

خرید مخازن ذخیره ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0026_00)





شماره پیمان:

· ۵۳ - · ۷۳ - 9114

		WELDING	REPAIR	PROCE	DURE		
پروژه	بسته کاری	صادركننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه
BK	GCS	IDR	120	QC	PR	0005	V00

شماره صفحه: 1 از 7

طرح نگهداشت و افزایش تولید ۲۷ مخزن

WELDING REPAIR PROCEDURE

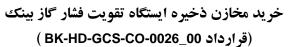
نگهداشت و افزایش تولید میدان نفتی بینک

V00	Nov.2024	IFA	IDrill M.E.	M.Fakharian	M.Sadeghian	
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









شماره پیمان:

 $\textbf{.} \Delta \textbf{r} - \textbf{.} \textbf{V} \textbf{r} - \textbf{9} \textbf{1} \Delta \textbf{f}$

		WELDING	REPAIR	PROCE	DURE		
پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سر يال	نسخه
BK	GCS	IDR	120	QC	PR	0005	V00

شماره صفحه: 2 از 7

REVISION RECORD SHEET

PAGE	V00	V01	V02	V03	V04
1	Х				
2	X				
3	X				
4	X				
5	X				
<u>6</u> 7	X				
8					
9					
10					
11					
12					
13					
14					
15					
16 17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28 29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40 41					
42					
43					
44					
45					
46					
47					
48					
49	1				
50					
51 52	+				
53	+				
54					
55					
56					
57					
58					
59					
60					
61					
62	1				
63					
64 65	ļ				

PAGE	V00	V01	V02	V03	V04
66					
67					
68					
69					
70 71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83		1			
84 85		-	+		
86		 			
87		1			
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99 100					
101					
102					
103					
104					
105					
106					
107					
108					
109					
110		-			
111		-			
112		1			
113 114		-	+		
115		t			
116					
117		1			
118					
119					
120					
121					
122					
123					
124		.			
125		-			
126		-			
127		1			
128 129	-	-			
130		1			
130	1	1	1	l	1







خرید مخازن ذخیره ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0026_00)

شماره پیمان:

.04 - . 14 - 114

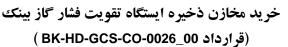
		WELDING	REPAIR	PROCE	DUKE		
پروژه	بسته کاری	صادر كننده	تسهيلات	رشته	نوع مدرك	سر يال	نسخه
BK	GCS	IDR	120	QC	PR	0005	V00

شماره صفحه: 3 از 7

CONTENTS

1.0	INTRODUCTION	4
2.0	SCOPE	5
_	REFERENCES CODE AND STANDARD	
	SCOPE OF WORK	
5.0	PERFORMANCE	5
6.0	REPORTING	6
7.0	BUILD UP	6
8.0	ATTACHMENT (REPAIR REPORT)	6









شماره پیمان:

.04 - . 14 - 9114

		WELDING	REPAIR	PROCE	DURE			
پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سر يال	نسخه	İ
BK	GCS	IDR	120	QC	PR	0005	V00	

شماره صفحه: 4 از 7

1.0 INTRODUCTION

Binak oilfield in Bushehr province is a part of the southern oilfields of Iran, is located 20 km northwest of Genaveh city.

With the aim of increasing production of oil from Binak oilfield, an EPC/EPD Project has been defined by NIOC/NISOC and awarded to Petro Iran Development Company (PEDCO). Also, PEDCO (as General Contractor) has assigned the EPC-packages of the Project to "Hirgan Energy - Design and Inspection" JV.

GENERAL DEFINITION

The following terms shall be used in this document.

CLIENT: National Iranian South Oilfields Company (NISOC)

PROJECT:

Binak Oilfield Development SUPPLY STORAGE

TANK.

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

EPC Joint Venture of: Hirgan Energy – Design &

CONTRACTOR/PURCAHSER: Inspection Companies (HE/DI)

VENDOR: iDrill Middle East (iDrill M.E)

EXECUTOR: Executor is the party which carries out all or part of

construction and/or commissioning for the project.

TPI: Third-Party Inspector

SHALL: Is used where a provision is mandatory.

SHOULD: Is used where a provision is advisory only.

MAY: Is used where a provision is completely discretionary.



خرید مخازن ذخیره ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0026_00)



شماره پیمان:

.04 - .14 - 4146

		WELDING	REPAIR	PROCE	DUKE		
پروژه	بسته کاری	صادركننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه
BK	GCS	IDR	120	QC	PR	0005	V00

شماره صفحه: 5 از 7

2.0 **SCOPE**

This procedure covers the requirement for repairing of weld defect while will be employed by iDrill Middle East Company for storage tanks related to the Binak Oilfield Development of Gas Dehydration Package. project. This procedure is required for Tag No.: TK-2209-TK -TK-2102-TK-2301 A/B

3.0 REFERENCES CODE AND STANDARD

- 1. API-650
- 2. ASME Sec. V

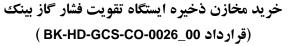
4.0 SCOPE OF WORK

All of activities in regard to repairing should be according to this procedure.

