or WPQRs does not constitute approval by AISC, QMC, or the QMC auditor. The applicant or participant is responsible for preparing and maintaining documents conforming to the applicable welding code.- Reference AASHTO/AWS D1.1:2020 Clause 1.5.2, et al.

Section 3 Hydraulic Fabricators - Advanced (HYDA)

AH3.1 Participants/Applicants applying for HYDA certification shall be required to perform a demonstration of capability (See *GR* 5.11) during each Initial Certification (RFN) audit unless there is advanced hydraulic work in the shop at the time of the audit. **If it is known or suspected that there will not be this type of work in the shop at the time of the audit, please notify your assigned auditor immediately.**

If you have not received your audit plan 30 days prior to your scheduled audit, please contact AISC.



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AH3.2 Participants renewing their HYDA certification shall be required to perform a demonstration of capability (See *GR 5.11*) during each Renewal Certification (R1, R2 or RF) audit unless there is advanced hydraulic work in the shop at the time of the audit or advanced hydraulic work has been completed within the past two years. **If it is known or suspected that there will not be this type of work in the shop at the time of the audit, please notify your assigned auditor immediately.**

If you have not received your audit plan 30 days prior to your scheduled audit, please contact AISC.

AH3.3 Participants and Applicants renewing or applying for HYDA certification shall demonstrate that training has been performed at least annually for the communication of the requirements for advanced hydraulic work unless advanced hydraulic work has been performed within the past year. This training must be documented and available during the audit.

AH3.4 The Certified Welding Inspector (CWI) may be an employee of the Participant and Applicant or contracted. In the case of the latter, contract status and qualifications of the CWI must be demonstrable. The CWI must be available during the audit.

AH3.5 Bolt test method demonstrations will be required at every Initial Certification (RFN) and Full Certification Renewal (RF) facility audit. The demonstrations shall comply with the current RCSC *Specification for Structural Joints Using High-Strength Bolts* Section 7, "Pre-Installation Verification," and with the Rotational Capacity Test for high-strength bolts in ASTM F3125 Annex A2.

AH3.6 Participants and Applicants must develop, document and implement an effective Fracture Control Plan (FCP) as described in the *Standard* Section 6.F.12.1.

AH3.7 Participants and Applicants must demonstrate capability to produce work that meets the requirements of the FCP. If the Participant has not produced Fracture Critical (FC) work within the past three years, then its capability shall be demonstrated by running a job or a portion of a job as if it met FCP requirements. A "portion" of a job must include a welded connection and all the other details associated with a member identified as Fracture Critical. This includes but is not limited to shop drawings, material, welding, inspection, NDT, cutting, etc., as addressed in clause 12 of the AASHTO/AWS D1.5M/D1.5, Bridge Welding Code.

AH3.8 Participants and Applicants shall demonstrate that training has been performed at least annually for the requirements of their Fracture Control Plan. This training must be documented and available during the audit.



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AH3.9 Participants and Applicants renewing or applying for HYDA certification shall maintain the following documents in compliance with Clause 12, AASHTO/AWS D1.5M/D1.5, *Bridge Welding Code*, for Fracture Control Plan for Nonredundant Members and have them available for review during each audit:

1. One representative Welding Procedure Specification (WPS)
2. Supporting Procedure Qualification Record (PQR) when required
3. Welder Qualification Test Record (WQTR) maintained current and qualified with records of period of effectiveness

Observation of PQRs, WPSs, or WPQRs does not constitute approval by AISC, QMC, or the QMC auditor. The applicant or participant is responsible for preparing and maintaining documents conforming to the applicable welding code.- Reference AASHTO/AWS D1.5:2020 Clauses 7 and 12, et al.

Section 4 Fracture Control Endorsement for Hydraulic (FCEH)

HF4.1 This endorsement requires concurrent Hydraulic Fabricator (HYD) certification. HYDA Participants and Applicants are not eligible for this endorsement. See H1.6

HF4.2 Participants and Applicants must develop, document, and implement an effective Fracture Control Plan (FCP) as described in the *Standard* Section 6.F.12.1.

HF4.3 Participants and Applicants must demonstrate capability to produce work that meets the requirements of their FCP. If the Participant has not produced Fracture Critical (FC) work within the past three years, then its capability shall be demonstrated by running a job or a portion of a job as if it met FCP requirements. A "portion" of a job must include a welded connection and all the other details associated with a member identified as Fracture Critical. This includes but is not limited to shop drawings, material, welding, inspection, NDT, cutting, etc., as addressed in clause 12 of the AASHTO/AWS D1.5M/D1.5, *Bridge Welding Code*.

HF4.4 Participants and Applicants shall demonstrate that training has been performed at least annually for the requirements of their FCP. This training must be documented and available during the audit.

HF4.5 Participants and Applicants renewing or applying for the Fracture Control Endorsement for Hydraulic shall maintain the following documents in compliance with Clause 12, AASHTO/AWS D1.5M/D1.5, *Bridge Welding Code*, for Fracture Control Plan for Nonredundant Members and have them available for review during each audit:

1. One representative Welding Procedure Specification (WPS)
2. Supporting Procedure Qualification Record (PQR) when required
3. Welder Qualification Test Record (WQTR) maintained current and qualified with records of period of effectiveness



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