

 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض</p> <p>خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0010_08)</p>							
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طرح نگهداشت و افزایش تولید ۲۷ مخزن

WELD REPAIR PROCEDURE

نگهداشت و افزایش تولید میدان نفتی بینک

V00	MAY. 2024	IFA	MFS	M.Fakharian	S.Faramarzpour	
Rev.	Date	Purpose of Issue/Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Status:

IFA: Issued For Approval
IFI: Issued For Information
AFC: Approved For Construction

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REVISION RECORD SHEET

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1. Scope of Procedure

- 1.1. The scope of this procedure is to define a method for repairing and re-welding in a correct manner.

CLIENT: National Iranian South Oilfields Company (NISOC)

PROJECT: Binak Oilfield Development – General Facilities

EPD/EPC CONTRACTOR (GC): Petro Iran Development Company (PEDCO)

EPC CONTRACTOR: Joint Venture of: Hiran Energy – Design & Inspection(D&I) Companies

VENDOR: MFS Co.

3. Reference

- ASME BPVC Sec. IX_2021
- ASME BPVC Sec. V_2021
- Welding Book (Including WPS, PQR)
- SPECIFICATION FOR PRESSURE VESSELS (Doc No.: BK-00-GNRAL-000-ME-SP-0001-D03)

4. Extent of Usage

The extent of this procedure includes all weld jobs in the MFS shop, which is applied to.

5. Responsibility

Production supervisor, welder and QC inspector are responsible for accurate performance of this Procedure.

6. Requirements

Based on standard rejected weld flaws shall be completely removed to sound metal and repaired using this repair procedure.

7 Implementation method

7.1 Based on the NDT reports (RT, UT, MT and PT); the location of defects will be determined exactly on the weld line.

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7.2 Weld repair should be performed in accordance with the original WPS used for the original weld, but in case that the original is made with SAW, weld repair may be done in accordance with the approved SMAW or GTAW process. The SMAW electrode size shall be smaller than for the original weld, but no larger than 4.0mm. Low hydrogen electrode shall be used for repair welding by SMAW.

7.3 Weld overlays which are found by inspection to be unsound, or which are deposited by Procedures differing from those properly qualified, shall be rejected, completely removed from the equipment, and replaced using the repair procedure.

7.4 Repair welding will only be permitted after consideration of the nature and cause of cracking.

7.5 Unacceptable defects shall be removed by chipping, grinding, machining or air-arc gouging. Where air-arc gouging is used, all carbon, cooper and other debris, including carburized metal shall be removed by grinding or other mechanical methods. Oxygen gouging of quenched and tempered steels or other high strength steels is not permitted.

7.6 For partial repairs, the cut-out portion shall be sufficiently deep and long to remove the defect. At the ends and sides of the cut, there shall be a gradual taper from the base of the cut to the surface of the weld metal.

7.7 The width and profile of the cut shall provide adequate access for re-welding.

7.8 Prior to starting the repair, the repair grooves shall be examined by dye penetrant method in accordance with ASME Code Section V, to ensure that all defects are removed.

7.9 Preheating (where required) and inter-pass temperature shall be maintained during all weld repairs.

7.10 If required according to ASME code, Repairs on already post weld heat treated components shall be subject to a new post weld heat treatment under the same conditions and rules.

Note 1: In case of hesitating of remaining defects, it is recommended to remove more welds from detective location by grinding.

After completion of weld operation and quality control department confirmation, RT or UT is done in accordance with project specification or ASME Sec. VIII standard to reassurance of modifying.

Note 2: In each section of weld where RT test has been done fully (full RT), if the repair is necessary, just the section of weld which has been repaired shall be full RT test again.

Note 3: For surface defects, it shall be grinding, until the defect is resolved. According to the WPS, welding will be done again until no defects will be remained. Then according to the NDT Procedures, MT or PT will be done to be sure about that every defects are removed from the surface.

8. Reporting

Sample of weld repair report is attached:



خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)


شماره پیمان

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WELD REPAIR PROCEDURE

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نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه
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Reference's Code: PR-01-10 Review No.: 03 Review Date: 11.04.2021	Weld Repair Report	 MFS Masnouat Felezi Sangin Co.
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