5.0 PERFORMANCE

- 5.1 All defects found in welds shall be called to the attention of the Purchaser's inspector, and the inspector's approval shall be obtained before the defects are repaired. All completed repairs shall be subject to the approval of the Purchaser's inspector. Acceptance criteria are specified in API 650 Para. 8.2, 8.4, and 8.5, as applicable.
- 5.2 Pinhole leaks or porosity in a tank bottom joint may be repaired by applying an additional weld bead over the defective area. Other defects or cracks in tank bottom or tank roof joints shall be repaired as required by API 650 Para. 8.1.7. Mechanical caulking is not permitted.
- 5.3 All defects, cracks, or leaks in shell joints or the shell-to-bottom joint shall be repaired in accordance with API 650 Para, 8.1.7.
- 5.4 Repairs of defects discovered after the tank has been filled with water for testing shall be made with the water level at least 0.3 m (1 ft.) below any point being repaired or, if repairs have to be made on or near the tank bottom, with the tank empty. welding shall not be done on any tank unless all connecting lines have been completely blinded, repairs shall not be attempted on a tank that is filled with oil or that has contained oil until the tank has been emptied, cleaned, and gas freed. Repairs on a tank that has contained oil shall not be attempted by the manufacturer unless the manner of repair has been approved in writing by purchaser and repairs are made in the presence of the Purchaser's inspector.
- 5.5 Defects in welds shall be repaired by grinding out the defects from one side or both sides of the joint, as required, and re-welding. All repaired welds in joints shall be checked by repeating the original inspection procedure and by repeating one of the testing methods of API 650 Para. 7.3, subject to the approval of the Purchaser.







شماره صفحه: 6 از 7

پیمان:	شماره

·54 - ·74 - 4176

WELDING REPAIR PROCEDURE								
پروژه	بسته کاری	صادركننده	تسهيلات	رشته	نوع مدرک	سريال	نسخه	
BK	GCS	IDR	120	QC	PR	0005	V00	

5.6 All of defects in welds and parent material such as: undercut, etc. which detect by Visual inspection shall be removed by grinding.

- 5.7 Before re-welding the repair area shall be grinded smoothly, removal of defects shall be verified and confirm by Visual check and PT or MT.
- 5.8 Repair welding of defects shall be done by qualified welders using relevant welding procedure, that approved by purchaser.
- 5.9 All of the welding shall be done by the same welding procedure specification (WPS) as the original
- 5.10 After weld completion the sufficient NDT (RT for subsurface defect & PT or MT for surface defect) should be done in the area, for compliance of welding repair of defect, and the surface shall be reexamined by Visual check.
- 5.11 Ultrasonic test shall be done where Radiography test cannot be used or whenever requested by the inspectors.
- 5.12 All repairing shall be performed before Hydro test.
- 5.13 All repairs caused by Hydro test shall be eliminate under inspector's supervision.
- 5.14 Repair welding shall be done by shielded metal arc welding (SMAW) by an approved WPS.
- 5.15 Where weld repairs are required, they shall be done progressively while the tank is being fabricated to minimize possible peaking and banding.

6.0 **REPORTING**

For each part which repaired, a report shall be issued. The report shall contain all necessary information for defines.

- Location (including Item No. Part No, and exactly Place.)
- **NDT Reports**

7.0 **BUILD UP**

- **7.1** Prepare the surface by grinding.
- 7.2 Build Up welding shall be done by shielded metal arc welding (SMAW) by an approved WPS.
- 7.3 After welding should be smooth surface.
- **7.4** Magnetic particle inspection or penetrant testing shall be done.

ATTACHMENT (REPAIR REPORT) 8.0



خرید مخازن ذخیره ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0026_00)





شماره پیمان: · ۵۳ - · ۷۳ - 9114

WELDING REPAIR PROCEDURE بسته کاری صادر كننده

نوع مدرك پروژه تسهيلات سريال BK GCS IDR PR 0005 V00 120 QC

شماره صفحه: 7 از **7**

Project Name:	Vendor:	Purchaser:	Date:	
Binak Oilfield Development of Gas Dehydration Package.	iDrill Middle East	Hirgan Energy – Design & Inspection Companies		
P.O No:	Procedure No.:	Report No.:	Page No.:	
			Page 1 of 1	

ITEM	WELD NO.	LOCATION	DEFECT TYPE	METHOD OF REPAIRING	NDT TEST	RESULT	REMARK

IDRILL M. E	HIRGAN / DI	PEDCO	TPI	NISOC
Name:	Name:	Name:	Name:	Name:
Date:	Date:	Date:	Date:	Date:
Signature:	Signature:	Signature:	Signature:	Signature: