

Non-Destructive Testing Service Suppliers

Object of Amendment

Rules for the Survey and Construction of Steel Ships Part M
Guidance for the Survey and Construction of Steel Ships Part M

Reason for Amendment

Chapter 7, Part M of the Rules for the Survey and Construction of Steel Ships stipulates requirements necessary for confirming Classification Society to ensure non-destructive testing service suppliers are properly qualified in accordance with IACS UR W35. Although the current requirements were intended to apply to only subsidiaries or cooperating companies that are independent of the quality controls of the builders of new ships, IACS decided, as a result of discussions among its members, to revise the UR to expand its application so that the same quality confirmation applies to all parties conducting non-destructive testing related to the construction of new ships.

In addition, in response to a request for the adoption of a common industry-wide treatment regarding the qualifications required for persons assigned to supervise non-destructive testing, the UR was further revised to reflect the past practices, such as the application of in-house certification systems for non-destructive testing qualifications, of each classification society. The revised UR was adopted by IACS as UR W35 (Rev.1).

Accordingly, relevant requirements are amended based on IACS UR W35 (Rev.1).

Outline of the Amendment

- (1) Expands the application of the UR to all parties conducting non-destructive testing related to the construction of new ships.
- (2) Amends requirements related to the qualifications of persons assigned to supervise non-destructive testing as part of quality control.
- (3) Amends requirements related to supervisor responsibilities.

Effective Date and application

Effective date of this draft amendment is 1 January 2025.

An asterisk (*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

ID: DH24-03

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended	Original	Remarks
RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS Part M WELDING	RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS Part M WELDING	IACS UR W35 (Rev.1) Reference Number
Chapter 7 Non-Destructive Testing Service Suppliers	Chapter 7 Non-Destructive Testing Service Suppliers	
7.1 General	7.1 General	
7.1.1 Application*	7.1.1 Application*	
<u>1 The Non-Destructive Testing (NDT) Service Suppliers which conduct NDT (including the Advanced Non-Destructive Testing (ANDT) specified in Chapter 9, unless otherwise specified) for registered ships and offshore structures during classification survey are to comply with this chapter.</u>	<u>1 The requirements of this chapter are applied to firms providing NDT (Non-Destructive Testing) services for ships and offshore structures as well as their components.</u>	1.1(i) and note
<u>2 The requirements of this chapter apply to following NDT Service Suppliers.</u> <u>(1) Independent NDT companies</u> <u>(2) Internal departments of fabricators, e.g. shipyards, hull block/section fabricators performing NDT.</u> <u>The NDT service specified in this chapter covers the service application to the following hull structure and associated items at the fabrication stage during new construction:</u> <u>(a) The welding of components that are integrated into the ship or offshore structure.</u>	(Newly added)	1.1(ii)

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended	Original	Remarks
<p><u>(b) The fabrication of independent fuel or cargo tanks (including those intended for low-flashpoint fuels, e.g. Type A, B and C independent tanks as described in Part N of the Rules and Part GF of the Rules).</u></p> <p><u>(c) Items listed within the definition of hull structure as follows.</u></p> <ul style="list-style-type: none"> <u>i) hull envelope including all internal and external structures;</u> <u>ii) superstructures, deckhouses and casings;</u> <u>iii) welded foundations, e.g. main engine seatings;</u> <u>iv) atch coamings and bulwarks;</u> <u>v) all penetrations fitted and welded into bulkheads, decks and shells;</u> <u>vi) the fittings of all connections to decks, bulkheads and shells, such as air pipes and ship side valves – all ILLC 1966, as amended, items;</u> <u>vii) welded attachments to shell, decks and primary members, e.g. crane pedestals, bitts and bollards, but only in regards to their interaction on the hull structure.</u> <p><u>(d) Rudders of welded construction.</u></p>		
<p>3 The requirements of this <u>chapter</u> are intended to ensure that such <u>NDT Service Suppliers</u> are using appropriate procedures, have qualified and certified personnel and have implemented written procedures for the training, experience, education, examination, certification, performance, application, control, verification and reporting of <u>NDT</u>. In addition, <u>NDT Service Suppliers</u> are to furnish appropriate equipment and facilities commensurate with providing a</p>	<p>2 The requirements of this <u>chapter</u> are intended to ensure that such <u>firms</u> are using appropriate procedures, have qualified and certified personnel and have implemented written procedures for the training, experience, education, examination, certification, performance, application, control, verification and reporting of <u>NDT</u>. In addition, <u>firms</u> are to furnish appropriate equipment and facilities commensurate with providing a professional service.</p>	<p>1.2</p>

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended	Original	Remarks
professional <i>NDT</i> service.		
4 In case where such a firm requests approval, the Society may approve it as a <i>NDT</i> Service Supplier.	3 In case where such a firm requests approval, the Society may approve it as a <i>NDT</i> service supplier.	
5 <u>The Society verifies the <i>NDT</i> Service Supplier in order to determine compliance with the requirements of this chapter. The method of verification is to be decided by the Society.</u>	(Newly added)	1.1(iii)
7.1.2 Definitions	7.1.2 Definitions	
The definitions of terms which appear in this chapter are specified in the following Table M7.1 .	The definitions of terms which appear in this chapter are specified in the following Table M7.1 .	
Table M7.1 The definitions of terms		1.3
<i>NDT</i>	Non-Destructive Testing The development and application of technical methods to examine materials or components in ways that do not impair their future usefulness and serviceability, in order to measure geometrical characteristics and to detect, locate, measure and evaluate flaws. <i>NDT</i> is also known as non-destructive examination (<i>NDE</i>), non-destructive inspection (<i>NDI</i>) and non-destructive evaluation (<i>NDE</i>). Comprising, but not limited to, the following methods and techniques <i>MT, PT, RT, VT, UT</i> and <i>ET</i> .	
<i>ANDT</i>	The above definition of <i>NDT</i> applies; however, <i>ANDT</i> includes advanced methods such as <i>RT-D, PAUT, TOFD</i> and <i>AUT</i> .	
<i>NDT</i> Service Supplier	Independent <i>NDT</i> company or <i>NDT</i> department/section that forms a part of a company providing <i>NDT</i> services on new construction of ships and offshore structures, as applicable to the performing <i>NDT</i> on the items as listed in 7.1.1-2.	
<i>MT</i>	Magnetic Particle Testing	
<i>PT</i>	Penetrant Testing	
<i>RT</i>	Radiographic Testing	
<i>RT-D</i>	Digital Radiography Testing (A technique within the method <i>RT</i> , e.g. Computed Radiography or Direct Radiography).	
<i>UT</i>	Ultrasonic Testing	

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended		Original		Remarks
	<i>PAUT</i>	Phased Array Ultrasonic Testing, (A type of <i>UT</i> technique in which electronically controls the transmission time of a pulse wave transmitted from a plurality transducer as ultrasonic beam at an arbitrary refraction angle and focal length to detect flaws. A device that can display and record flaw detection results as a two-dimensional image).		
	<i>TOFD</i>	Time of Flight Diffraction (A type of <i>UT</i> technique in which plane flaw detection and dimension measurement are performed by a method using the correlation between interference waves at various probe positions or angles of incidence).		
	<i>AUT</i>	Automated Ultrasonic Testing: technique by which an object is tested by ultrasound using probes operating under mechanical control and where ultrasonic data is collected automatically.		
	<i>ET</i>	Electromagnetic Testing, Eddy Current Testing and/or Alternating Current Field Measurements (<i>ACFM</i>), etc.		
	<i>VT</i>	Visual Testing		
	Industrial sector	Section of industry or technology where specialized <i>NDT</i> practices are used, requiring specific product-related knowledge, skill, equipment and/or training.		
	Product sector	A category of component that may be defined by type of manufacturing, fabrication, and/or shape, which may have unique, and/ or general manufacturing/fabrication defect characteristics. Product sector examples include (but not limited to): castings, wrought products (forgings), rolled products, extruded products and welds.		
7.1.3 References		7.1.3 References		
<p>1 The following referenced documents are to be used for the application of this chapter as appropriate. <u>For updated references, the latest edition of the referenced document (including any amendments) applies.</u></p> <p>(1) <i>ISO 9712:2021</i>: Non-destructive testing – Qualification and certification of <i>NDT</i> personnel</p> <p>(2) <i>ISO/IEC 17020:2012</i>: Conformity assessment – Requirements for the operation of various types of bodies performing inspection</p> <p>(3) <i>ISO/IEC 17024:2012</i>: Conformity assessment – General requirements for bodies operating certification of persons</p>		<p>The following referenced documents are to be used for the application of this <u>chapter</u> as appropriate. <u>Other national standards listed below are accepted as compliant and hence are accepted for use together with this document. The below standards, in principle, refer to the most recent version published.</u></p> <p>(1) <i>ISO 9712:2012</i>: Non-destructive testing – Qualification and certification of <i>NDT</i> personnel</p> <p>(2) <i>ISO/IEC 17020:2012</i>: Conformity assessment – Requirements for the operation of various types of bodies performing inspection</p> <p>(3) <i>ISO/IEC 17024:2012</i>: Conformity assessment – General requirements for bodies operating certification of persons</p>		1.4

