



نگهداشت و افزایش تولید میدان نفتی بینک  
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PMR FOR ORIFICE AND RESTRICTION ORIFICE PLATE

پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	IN	MR	0009	D02

شماره صفحه: 1 از 19

طرح نگهداشت و افزایش تولید 27 مخزن

## PMR FOR ORIFICE AND RESTRICTION ORIFICE PLATE

نگهداشت و افزایش تولید میدان نفتی بینک

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Status:

IDC: Inter-Discipline Check  
IFC: Issued For Comment  
IFA: Issued For Approval  
AFD: Approved For Design  
AFC: Approved For Construction  
AFP: Approved For Purchase  
AFQ: Approved For Quotation  
IFI: Issued For Information  
AB-R: As-Built for CLIENT Review  
AB-A: As-Built -Approved



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D02	0009	MR	IN	120	PEDCO	GCS	BK

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## 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.

As a part of the Project, a New Gas Compressor Station (adjacent to existing Binak GCS) shall be constructed to gather of 15 MMSCFD (approx.) associated gases and compress & transfer them to Siahmakan GIS.

### GENERAL DEFINITION

The following terms shall be used in this document.

CLIENT:	National Iranian South Oilfields Company (NISOC)
PROJECT:	Binak Oilfield Development – Surface Facilities; New Gas Compressor Station
EPD/EPC CONTRACTOR (GC):	Petro Iran Development Company (PEDCO)
EPC CONTRACTOR/PURCHSER:	Joint Venture of: Hirgan Energy – Design & Inspection (D&I) Companies
VENDOR:	The Firm or Person Who Will Fabricate or supply The Equipment or Material.
SUB VENDOR:	The firm or person who will have a direct contract with the Vendor or another Sub vendor to perform a part or parts of the Work
EXECUTOR:	Executor is The Party Which Carries Out All or Part of Construction and/or Commissioning for The Project.
THIRD PARTY INSPECTOR (TPI):	The firm appointed by EPD/EPC CONTRACTOR (GC) and approved by CLIENT (in writing) for the inspection of goods.
SHALL:	Is Used Where a Provision Is Mandatory.
SHOULD:	Is Used Where a Provision Is Advisory Only.
WILL:	Is normally used in connection with the action by CLIENT rather than by an EPC/EPD CONTRACTOR or VENDOR.
MAY:	Is used Where a Provision Is Completely Discretionary.

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## 2.0 GENERAL

This document presents the item material requisitions for Contractor's use as appropriate.

This material requisition covers the requirements for the design, manufacturing, testing and supply of Orifice and Restriction Orifice Plate as listed below. All equipment/devices/items shall conform to this requisition and all specifications which have been mentioned in attachment 1 of this material requisition.

## 3.0 REFERENCE / ATTACHED DOCUMENTS

- a. Specified documents in attachment 1 shall be considered as a part of this material Requisition.
- b. All codes and standards which have been referenced in above mentioned specs shall be considered.
- c. In case of any conflict between the contents of this document or any discrepancy between this document and other project documents or reference standards, this issue must be reported to the CLIENT. The final decision in this situation will be made by CLIENT.
- d. Deviations

Any exceptions/clarifications to codes/standards and specifications listed in attachment 1 must be clearly stated in a separate dedicated section of the proposal in the format submitted in attachment 3.

The proposed deviations/comments list shall include as minimum:

- Reference for the involved specification, chapter and paragraph.
- Technical justification for the non-compliance.
- Detailed description of the proposed alternative.

If no exceptions or clarifications exist, either for the complete referenced document or an individual paragraph, VENDOR shall be considered to be in full compliance with the relevant document.

VENDOR may propose materials of equivalent or better quality compared to those indicated in the equipment data sheet. Even these cases shall be duly included/technically supported in the deviations/clarifications list.

## 4.0 SUBJECT OF THE SUPPLY

VENDOR shall supply Orifice and Restriction Orifice Plate. The scope of supply is detailed at part 5. VENDOR shall include in the supply, all other equipment/devices/items not listed in part 5, but necessary for a good design and a safe operation, taking into account process data and installation conditions such as area classification and climatic conditions.

The grade of shop assembly of the equipment/devices/items supplied shall be at maximum extent to facilitate site erection and pre-commissioning activities.

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## 5.0 LIMITS OF SUPPLY

### 5.1 SCOPE OF SUPPLY

#### 5.1.1 MAIN DESCRIPTION

The scope of supply includes Orifice and Restriction Orifice Plate Main feature are as below:

- Orifice Plate
- Flange
- Restriction Orifice
- Painting and coating

Detail of supply is as per below:

No.	Item	Description (*)
1	Flow Elements	As Per Data sheet for Orifice Plate / Restriction Orifice Doc. No.:" BK-GCS-PEDCO-120-IN-DT-0013"
2	Restriction orifices	As Per Data for Orifice Plate / Restriction Orifice Doc. No.:" BK-GCS-PEDCO-120-IN-DT-0013"

(\*): Latest revision of data sheet shall be considered as reference.

VENDOR shall assume overall responsibility for the design, manufacture, assembly, test and performance of all equipment/devices/items supplied as indicated in this requisition. This shall include, but not be limited to:

- Resolve engineering issues relating to equipment/devices/items within the scope of supply.
- Provide detailed design and documentation of all equipment/devices/items and components within the scope of supply in accordance with attachment 2 of this document.
- Provide all necessary information documents in order to allow the contractor to erect, install and verify the proposed equipment/devices/items.
- Implement a quality assurance plan
- The quality plan applied to the scope of supply shall include:
  - QA/QC Organization Chart and procedures that shall be submitted for approval.
  - Plan for HOLD points in the production process proposed to CLIENT/EPC CONTRACTOR for witness or approval particular activities.
  - Production schedule indicating main quality manufacturing processes, inspection and tests.

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- Qualification of all personnel performing tests to be reviewed by the inspector
- Vendor shall also provide the description of the following quality activities:
  - o Sub vendors' products quality
  - o Quality check and identification of the materials and equipment entering in their manufacturing shop.

- Calibration of test instruments and equipment
- Provide detailed specifications and data sheets.

### 5.1.2 SPARE PARTS

- The Vendor shall provide certain quantities of consumable for the installation, pre-commissioning, commissioning, start-up and up to the end of the guarantee period.
- The quantities shall be estimated by Vendor and shall be based upon the Vendor's experience. The following two periods shall be taken into account:
  - Pre-commissioning and commissioning period where the consumption of consumable is greater
  - Normal use of the System
- The VENDOR shall provide lists of recommended spare parts, which shall include the original part numbers with prices for commissioning, start-up and two years operation. All spare parts shall be identified individually.
- Spare parts for commissioning and start-up; a qualified and complete list based on PROJECT SPARE PART SUPPLY PROCEDURE (Doc. No. E&C-QC-SP-1).
- Spare parts for two years operation; a qualified and complete list based on PROJECT SPARE PART SUPPLY PROCEDURE (Doc. No. E&C-QC-SP-1).
- The VENDOR shall be able to provide spares back up and support for the plant life of at least 20 years.
- SPIR form shall be approved by CLIENT prior to procurement.

### 5.1.3 OTHER ITEMS

- Name plate

## 5.2 EXCLUSIONS

No exclusion is applicable.

## 5.3 BATTERY LIMITS

No battery limit is applicable.

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## 6.0 INSPECTION AND TESTS

The equipment shall be inspected and tested in accordance with the Inspection & Test plan ( ITP) issued by the vendor and approved by the Client and EPC/EPD CONTRACTOR (GC) before the award of the order . The Inspection & Test plan (ITP) shall be at least according to the Commodity Procurement and Manufacturing Inspection Instruction (Docs. Nos. ICE-EID-MI-SP01-Rev01) , Inspection Level of Commodity and Equipment ( Docs .Nos. ICE-EID-MI-SP02-Rev01) and Data Sheets. The vendor shall in any case conduct all the tests required by contractual documents, specifications, codes and standards, manufacturer standard quality system and keep the relevant documentation. All required manufacturing and function test/inspection also Factory Acceptance Test /Site Acceptance Test and Quality Assurance requirements shall be considered in vendor responsibility as per project specification.

## 7.0 VENDOR DOCUMENTATION REQUIREMENTS & SCHEDULE

Vendor document shall be according to attachment 2 of this document.

All documents, preliminary or final, are to be stamped and signed by VENDOR.

Failure in dispatch of the required documents shall cause the supply to be considered as unfulfilled.

PURCHASER's approval does not relieve vendor, in any way, from his obligation to fulfill the requirements of the purchase order documents.

All vendor drawings and documents shall be in English language.

All drawings and documents are to be identified as per clause 1 **“GENERAL DEFINITION”**

## 8.0 UNIT RESPONSIBILITY

VENDOR shall be responsible for the design, engineering, co-ordination, supply, delivery, and testing, final check-out, training and satisfactory operation of the equipment/devices/items. The engineering coordination also includes responsibility for handing and expediting drawings.

Also, VENDOR shall be responsible for ensuring that all relevant information and documentation is passed on the sub-vendors.

## 9.0 GUARANTEE AND WARRANTY

All material and Equipment/Devices/Items in VENDOR's scope of work/supply shall be guaranteed by VENDOR.



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The guarantee period shall be eighteen (18) months from the date of delivery or twelve (12) months from the installation date of each equipment/package at site



VENDOR shall guarantee the performance of supplied items ~~(if any)~~.

VENDOR shall guarantee that the Equipment/Device/Item is suitable for the operating conditions herein specified, and that all materials and components are free from any defects; verifications of all calculations are in VENDOR's responsibility.

VENDOR shall unconditionally guarantee the materials and workmanship of all material and/or services. If, within the guarantee period, any defects occur which are due to faulty material and/or services included in his scope (design, manufacturing, inspection, testing, supply & etc.), VENDOR shall, at his own expense, repair or adjust the condition, or replace the material and/or services to the complete satisfaction of CLIENT's representative. These repairs, replacement or adjustments shall be made only at such time as will be least detrimental to the operation of the CLIENT's business.

VENDOR warrants promptly repairing or replacing the defective parts in the warranty period.

Vendor shall ensure a correct and safe operation of the unit, providing all safety protection Devices.

Vendor shall be responsible for the safe, reliable, continuous functioning of the Equipment/Devices/Items.

VENDOR is fully responsible for the design of package for correct and safe operation based on project requirement during package life time; therefore, VENDOR shall specify any documents/specifications which may be required for design, manufacture and finalizing of Equipment/Devices/Items to avoid any problems during the package operation at site before P.O; otherwise, VENDOR shall be hold responsible for any corresponding deviation from expectations from the Equipment/Devices/Items.

## 10.0 DEVIATION

VENDOR's proposal shall be prepared in strict compliance with the requirements set forth in the relevant specifications of tender documents.

VENDOR shall include in his proposal the statement of compliance with the tender documents should VENDOR wish to submit exception to the requirements of tender documents. They shall be submitted for CLIENT/EPC CONTRACTOR's approval.

## 11.0 PRICE BREAKDOWN

Breakdown price of following items shall be included in the proposal, as well as total price.

 <p>NISOC</p>	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>																	
<p>شماره پیمان: 053 - 073 - 9184</p>	<p style="text-align: center;"><b>PMR FOR ORIFICE AND RESTRICTION ORIFICE PLATE</b></p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>پروژه</th> <th>بسته کاری</th> <th>صادر کننده</th> <th>تسهیلات</th> <th>رشته</th> <th>نوع مدرک</th> <th>سریال</th> <th>نسخه</th> </tr> </thead> <tbody> <tr> <td>BK</td> <td>GCS</td> <td>PEDCO</td> <td>120</td> <td>IN</td> <td>MR</td> <td>0009</td> <td>D02</td> </tr> </tbody> </table>	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	BK	GCS	PEDCO	120	IN	MR	0009	D02	<p>شماره صفحه : 10 از 19</p>
پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه											
BK	GCS	PEDCO	120	IN	MR	0009	D02											

- 1) Material and Fabrication for each Section Separately
- 2) Pre-commissioning & commissioning spare parts (E&C-QC-SP-1)
- 3) 2 years' operational spare parts (E&C-QC-SP-1)
- 4) Packing & transportation

	<b>نگهداشت و افزایش تولید میدان نفتی بینک</b> <b>سطح الارض</b> <b>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</b>								
	شماره پیمان: 053 - 073 - 9184	<b>PMR FOR ORIFICE AND RESTRICTION ORIFICE PLATE</b>							شماره صفحه : 11 از 19
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	IN	MR	0009	D02	

## ATTACHMENT 1

### 11.1 LIST OF REFERENCE / APPLICABLE DOCUMENTS

D02

No.	Document No.	Document Title	REV.
<b>Instrument</b>			
1	BK-GNRAL-PEDCO-000-IN-SP-0001	Specification For Instrumentation	D03
2	BK-GCS-PEDCO-120-IN-DT-0013	Data sheet for Orifice Plate / Restriction Orifice	D03
3	BK-GCS-PEDCO-120-IN-DG-0002	Instrument Hook-up Diagram	D04
4	BK-GCS-PEDCO-120-IN-DC-0002	Instrument & Control System Design Criteria	D02
<b>Safety</b>			
5	BK-GCS-PEDCO-120-SA-PI-0001	P&ID - Fire Water Network	D06
<b>Piping</b>			
6	BK-GCS-PEDCO-120-PI-SP-0001	Piping Material Specification	D06
<b>Process</b>			
7	BK-GCS-PEDCO-120-PR-PI-0001	Symbol & Legend for PFD and P&ID	D06
8	BK-GCS-PEDCO-120-PR-PI-0002	P&ID - Gas Compression Inlet Gas Pipeline (Binak)	D08
9	BK-GCS-PEDCO-120-PR-PI-0003	P&ID - Gas Compression Inlet Gas Pipeline (Golkhari)	D08
10	BK-GCS-PEDCO-120-PR-PI-0004	P&ID - Slug Catcher System	D10
11	BK-GCS-PEDCO-120-PR-PI-0005	P&ID - Gas Compression Inlet Knock Out Drum	D10
12	BK-GCS-PEDCO-120-PR-PI-0006	P&ID - 1st Stage Gas Compression Suction Drums	D10
13	BK-GCS-PEDCO-120-PR-PI-0007	P&ID - 1st Stage Gas Compression Compressors	D09
14	BK-GCS-PEDCO-120-PR-PI-0008	P&ID - 1st Stage Gas Compression Air Coolers	D10
15	BK-GCS-PEDCO-120-PR-PI-0009	P&ID - 2nd Stage Gas Compression Suction Drums	D09
16	BK-GCS-PEDCO-120-PR-PI-0010	P&ID - 2nd Stage Gas Compression Compressors	D08
17	BK-GCS-PEDCO-120-PR-PI-0011	P&ID - 2nd Stage Gas Compression Air Coolers	D10
18	BK-GCS-PEDCO-120-PR-PI-0012	P&ID - 2nd Stage Gas Compression Discharge Drum	D09
19	BK-GCS-PEDCO-120-PR-PI-0013	P&ID - Gas Compression Dehydration Package	D09
20	BK-GCS-PEDCO-120-PR-PI-0014	P&ID - Lean Glycol Storage Tank	D09
21	BK-GCS-PEDCO-120-PR-PI-0015	P&ID - Instrument & Plant Air System	D08
22	BK-GCS-PEDCO-120-PR-PI-0016	P&ID - Nitrogen Generation System	D08
23	BK-GCS-PEDCO-120-PR-PI-0017	P&ID - Close Drain System	D09
24	BK-GCS-PEDCO-120-PR-PI-0018	P&ID - Corrosion Inhibitor Package	D09
25	BK-GCS-PEDCO-120-PR-PI-0019	P&ID - Methanol Injection Package	D07
26	BK-GCS-PEDCO-120-PR-PI-0020	P&ID - LP Flare System	D09
27	BK-GCS-PEDCO-120-PR-PI-0021	P&ID - Oily Water Sewer	D05
28	BK-GCS-PEDCO-120-PR-PI-0022	P&ID - Fuel Gas System	D09
29	BK-GCS-PEDCO-120-PR-PI-0023	P&ID - Diesel Oil System	D08
30	BK-GCS-PEDCO-120-PR-PI-0024	P&ID - Potable Water System	D07

 <p>NISOC</p>	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>																	
<p>شماره پیمان: 053 - 073 - 9184</p>	<p>PMR FOR ORIFICE AND RESTRICTION ORIFICE PLATE</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>پروژه</td> <td>بسته کاری</td> <td>صادر کننده</td> <td>تسهیلات</td> <td>رشته</td> <td>نوع مدرک</td> <td>سریال</td> <td>نسخه</td> </tr> <tr> <td>BK</td> <td>GCS</td> <td>PEDCO</td> <td>120</td> <td>IN</td> <td>MR</td> <td>0009</td> <td>D02</td> </tr> </table>	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	BK	GCS	PEDCO	120	IN	MR	0009	D02	<p>شماره صفحه : 12 از 19</p>
پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه											
BK	GCS	PEDCO	120	IN	MR	0009	D02											

No.	Document No.	Document Title	REV.
31	BK-GCS-PEDCO-120-PR-PI-0025	P&ID - Glycol Sump Drum	D09
32	BK-GNRAL-PEDCO-000-PR-DC-0001	Process Design Criteria	D02
33	BK-GNRAL-PEDCO-000-PR-DB-0001	Process Basis of Design	D08
<b>General</b>			
34	ICE-EID-MI-SP01-Rev01	دستورالعمل بازرسی خرید و ساخت کالا	-
35	ICE-EID-MI-SP02-Rev01	سطح بازرسی کالا و تجهیزات	-
36	E&C-QC-SP-1	دستورالعمل تامین قطعات یدکی راه اندازی و راهبردی دو ساله	-
37	BK-GNRAL-PEDCO-000-QC-PR-0022	Specification For Final Data Book (FDB) Requirements	D00
38	BK-GNRAL-PEDCO-000-QC-PR-0045	Packing, Marking, Transportation Procedure	

**\*\*NOTE:** The Latest Revision of Project Document in Attachment 1 To Be Considered as Reference by Vendor.

 <b>نگهداشت و افزایش تولید میدان نفتی بینک</b> <b>سطح الارض</b> <b>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</b>									
	شماره پیمان: 053 - 073 - 9184	<b>PMR FOR ORIFICE AND RESTRICTION ORIFICE PLATE</b>							شماره صفحه: 13 از 19
	پروژه BK	بسته کاری GCS	صادرکننده PEDCO	تسهیلات 120	رشته IN	نوع مدرک MR	سریال 0009	نسخه D02	

## ATTACHMENT 2

### 11.2 VENDOR DOCUMENTS MIN. REQUIREMENT

NO.	DESCRIPTION	WITH BID	AFTER ORDERING				AT THE FINAL INSPECTION (4)
		Q./TYPE (1)	Q./TYPE (1)	DELIVERY DATE (2)	PURPOSE (3)	FINAL ISSUE	
<b>MANAGEMENT</b>							
1	Vendor Document Index and Schedule	4N	(5)	2W	A	(5)	X
2	Organization Brief	4N	(5)	2W	I	(5)	
3	Schedule Level 1, 2, 3 & 4 showing Engineering, Procurement, Fabrication, Inspection, Testing, and Delivery Plan.	4N	(5)	3W	A	(5)	X
4	Physically Progress Report (Every 2 Weeks))		(5)	2W	I	(5)	
5	Project Organization Chart	4N	(5)	2W	I	(5)	X
6	Reference List	4N	(5)	2W	I	(5)	
7	Vendor Catalogue	4N	(5)	2W	I	(5)	X
<b>HSE</b>							
8	HSE Procedure		(5)	4W	A	(5)	X
<b>ENGINEERING</b>							
9	Specifications/Data Sheets (Completed)		(5)	4W	A	(5)	X
10	Dimensional Outlines	4N	(5)	4W	A	(5)	X
11	Mounting Details		(5)	4W	A	(5)	X
12	Engineering Design and Documentation, Sizing Calculation, Noise Calculation	4N	(5)	4W	A	(5)	X
13	Schematic Wiring and Tubing Diagram	4N	(5)	4W	A	(5)	X
14	Electric Power & Utility Consumption List		(5)	4W	A	(5)	X
15	General Arrangement	4N	(5)	4W	A	(5)	X
16	Detailed Dimensions of Cut- Outs		(5)	4W	A	(5)	X
17	Parts/Material List	4N	(5)	4W	A	(5)	X

 <b>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</b> <b>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</b>									
	<b>PMR FOR ORIFICE AND RESTRICTION ORIFICE PLATE</b>								
شماره پیمان: 053 - 073 - 9184	پروژه BK	بسته کاری GCS	صادر کننده PEDCO	تسهیلات 120	رشته IN	نوع مدرک MR	سریال 0009	نسخه D02	شماره صفحه : 14 از 19

NO.	DESCRIPTION	WITH BID	AFTER ORDERING				AT THE FINAL INSPECTION (4)
		Q./TYPE (1)	Q./TYPE (1)	DELIVERY DATE (2)	PURPOSE (3)	FINAL ISSUE	
18	Technical Description and Relevant Catalogues	4N	(5)	4W	A	(5)	X
19	List of Deviations from the Specification and Data Sheets	4N	(5)	4W	A	(5)	
<b>PROCUREMENT</b>							
20	List of Sub-Vendors (table giving: part of equipment, tag no., sub-vendor reference) (5.1.3)	4N	(5)	4W	A	(5)	
21	Unpriced copy of sub-orders	4N	(5)	4W	I	-	
22	Packing Spec. / Shipping Schedule	4N	(5)	4W	I	-	
23	Weight List/ Shipping List	4N	(5)	4W	I	(5)	
24	Mechanical & Performance Guarantees	4N	(5)	4W	I	-	
<b>QUALITY, MANUFACTURING, TESTING</b>							
25	Quality Assurance Manual /Quality Management System Certificate (according to latest rev. of ISO)		(5)	3W	A	(5)	
26	Preliminary Project Schedule		(5)	4W	I	-	
27	Weld and NDT Map		(5)	4W	I	(5)	X
28	Surface Preparation and Painting Procedures		(5)	4W	I	(5)	X
29	Welding Procedure Specification (including repair procedures).		(5)	4W	I	(5)	X
30	Welder Qualification Procedure		(5)	4W	I	(5)	X
31	Fabrication Degree		(5)	4W	I	(5)	X
32	Hydrostatic/Pneumatic Test Procedure		(5)	4W	I	(5)	X
33	Quality Control Plan		(5)	4W	I	(5)	X
34	Manufacturing, Test & Inspection Procedures	4N	(5)	4W	A	(5)	X
35	Performance & Functional Test Procedure		(5)	4W	A	(5)	X
36	Non-Destructive Testing/Examination Procedures		(5)	4W	A	(5)	X
37	Factory Acceptance Test (FAT) Procedure		(5)	4W	A	(5)	X
<b>RECORDS, REPORTS &amp; CERTIFICATES</b>							

	<b>نگهداشت و افزایش تولید میدان نفتی بینک</b> <b>سطح الارض</b> <b>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</b>								
	<b>PMR FOR ORIFICE AND RESTRICTION ORIFICE PLATE</b>								شماره صفحه : 15 از 19
	شماره پیمان : 053 - 073 - 9184	پروژه BK	بسته کاری GCS	صادر کننده PEDCO	تسهیلات 120	رشته IN	نوع مدرک MR		

NO.	DESCRIPTION	WITH BID	AFTER ORDERING				AT THE FINAL INSPECTION (4)
		Q./TYPE (1)	Q./TYPE (1)	DELIVERY DATE (2)	PURPOSE (3)	FINAL ISSUE	
38	Material Conformity Certificate		(5)	4W	I	(5)	X
39	Testing Authority Approval Certificate		(5)	4W	I	(5)	X
40	Hazardous Area Certificates.		(5)	4W	I	(5)	X
41	Ingress Protection Certificate		(5)	4W	I	(5)	X
42	Conformity Certificates (sub-vendor/equipment)		(5)	4W	I	(5)	X
43	Material Certificates Identification Diagram. (cross-reference material location ; certificates for critical components)		(5)	4W	I	(5)	X
44	Welding Procedure Qualification Record.		(5)	4W	I	(5)	
45	Welding Inspection Reports		(5)	4W	I	(5)	
46	Welder Qualification Records.		(5)	4W	I	(5)	
47	NDT Operator Qualifications		(5)	4W	I	(5)	X
48	Detailed NDT Reports		(5)	4W	A	(5)	
49	Weld/ NDT Identification Diagram. (Cross-reference weld locations, WPS, welders, NDT reports).		(5)	4W	A	(5)	X
50	Hardness Test Reports		(5)	4W	A	(5)	X
51	PWHT Charts & Reports, including calibration records of recorders (for each heat treatment)		(5)	4W	I	(5)	X
52	Pressure Test Reports / Certificates		(5)	4W	A	(5)	X
53	FAT Test Report / Certificates		(5)	4W	A	(5)	
54	Performance Test Report / Certificates		(5)	4W	A	(5)	X
55	Material Test Certificates		(5)	4W	I	(5)	X
56	Calibration Curves of Control Equipment		(5)	4W	I	(5)	X
57	Calibration Test Certificates		(5)	4W	I	(5)	X
58	Surface Preparation & Coating Reports		(5)	4W	A	(5)	
59	Hydrostatic / Pneumatic Testing Certificates		(5)	4W	I	(5)	X
60	Welding Consumable Certificate		(5)	4W	I	(5)	X

 <b>NISOC</b>	<b>نگهداشت و افزایش تولید میدان نفتی بینک</b> <b>سطح الارض</b> <b>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</b>							 <b>شرکت توسعه و بهره‌برداری انرژی</b> <b>HIRGAN ENERGY</b>	
	<b>PMR FOR ORIFICE AND RESTRICTION ORIFICE PLATE</b>								<b>شماره صفحه : 16 از 19</b>
<b>شماره پیمان:</b> <b>053 - 073 - 9184</b>	<b>پروژه</b> BK	<b>بسته کاری</b> GCS	<b>صادر کننده</b> PEDCO	<b>تسهیلات</b> 120	<b>رشته</b> IN	<b>نوع مدرک</b> MR	<b>سریال</b> 0009	<b>نسخه</b> D02	

NO.	DESCRIPTION	WITH BID	AFTER ORDERING				AT THE FINAL INSPECTION (4)
		Q./TYPE (1)	Q./TYPE (1)	DELIVERY DATE (2)	PURPOSE (3)	FINAL ISSUE	
61	Test & Inspection Reports		(5)	4W	A	(5)	
62	Rust Prevention Report		(5)	4W	A	(5)	
63	Non-Conformities Report		(5)	4W	A	(5)	
64	Letter of Conformity		(5)	4W	A	(5)	
65	Monthly Progress Report		(5)	4W	A	(5)	
<b>INSTALLATION</b>							
66	Sub-Assembly Documentation		(5)	4W	A	(5)	
67	Sub-Assembly Drawings		(5)	4W	A	(5)	
68	Erection/Installation Manual		(5)	4W	A	(5)	
69	Name Plate Documents	4N	(5)	4W	A	(5)	
70	Handling, Transportation & Storage Instructions	4N	(5)	4W	A	(5)	
71	Unpacking & Inspection Instructions		(5)	4W	A	(5)	
72	Preliminary Packing List		(5)	4W	A	(5)	
73	Packing List		(5)	4W	A	(5)	
<b>OPERATION &amp; MAINTENANCE</b>							
74	Operating Instructions		(5)	4W	A	(5)	
75	Maintenance Instructions		(5)	4W	A	(5)	
76	Commissioning & Start-up Manual		(5)	4W	A	(5)	
77	List of Spare Parts Commissioning & Start-up	4N	(5)	4W	A	(5)	
78	List of Spare Parts 2 Years Operation	4N	(5)	4W	A	(5)	
79	List of Special Tools	4N	(5)	4W	A	(5)	
80	Lube Oil Schedule		(5)	4W	A	(5)	
81	Software Manual (incl. Troubleshooting)		(5)	4W	A	(5)	
82	Consumables List		(5)	4W	A	(5)	
83	Function Test Procedure		(5)	4W	A	(5)	X
<b>OTHERS</b>							



