

CCS Rule Change Notice For

GUIDELINES FOR INSPECTION OF HULL WELDS

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Brief Introduction

According to the adjustment of certification in welder tests by CCS.In this purpose, the expression of "Welder's Qualification Certificate" need revise in this guidelines. At the same time, according to "Guidelines for level Assessment and Certification of Non-destructive Testing Personnel", the certificate issued by the Non-destructive testing personnel is renamed as "Level Certificate of Non-destructive Testing Personnel".

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CHAPTER 1 GENERAL

Section 1 GENERAL

1.1.3 Welders

- 1.1.3.1 Welders engaged in operations covered by the Guidelines are to be specially trained in relevant knowledge and qualified by CCS through tests in accordance with CCS Rules for Materials and Welding.
- 1.1.3.2 Welders holding a qualification certificate issued by CCS are to perform welding within the range specified in the certificate.

CHAPTER 3 QUALIFICATION TESTS OF WELDERS AND WELDING OPERATORS

Section 1 GENERAL PROVISIONS

3.1.5 Qualification Certificate of Welder

- 3.1.5.1 Upon a satisfactory qualification test carried out by CCS, a Qualification Certificate of Welder is to be issued by CCS. The period of validity and renewal of the certificate and the extension of its period of validity are to comply with the requirements in Chapter 4, PART THREE of CCS Rules for Materials and Welding.
- 3.1.5.2 Manufacturers are to control the period of validity and the application of the Qualification Certificate of Welder.
- 3.1.5.3 For the format of Welder's Qualification Certificate, see Appendix 3B of this Chapter. The actual certificate issued by CCS is to prevail.
- 3.1.5.4 Attention is to be given to the following cases for the completion of the Qualification Certificate of Welder and its applicability:
- (1) The qualification for the one-side welding with ceramic backing and back formation falls into the category of "welding with backing" and is the same as the qualification for one-side welding with steel backing, not covering the qualification for the welding without backing and with back formation.
- (2) Upon successful completion of the combined tests referred to in 3.1.3.3, both welding processes and associated plate thicknesses are to be stated in the certificate. Such certificate applies respectively to the one-side welding with root run and the welding by both sides with top capping run, with applicable throat thicknesses being appropriate to those of respective test assemblies.

Section 3 QUALIFICATION TEST REQUIREMENTS OF WELDING OPERATORS

3.3.7 Certificate and term of validity

- 3.3.7.1 When the welding operator passes the qualification examination, CCS is to issue the qualification certificate. Each shipyard/manufacturer is to be responsible for the term of validity and scope of application for the certificate.
- 3.3.7.2 The qualification certificate of welding operator is to include the following contents:
- (1) Coverage of base metal, welding process, welding equipment or system, welding joint type, welding position and other main parameters;
- Expiration date of validity;
- (3) Name, date of birth, ID number and photo of welding operator;
- (4) Name of shipyard/manufacturer.
- 3.3.7.6 Upon verifying that the above conditions are met, CCS is to sign the qualification certificate of welder operator to confirm the continuation of his/her qualification.

Appendix 3B Example of Welder's Qualification Certificate

WELDER'S QUALIFICATION CERTIFICATE

Welder's name:	Date of birth:						
Cert. No:	Sex:				Photograph		
Identification No.							
WPS/pWPS No.							
Employer's name and address							
Date of initial approval Produ				uct type			
This is to certify that the welder has passed the qualification test [/and re-validation record audit] according to the rules of CCS, and is qualified to undertake welding operation specified in range of qualification of this certificate.							
Items	Test piece			Range of qualification			
Welding process							
Base metal							
Filler metal type							
Plate /pipe wall thickness							
pipe outside diameter							
Type of welded joint							
Welding position							
Revalidation method	In accordance with Section 4.1.7.4, Chapter 4, Part THREE of Rules for Materials and Welding1)□ 2)□ 3)□						
Other details							
This certificate is issued at		[pl	ace],	and valid until_	[DD/MM/YYYY].		
Signature/seal of surveyor:				Issued on	[DD/MM/YYYY].		

CHAPTER 4 APPROVAL OF WELDING PROCEDURES

Section 1 GENERAL PROVISIONS

4.1.4 Qualification of personnel

4.1.4.1 The non-destructive testing personnel involved in the approval test of welding procedures are to hold the Qualification <u>Level</u> Certificate of Non-Destructive Testing Personnel issued or approved by CCS to corresponding grades.

CHAPTER 5 DESIGN OF WELDING PROCEDURES OF HULL STRUCTURES

Section 1 GENERAL PROVISIONS

5.1.2 Welding procedure specifications and design requirements

- 5.1.2.1 Prior to commencement of construction, the following technical documents and data are to be provided by the builder to CCS for approval and confirmation:
- (1) Plans and supporting documents;
- (2) Examination and testing plans;
- (3) NDE plans;
- (4) Welding consumable details;
- (5) Welding procedure specifications;
- (6) Welding plans or details;
- (7) Qualification certificates of welders;
- (8) Qualification certificates of NDE operators Level Certificates of Non-Destructive Testing Personnel.

CHAPTER 6 WELDING OF HULL STRUCTURES

Section 1 GENERAL PROVISIONS

6.1.3 Personnel

6.1.3.1 Welding personnel engaged in shipbuilding are to hold a "Qualification Certificate of Welder" issued or approved by CCS, and to be engaged in welding operations appropriate to their respective certificates.

6.1.4 Pre-weld preparations

6.1.4.4 Welders engaged in tack welding are to hold a Qualification Certificate of Welder, and such welding is to be performed according to approved welding procedure specifications and in compliance with the requirements for finished welds.

Section 7 WELDING OF ALUMINIUM-STEEL TRANSITION JOINTS

6.7.1 General provisions

6.7.1.3 The welders engaged in the welding of transition joints are to be trained and certified for steel and aluminium alloy welding qualification respectively.

CHAPTER 7 INSPECTION OF WELDS

Section 1 GENERAL PROVISIONS

7.1.3 Testing organizations and personnel

7.1.3.5 Nondestructive testing personnel engaged in on-site inspection is to carry a card of the <u>qualification level</u> certificate within the validity period, and the work which the testing personnel undertakes is to be consistent with the testing method and level in the <u>qualification level</u> certificate.