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended	Original	Remarks
<p>(4) <i>ISO 9001:2015: Quality Management Systems – Requirements</i></p> <p>(5) <u><i>SNT-TC-1A:2020; Personnel Qualification and Certification in Nondestructive Testing</i></u></p> <p>(6) <u><i>ANSI/ASNT CP-189:2020; ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel</i></u></p>	<p>(4) <i>ISO 9001:2015: Quality Management Systems – Requirements</i></p> <p>(Newly added)</p> <p>(Newly added)</p>	
<p>2 <u>Other national adoptions of the standards listed above -1 are accepted as compliant and hence are accepted for use together with this document.</u></p>	<p>(Newly added)</p>	1.4
<p>7.2 Requirements for <u>NDT Service Suppliers</u></p>	<p>7.2 Requirements for <u>Documents</u></p>	
<p>7.2.1 General</p>	<p>(Newly added)</p>	2
<p><u>The <i>NDT Service Supplier</i> is to document, as required in 7.3 to 7.6, that it has the competence and control needed to perform the specified <i>NDT</i> services.</u></p>	<p>(Newly added)</p>	2
<p>7.2.2 Requirements for Documents</p>	<p>7.2.1 Requirements for Documents</p>	
<p><u>The following documents are to be available for the Society upon request:</u></p> <p>(1) An outline of <i>NDT Service Supplier’s</i> organization and management structure, including any subsidiaries.</p> <p>(2) Information on the structure of the <i>NDT Service Supplier’s</i> quality management system.</p> <p>(3) Quality manual and documented procedures covering the requirements given in 7.2.3</p> <p>(4) For companies with in-house certification of personnel scheme; a written practice developed in accordance with a <u>recognised</u> standard or</p>	<p>1 <u>Suppliers are to create and maintain documentation containing the following information.</u></p> <p>(1) An outline of <u>the supplier’s</u> organization and management structure, including any subsidiaries.</p> <p>(2) Information on the structure of the <u>supplier’s</u> quality management system.</p> <p>(3) Quality manual and documented procedures covering the requirements given in 7.3</p> <p>(4) For companies with <u>an in-house certification scheme</u> for personnel, a written practice developed in accordance with a <u>recognized</u> standard or</p>	2.1

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended	Original	Remarks
<p>recommended practice (i.e. <i>ASNT's SNT-TC-1A, 2020, ANSI/ASNT CP-189, 2020</i> or similar).</p> <p>(5) Operational work procedures for each <i>NDT</i> method, including selection of the <i>NDT</i> technique.</p> <p>(6) Training and follow-up programmes for <i>NDT</i> operators including practical training on various ship and offshore products.</p> <p><u>(7) Written statement issued by the employer, based upon the scope of certification, authorising the operator to carry out specified tasks</u></p> <p>(8) For suppliers who have personnel certification schemes, procedures <u>for supervisor's authorisation of <i>NDT</i> operators.</u></p> <p>(9) Experience of the <u><i>NDT Service Supplier</i></u> in the specific service area.</p> <p><u>(10) For companies which obtain certification from an accredited certification body; a list of documented training and experience for <i>NDT</i> operators within the relevant <i>NDT</i> service area, including qualifications and third party certification per <i>ISO 9712:2021</i> based certification schemes.</u></p> <p>(11) Description of equipment used for the <i>NDT</i> services performed by the <u><i>NDT Service Suppliers</i></u>.</p> <p>(12) A guide for <i>NDT</i> operators to use equipment mentioned in (11).</p> <p>(13) Record formats <u>for recording results of the <i>NDT</i> service referred to 7.6.1.</u></p> <p>(14) Information on other activities which may present a conflict of interest. <u>(if applicable)</u></p> <p>(15) Record of customer claims and corrective actions. <u>(if applicable)</u></p> <p>(16) Any legal proceedings <u>against the company in the</u></p>	<p>recommended practice (i.e. <i>ASNT's SNT-TC-1A, 2016, ANSI/ASNT CP-189, 2016</i> or similar).</p> <p>(5) Operational work procedures for each <i>NDT</i> method, including selection of the <i>NDT</i> technique.</p> <p>(6) Training and follow-up programmes for <i>NDT</i> operators including practical training on various ship and offshore products.</p> <p>(Newly added)</p> <p>(7) For suppliers who have personnel certification schemes, procedures <u>related to the supervisor authorisation of <i>NDT</i> operators.</u></p> <p>(8) Experience of the <u>supplier</u> in the specific service area.</p> <p>(9) A list of documented training and experience for <i>NDT</i> operators within the relevant service area, including qualifications and third party certification per <i>ISO 9712:2012</i> based certification schemes.</p> <p>(10) Description of equipment used for the services performed by <u>the suppliers.</u></p> <p>(11) A guide for <i>NDT</i> operators to use equipment mentioned in (10).</p> <p>(12) Record formats.</p> <p>(13) Information on other activities which may present a conflict of interest.</p> <p>(14) Record of customer claims and corrective actions.</p> <p>(15) Any <u>current or past legal proceedings involving the company.</u></p>	

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended	Original	Remarks
past/currently in the courts of law. (if applicable)		
(Delete)	<u>2</u> The documents mentioned in -1 are to be made available to the Society upon request.	
7.3 Quality Requirements	7.3 Quality Requirements	
7.3.1 Quality Management System	7.3.1 Quality Management System	
<p>1 <u>NDT Service Suppliers</u> are to have a documented quality management system, covering at least the following.</p> <p>(1) Work procedures for all tasks and operations, including the various <i>NDT</i> methods and <i>NDT</i> techniques for which the <u>NDT Service Supplier</u> is involved.</p> <p>(2) Preparation, issuance, maintenance and control of documents.</p> <p>(3) Maintenance and calibration of the <i>NDT</i> equipment.</p> <p>(4) Training programs for the <i>NDT</i> operators and the supervisors.</p> <p>(5) Maintenance of records for <i>NDT</i> operators and supervisors training, qualification and certification.</p> <p>(6) Certification of <i>NDT</i> operators (the latest version).</p> <p>(7) Procedures for testing operator visual acuity.</p> <p>(8) Supervision and verification of operation to ensure compliance with the <i>NDT</i> procedures.</p> <p>(9) Quality management of subsidiaries.</p> <p>(10) Job preparation.</p> <p>(11) Order reference system where each engagement is traceable to when and where the test was carried out as well as who carried it out.</p> <p>(12) Recording and reporting of information, including retention time of records.</p>	<p>1 Suppliers are to have a documented quality management system, covering at least the following.</p> <p>(1) Work procedures for all tasks and operations, including the various <i>NDT</i> methods and <i>NDT</i> techniques for which <u>the supplier</u> is involved.</p> <p>(2) Preparation, issuance, maintenance and control of documents.</p> <p>(3) Maintenance and calibration of the <i>NDT</i> equipment.</p> <p>(4) Training programs for the <i>NDT</i> operators and the supervisors.</p> <p>(5) Maintenance of records for <i>NDT</i> operators and supervisors training, qualification and certification.</p> <p>(6) Certification of <i>NDT</i> operators (the latest version).</p> <p>(7) Procedures for testing operator visual acuity.</p> <p>(8) Supervision and verification of operation to ensure compliance with the <i>NDT</i> procedures.</p> <p>(9) Quality management of subsidiaries.</p> <p>(10) Job preparation.</p> <p>(11) Order reference system where each engagement is traceable to when and where the test was carried out as well as who carried it out.</p> <p>(12) Recording and reporting of information, including retention time of records.</p>	2.2

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended	Original	Remarks
<p>(13) Code of conduct for the <u>NDT Service Supplier's</u> activities, especially <i>NDT</i> related activities.</p> <p>(14) Periodic review of work process procedures.</p> <p>(15) Corrective and preventive action.</p> <p>(16) Feedback and continuous improvement.</p> <p>(17) Internal audits.</p> <p>(18) Provisions of accessibility to required codes, standards and procedures to assist <i>NDT</i> operators.</p>	<p>(13) Code of conduct for the <u>supplier's</u> activities, especially <i>NDT</i> related activities.</p> <p>(14) Periodic review of work process procedures.</p> <p>(15) Corrective and preventive action.</p> <p>(16) Feedback and continuous improvement.</p> <p>(17) Internal audits.</p> <p>(18) Provisions of accessibility to required codes, standards and procedures to assist <i>NDT</i> operators.</p>	
<p>2 A documented quality system complying with the most recent version of <i>ISO/IEC 17020:2012</i> and including the above information mentioned in -1 would be considered acceptable. The <u>NDT Service Supplier</u> may satisfy the requirements of Type A or Type B or <u>Type C</u> inspection body, as described in <i>ISO/IEC 17020:2012</i>. <u>In all cases, production staff is not allowed to inspect their own work in the case of Type C inspection body.</u></p>	<p>2 A documented quality system complying with the most recent version of <i>ISO/IEC 17020:2012</i> and including the above information mentioned in -1 would be considered acceptable. The <u>supplier</u> may satisfy the requirements of Type A or Type B inspection body, as described in <i>ISO/IEC 17020:2012</i>.</p>	2.2
<p>7.3.2 Qualification and Certification of NDT Personnel</p>	<p>7.3.2 Qualification and Certification of NDT Personnel</p>	
<p>1 <u>The NDT Service Supplier is responsible for the qualification and preferably 3rd party certification of its supervisors and operators to a recognised certification scheme based on ISO 9712:2021 or JIS Z2305.</u></p>	<p>1 Supplier supervisors and operators <u>are to be recognised by a certification scheme based upon ISO 9712:2012 or JIS Z2305. The aforementioned standards, in principle, refer to the most recent version published.</u></p>	2.3
<p>2 The <u>NDT Service Supplier</u> is to be responsible for the above -1.</p>	<p>2 The <u>supplier</u> is to be responsible for the above -1.</p>	2.3
<p>3 Personnel qualification by an employer based upon relevant and/or recommendation standards which are found acceptable by the Society (e.g. <i>SNT-TC-1A, 2020</i> or <i>ANSI/ASNT CP-189, 2020</i> etc.) may be accepted if the <u>NDT Service Supplier's</u> written practice is reviewed and found acceptable by the Society. In such cases, the <u>NDT Service Supplier's</u> written practice is at a minimum, except for the</p>	<p>3 Personnel qualification by an employer based upon relevant and/or recommendation standards which are found acceptable by the Society (e.g. <i>SNT-TC-1A, 2016</i> or <i>ANSI/ASNT CP-189, 2016</i> etc.) may be accepted if the <u>supplier's</u> written practice is reviewed and found acceptable by the Society. In such cases, the <u>supplier's</u> written practice is at a minimum, except for the impartiality requirements of a</p>	2.3

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended	Original	Remarks
impartiality requirements of a certification body and/or authorised body, <u>generally to comply with the requirements of ISO 9712:2020.</u>	certification body and/or authorised body, to comply with <i>ISO 9712:2012.</i>	
4 For <i>NDT</i> operators holding certificates issued via an employer based scheme, the employer's certification is deemed revoked when employment is terminated by either party.	(Newly added)	2.3
5 Supervisor and operator certificates and competence are to comprise all industrial sectors and techniques being applied by the supplier.	4 Supervisor and operator certificates and competence are to comprise all industrial sectors and techniques being applied by the supplier.	2.3
6 Level 3 personnel are certified by one of the following means: (1) obtain certification from an accredited certification body. (2) obtain certification from an employer based scheme via the examination method, as detailed in the written practice. It is not permissible to directly appoint a level 3 without examination if the intended certification route is from an employer based scheme.	(Newly added)	2.3
7.3.3 Supervisor	7.3.3 Supervisor	
1 The <i>NDT</i> Service Supplier have a supervisor or supervisors, responsible for the following: (a) validate <i>NDT</i> instructions and procedures established and reviewed by level 3 personnel; (b) review of <i>NDT</i> reporting; (c) supervise all tasks and <i>NDT</i> operations at all levels;	1 Suppliers are to have a supervisor or supervisors who are responsible for the appropriate execution of <i>NDT</i> operations and for the professional standard of the operators and their equipment, including the professional administration of the working procedures.	2.4

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended	Original	Remarks
<p><u>(d) inspection of <i>NDT</i> equipment, tools and calibration;</u> <u>(e) re-evaluate the qualification of the operators annually on behalf of the <i>NDT</i> Service Supplier.</u></p>		
<p>2 <u>Normally, the <i>NDT</i> Service Supplier employs (on a full-time basis) a level 3 supervisor, certified to level 3 in the applicable method(s) as per the requirements of this chapter.</u></p>	<p>2 <u>Supervisors are to be independently certified to Level 3 by a third party based upon 7.3.2 and accepted by the Society.</u></p>	2.4
<p>3 <u>It is recognised that an <i>NDT</i> Service Supplier may not directly employ a Level 3 in all the stated methods practiced. In such cases, it is permissible to employ an external Level 3 who is certified by an accredited certification body in those methods not held by the full-time Level 3(s) of the <i>NDT</i> Service Supplier.</u></p>	<p>3 <u>In relation to -2, suppliers are to employ, on a full-time basis, at least one supervisor for all <i>NDT</i> methods which are carried out by the supplier, except in cases where it is recognised that it is difficult for the supplier to directly employ a Level 3 certified supervisor for all the stated <i>NDT</i> methods.</u></p>	2.4
<p>4 <u>Alternatively, and by agreement with the Society, the <i>NDT</i> Service Supplier may appoint an internal (full-time employed) supervisor of <i>NDT</i> activities, who does not hold level 3 certification. In this case, the supervisor is certified to a minimum of level 2. For <i>NDT</i> Service Suppliers operating this alternative approach, the <i>NDT</i> Service Supplier comply with all other requirements of this chapter and employ (either part time or on a contract basis) Level 3 <i>NDT</i> services (to carry out functions such as procedure development, procedure approval, consultancy, review etc.) from outside the <i>NDT</i> Service Supplier organisation. The appointed external level 3 is certified by an accredited certification body in all the applicable methods appropriate to the scope of the <i>NDT</i> operations.</u></p>	<p>4 <u>Supervisors are to be directly involved in the review and acceptance of <i>NDT</i> procedures, <i>NDT</i> reports and the calibration of <i>NDT</i> equipment and tools.</u></p>	2.4
<p>7.3.4 Operators</p>	<p>7.3.4 Operators</p>	
<p>1 <u>Operators are at a minimum to be qualified and certified to Level 2 in the <i>NDT</i> method(s) concerned and as described in 7.3.2.</u></p>	<p>1 <u>Operators are at a minimum to be qualified and certified to Level 2 in the <i>NDT</i> method(s) concerned and as described in 7.3.2.</u></p>	2.5