	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک								
	شماره پیمان: 053 - 073 - 9184	<b>PMR FOR ORIFICE AND RESTRICTION ORIFICE PLATE</b>							شماره صفحه : 17 از 19
	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	IN	MR	0009	D02	

NO.	DESCRIPTION	WITH BID	AFTER ORDERING				AT THE FINAL INSPECTION (4)
		Q./TYPE (1)	Q./TYPE (1)	DELIVERY DATE (2)	PURPOSE (3)	FINAL ISSUE	
84	Vendor Final Book		(5)	4W	A	(5)	X
85	All others documents will be listed in the order		(5)	4W	A	(5)	X

**NOTES:**

\*\*\* The electronic file (Native/PDF) and Hardcopy version shall be provided in all stages by vendor.

(1) Q : QUANTITY ; TYPE : C = COPY, R = REPRODUCIBLE, P = POLYESTER, M = MICROFILM, E = ELECTRONIC, N=NUMBER OF DOCUMENT

(2) W = CONSECUTIVE CALENDAR WEEK, M = CONSECUTIVE CALENDAR MONTH

(3) A = FOR APPROVAL - I = FOR INFORMATION

(4) X = DOCUMENTS TO BE SUBMITTED AT THE FINAL INSPECTION

(5) "6 C+E" COPY OF DOCUMENT.

(6) MECHANICAL CATALOGUE INCLUDING FINAL DRAWINGS/DOCUMENTS, UNPRICED PURCHASE ORDER & SUB- PURCHASE ORDER, MAINTENANCE DOSSIER ETC.

(7) ALL DOCUMENTS AND/OR DRAWINGS FOR THIS PROJECT SHALL ALSO BE SUBMITTED IN THE ELECTRONIC FILES BY

USING THE FOLLOWING SOFTWARE.

MS OFFICE WORD 2013 OR UPPER VERSION (ENGLISH) FOR WORD PROCESSING

MS OFFICE EXCEL 2013 OR UPPER VERSION (ENGLISH) FOR SPREAD SHEET

AUTO CAD 2005 (ENGLISH) FOR DRAWING

(8) IN ORDER TO DESIGN AND MANUFACTURE THE INSTRUMENTS, VENDOR SHALL CONSIDER THE SEISMIC FACTOR,

SUITABLE FOR SEISMIC UBC 97 zone 4, AND THE RESULTS SHALL BE PROVIDED BY VENDOR.

(9) List of Documents will be Finalized in VDIS.

 <p>NISOC</p>	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>																	
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پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه											
BK	GCS	PEDCO	120	IN	MR	0009	D02											

### ATTACHMENT 3

#### 11.3 DEVIATIONS / EXCEPTIONS TO JOB SPECIFICATION

Requisition No.:

Description:

Equipment No.:

Item No.	Description of Proposed Exception	Recommended Revision to JOB SPECIFICATION	Reason for Proposed Exception	Effect on Base PROPOSAL if CONTRACTOR Rejects Exception

 <p>NISOC</p>	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>																	
<p>شماره پیمان: 053 - 073 - 9184</p>	<p style="text-align: center;">PMR FOR ORIFICE AND RESTRICTION ORIFICE PLATE</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>پروژه</td> <td>بسته کاری</td> <td>صادر کننده</td> <td>تسهیلات</td> <td>رشته</td> <td>نوع مدرک</td> <td>سریال</td> <td>نسخه</td> </tr> <tr> <td>BK</td> <td>GCS</td> <td>PEDCO</td> <td>120</td> <td>IN</td> <td>MR</td> <td>0009</td> <td>D02</td> </tr> </table>	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	BK	GCS	PEDCO	120	IN	MR	0009	D02	<p>شماره صفحه : 19 از 19</p>
پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه											
BK	GCS	PEDCO	120	IN	MR	0009	D02											

## ATTACHMENT 4

### 11.4 ALTERNATIVES TO JOB SPECIFICATION

Requisition No.:

Description:

Equipment No.:

Item No.	Job Specification No. & Paragraph No.	Requirements of Job Specification	Description of Proposed Alternative	Reason for Proposed Alternative