

DEP SPECIFICATION

VALIDATION OF NDE FOR FABRICATION INSPECTION

DEP 30.55.03.30-Gen.

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DESIGN AND ENGINEERING PRACTICE



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1. INTRODUCTION

1.1 SCOPE

This new DEP specifies requirements and gives recommendations for validation of non-destructive testing (NDT) methods to be applied during plate and pipe mill fabrication.

Guidance is provided on the execution of NDE validation as required in the referencing standards, including:

DEP 31.38.01.31-Gen.	Shop and Field Fabrication of Piping
DEP 31.40.20.37-Gen.	Line Pipe for Critical Service (Amendments/Supplements to ISO 3183:2007)
DEP 37.19.10.30-Gen.	Weldable Structural Steels for Fixed Offshore Structures (Amendments/Supplements to EN 10225 AND EN 10025)
DEP 37.81.20.34-Gen.	Manufacture, Testing, and Inspection of Weldable Structural Steel Plate Grades 345-552 N/mm ² (50-80 ksi) for Primary Steel Applications in Deepwater Offshore Structures (Based on ASTM A6)
DEP 37.81.20.33-Gen.	Manufacture, Testing, and Inspection of Weldable Structural Steel Plate Grades 345-552 N/mm ² (50-80 ksi) for Special/Critical Steel Applications in Deepwater Offshore Structures (Based on ASTM A20)
WS 39.01.20.12-Gen.	Casing and Tubing Design Manual; Volume 1 – Mandatory Requirements

1.2 DISTRIBUTION, INTENDED USE AND REGULATORY CONSIDERATIONS

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This DEP is intended for use in facilities related to oil and gas production, gas handling, oil refining, chemical processing, gasification, distribution and supply/marketing. This DEP may also be applied in other similar facilities.

When DEPs are applied, a Management of Change (MOC) process shall be implemented; this is of particular importance when existing facilities are to be modified.

If national and/or local regulations exist in which some of the requirements could be more stringent than in this DEP, the Contractor shall determine by careful scrutiny which of the requirements are the more stringent and which combination of requirements will be acceptable with regards to the safety, environmental, economic and legal aspects. In all cases the Contractor shall inform the Principal of any deviation from the requirements of this DEP which is considered to be necessary in order to comply with national and/or local regulations. The Principal may then negotiate with the Authorities concerned, the objective being to obtain agreement to follow this DEP as closely as possible.

1.3 DEFINITIONS

1.3.1 General definitions

The **Contractor** is the party that carries out all or part of the design, engineering, procurement, construction, commissioning or management of a project or operation of a facility. The Principal may undertake all or part of the duties of the Contractor.

The **Manufacturer/Supplier** is the party that manufactures or supplies equipment and services to perform the duties specified by the Contractor.

The **NDT-Contractor** is the party that carries out the fabrication NDT. The NDT-Contractor can be hired directly by the Principal or subcontracted by the Contractor. The

NDT-Contractor is responsible for the delivery of the NDT-operators and necessary equipment and documentation for the NDT-qualification and production inspection, including the requested reporting.

The **Principal** is the party, which initiates the project and ultimately pays for the inspection. The Principal will generally specify the technical requirements. The Principal may include an agent or consultant authorized to act for and on behalf of the Principal.

The word **shall** indicates a requirement.

The word **should** indicates a recommendation.

1.3.2 Abbreviations

Term	Definition
ASNT	American Society for Nondestructive Testing
EN	Euro Norm (European Standards)
ISO	International Organization for Standardization
MOC	Management of Change
NDE	Nondestructive Examination (also known as NDT)
NDT	Nondestructive Testing (also known as NDE)
QA	Quality Assurance
QC	Quality Control
UT	Ultrasonic Testing

1.4 CROSS-REFERENCES

Where cross-references to other parts of this DEP are made, the referenced section number is shown in brackets (). Other documents referenced by this DEP are listed in (5).

1.5 COMMENTS ON THIS DEP

Comments on this DEP may be sent to the Administrator at standards@shell.com, using the DEP Feedback Form. The DEP Feedback Form can be found on the main page of "DEPs on the Web", available through the Global Technical Standards web portal <http://www.shell.com/standards> and on the main page of the DEPs DVD-ROM.

1.6 DUAL UNITS

This DEP contains both the International System (SI) units, as well as the corresponding US Customary (USC) units, which are given following the SI units in brackets. When agreed by the Principal, the indicated USC values/units may be used.