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended	Original	Remarks
<p>2 Operators who are qualified and certified as Level 1 are to only undertake the gathering of data and the using of <i>NDT</i> methods. They are not, however, to undertake the performing data interpretation or data analysis.</p>	<p>2 Operators who are qualified and certified as Level 1 are to only undertake the gathering of data and the using of <i>NDT</i> methods. They are not, however, to undertake the performing data interpretation or data analysis.</p>	2.5
<p>3 Operators are to have adequate knowledge of materials, welds, structures or components as well as of <i>NDT</i> equipment and its limitations that is sufficient to apply the relevant <i>NDT</i> method for each application appropriately.</p>	<p>3 Operators are to have adequate knowledge of materials, welds, structures or components as well as of <i>NDT</i> equipment and its limitations that is sufficient to apply the relevant <i>NDT</i> method for each application appropriately.</p>	2.5
<p>7.3.5 Sub-contractors</p>	<p>7.3.5 Sub-contractors</p>	
<p>1 <u>The <i>NDT</i> Service Suppliers</u> are to provide information on agreements and arrangements if any part(s) of the <i>NDT</i> services provided are subcontracted, <u>included level 3 <i>NDT</i> services (as described in 7.3.3).</u></p>	<p>1 Suppliers are to provide information on agreements and arrangements if any part(s) of the services provided are subcontracted.</p>	2.8
<p>2 <u>The <i>NDT</i> Service Suppliers</u>, in the following-up of subcontracts, are to give consideration to the quality management system of the subcontractor.</p>	<p>2 Suppliers, in the following-up of subcontracts, are to give consideration to the quality management system of the subcontractor.</p>	2.8
<p>3 Subcontractors are to meet the same requirements placed upon <u>the <i>NDT</i> Service Suppliers</u> for any <i>NDT</i> performed.</p>	<p>3 Subcontractors are to meet the same requirements placed upon <u>suppliers</u> for any <i>NDT</i> performed.</p>	2.8
<p>7.4 Equipment</p>	<p>7.4 Equipment</p>	
<p>7.4.1 Equipment</p>	<p>7.4.1 Equipment</p>	
<p>1 <u>The <i>NDT</i> Service Suppliers</u> are to maintain records of the <i>NDT</i> equipment used and detailed information related to maintenance, calibration and verification activities. Operators are to be familiar with the specific equipment type prior to using it.</p>	<p>1 Suppliers are to maintain records of the <i>NDT</i> equipment used and detailed information related to maintenance, calibration and verification activities. Operators are to be familiar with the specific equipment type prior to using it.</p>	2.6
<p>2 Where the equipment is of unique nature, operators are to be trained by competent personnel in the operation and</p>	<p>2 Where the equipment is of unique nature, operators are to be trained by competent personnel in the operation and</p>	2.6

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended	Original	Remarks
use of the equipment before carrying out <i>NDT</i> using such equipment.	use of the equipment before carrying out <i>NDT</i> using such equipment.	
3 Under all circumstances, <u>the <i>NDT</i> Service Suppliers</u> are to possess sufficient equipment to carry out the services being a part of the <i>NDT</i> scope required by the Society.	3 Under all circumstances, <u>suppliers</u> are to possess sufficient equipment to carry out the services being a part of the <i>NDT</i> scope required by the Society.	2.6
7.5 Work instructions and procedures etc.	7.5 Work instructions and procedures etc.	
7.5.1 Work instructions and procedures	7.5.1 Work instructions and procedures	
1 <u>The <i>NDT</i> Service Suppliers</u> are to produce written procedures for the <i>NDT</i> being applied. These procedures are to be written, verified or approved by the <u><i>NDT</i> Service Supplier's Level 3 supervisor (either internal, or external, as described in 7.3.3).</u>	1 Suppliers are to produce written procedures for the <i>NDT</i> being applied. These procedures are to be written, verified or approved by the <u>supplier's Level 3 supervisor.</u>	2.7
2 Procedures are to be documented and include all relevant information relating to the inspection, including the defect evaluation acceptance criteria deemed appropriate by the Society.	2 Procedures are to be documented and include all relevant information relating to the inspection, including the defect evaluation acceptance criteria deemed appropriate by the Society.	2.7
3 All <i>NDT</i> procedures and instructions are to be properly documented in such a way that the performed testing can be easily traced and/or repeated at a later stage.	3 All <i>NDT</i> procedures and instructions are to be properly documented in such a way that the performed testing can be easily traced and/or repeated at a later stage.	2.7
4 All <i>NDT</i> procedures stipulated in 7.5.1 are to be reviewed by the Society.	4 All <i>NDT</i> procedures stipulated in 7.5.1 are to be reviewed by the Society.	2.7
7.6 Reporting	7.6 Reporting	
7.6.1 Reporting to the Society	7.6.1 Reporting to the Society	
1 All are to be properly documented in such a way that the performed testing and examination can be easily <u>retraced</u>	1 All <u>reports</u> are to be properly documented in such a way that the performed testing and examination can be easily	2.9

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended	Original	Remarks
and/or repeated <u>as a later stage.</u>	<u>traced and/or repeated.</u>	
2 All reports are to identify the defects present in the tested area, and include a conclusive statement as to whether the material, weld, component or structure satisfies the acceptance criteria.	2 All reports are to identify the defects present in the tested area, and include a conclusive statement as to whether the material, weld, component or structure satisfies the acceptance criteria.	2.9
3 All reports are to include references to the applicable standards, <i>NDT</i> procedures and acceptance criteria applied with respect to the applicable <i>NDT</i> method/technique. In general, the acceptance criteria are to comply with relevant Society Rules.	3 All reports are to include references to the applicable standards, <i>NDT</i> procedures and acceptance criteria applied with respect to the applicable <i>NDT</i> method/technique. In general, the acceptance criteria are to comply with relevant Society Rules.	2.9
4 All reports are to be signed by the personnel with the <u>appropriate level of certification, and the appropriate signatory status as defined in the Quality Management System.</u>	(Newly added)	2.9
EFFECTIVE DATE AND APPLICATION		
1. The effective date of the amendments is 1 January 2025.		

Comparative table of the current and the amendment (Non-Destructive Testing Service Suppliers)

Amended	Original	Remarks
<p style="text-align: center;">GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p style="text-align: center;">Part M WELDING</p>	<p style="text-align: center;">GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS</p> <p style="text-align: center;">Part M WELDING</p>	
<p>M7 Non-Destructive Testing Service Suppliers</p>	<p>M7 Non-Destructive Testing Service Suppliers</p>	
<p>M7.1 General</p>	<p>M7.1 General</p>	
<p>M7.1.1 Application</p>	<p>M7.1.1 Application</p>	
<p><u>With respect to 7.1.1, Part M of the Rules, for requirements specified in this <u>chapter</u> which are covered by the certificate issued to suppliers by the Japan Welding Engineering Society (JWES) in accordance with WES 8701 “Standard for certification of nondestructive inspection corporation for welded structures”, the Society may regard such suppliers as satisfying the corresponding requirements in this <u>chapter</u> when confirming compliance with this <u>chapter</u>.</u></p>	<p><u>For requirements specified in this <u>chapter</u> which are covered by the certificate issued to suppliers by the Japan Welding Engineering Society (JWES) in accordance with WES 8701 “Standard for certification of nondestructive inspection corporation for welded structures”, the Society may regard such suppliers as satisfying the corresponding requirements in this <u>chapter</u> when confirming compliance with this <u>chapter</u>.</u></p>	<p>Regarding 1.1(iii) Original</p>
<p style="text-align: center;">EFFECTIVE DATE AND APPLICATION</p> <p>1. The effective date of the amendments is 1 January 2025.</p>		