

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PMR FOR DP FLOW /DP LEVEL	/PRESSURE/DIFF. PRESSURE
TRANSI	MITTER

TRATOMITIEN									
پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه		
BK	GCS	PEDCO	120	ZI	MR	0011	D00		

شماره صفحه: 1 از 21

طرح نگهداشت و افزایش تولید 27 مخزن

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE TRANSMITTER

نگهداشت و افزایش تولید میدان نفتی بینک

Class:3 CLIENT Doc. Number: F0Z-709287						
Rev.	Date	Purpose of Issue/Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval
D00	AUG. 2022	IFI	P.Hajisadeghi	M.Fakharian	M.Mehrshad	

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



053 - 073 - 9184

نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE

TRANSMITTER

بسته کاری صادر كننده نوع مدرك نسخه پروژه تسهيلات سريال BK GCS PEDCO 120 IN MR 0011 D00

شماره صفحه: 2 از 21

REVISION RECORD SHEET

	REVIS						
PAGE	D00	D01	D02	D03	D04		
1	X						
2	X						
3 4	X						
5	X						
6	X						
7	X						
8	X						
9 10	X						
11	X						
12	X						
13	X						
14 15	X						
16	X						
17	X						
18	X						
19	X						
20 21	X						
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	-						
50 51							
51 52							
53							
54							
55	1			1			
<u>56</u>							
57 58							
59							
60							
61							
62	-						
63							
64 65	1			1			

PAGE	D00	D01	D02	D03	D04
66					
67					
68					
69 70					
71					
72					
73					
74					
75					
<u>76</u>	-				
77					
<u>78</u> 79					
80					
81					
82					
83					
84	 				
85 86	 				
86 87	t				
88					
89					
90					
91	-				
92					
93 94					
95					
96					
97					
98					
99 100					
101					
102					
103					
104					
105					
106 107					
107					
109					
110					
111	ļ				
112	 				
113 114	 				
115	t				
116					
117					
118	ļ				
119	 				
120 121	 				
122	t				
123					
124					
125					
126	-				
127 128	-				
129	<u> </u>				
130					



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE TRANSMITTER

 المحمد
 المحمد

شماره صفحه: 3 از 21

CONTENTS

1.0	INTRODUCTION	4
2.0	GENERAL	
3.0	REFERENCE / ATTACHED DOCUMENTS	8
4.0	SUBJECT OF THE SUPPLY	8
5.0	LIMITS OF SUPPLY	8
5.1	SCOPE OF SUPPLY	
5.2 5.3	EXCLUSIONS	
6.0	INSPECTION AND TESTS	
7.0	VENDOR DOCUMENTATION REQUIREMENTS & SCHEDULE	
8.0	UNIT RESPONSIBILITY	11
9.0	GUARANTEE AND WARRANTY	11
10.0	DEVIATION	12
11.0	PRICE BREAKDOWN	12
ATTAC	CHMENT 1	12
11.1	LIST OF REFRENCE / APPLICABLE DOCUMENTS	12
ATTAC	CHMENT 2	15
11.2	VENDOR DOCUMENTS MIN. REQUIREMENT	15
ATTAC	CHMENT 3	20
11.3	DEVIATIONS / EXCEPTIONS TO JOB SPECIFICATION	20
ATTAC	CHMENT 4	21
11.4	ALTERNATIVES TO JOB SPECIFICATION	21



053 - 073 - 9184

نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE
TRANSMITTER

TRANOMITIER									
پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه		
BK	GCS	PEDCO	120	IN	MR	0011	D00		

شماره صفحه: 4 از 21

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: Joint Venture of : Hirgan Energy – Design & Inspection

(D&I) Companies

VENDOR: The Firm or Person Who Will Fabricate The Equipment

or Material.

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,

supplier or VENDOR.

MAY: Is used Where a Provision Is Completely

Discretionary.



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE								
TRANSMITTER								
پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه	
BK	GCS	PEDCO	120	IN	MR	0011	D00	

شماره صفحه: 5 از 21

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 Pressure /Differential Pressure/Flow(DP)/level(DP) Transmitter 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.

The vendor's supply shall include:

No.	Item	Description	Total QTY.
1	PDIT-2111	Connection: 1/2" NPT, 150# RF side, Range: 0-1000mbar	1
2	PDIT-2112	Connection: 1/2" NPT, 150# RF side, Range: 0-1000mbar	1
3	PDIT-2121A	Connection: 1/2" NPT, 150# RF side, Range: 0-1000mbar	1
4	PDIT-2121B	Connection: 1/2" NPT, 150# RF side, Range: 0-1000mbar	1
5	PDIT-2121C	Connection: 1/2" NPT, 150# RF side, Range: 0-1000mbar	1
6	PDIT-2131A	Connection: 1/2" NPT, 300# RF side, Range: 0-1000mbar	1
7	PDIT-2131B	Connection: 1/2" NPT, 300# RF side, Range: 0-1000mbar	1
8	PDIT-2131C	Connection: 1/2" NPT, 300# RF side, Range: 0-1000mbar	1
9	PDIT-2143	Connection: 1/2" NPT, 300# RF side, Range: 0-1000mbar	1
10	PDIT-2141	Connection: 1/2" NPT, 300# RF side, Range: 0-1000mbar	1
11	PT-2102	Connection: 1/2" NPT, 150# RF side, Range: 0-11 barg	1
12	PT-2104	Connection: 1/2" NPT, 150# RF side, Range: 0-11 barg	1
13	PT-2111	Connection: 1/2" NPT, 150# RF side, Range: 0-11 barg	1
14	PT-2112	Connection: 1/2" NPT, 150# RF side, Range: 0-11 barg	1
15	PT-2113	Connection: 1/2" NPT, 150# RF side, Range: 0-1 barg	1
16	PT-2113A	Connection: 1/2" NPT, 150# RF side, Range: 0-3 barg	1
17	PT-2114	Connection: 1/2" NPT, 300# RF side, Range: 0-25 barg	1
18	PT-2115	Connection: 1/2" NPT, 300# RF side, Range: 0-25 barg	1
19	PT-2113B	Connection: 1/2" NPT, 150# RF side, Range: 0-3 barg	1



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE TRANSMITTER

 نسخه
 سریال
 نوع مدر ک
 رشته
 تسهیلات
 صادر کننده
 بسته کاری
 پروژه

 BK
 GCS
 PEDCO
 120
 IN
 MR
 0011
 D00

شماره صفحه: 6 از 21

No.	Item	Description	Total QTY.
20	PT-2116	Connection: 1/2" NPT, 150# RF side, Range: 0-11 barg	1
21	PT-2117	Connection: 1/2" NPT, 150# RF side, Range: 0-11 barg	1
22	PT-2121A	Connection: 1/2" NPT, 150# RF side, Range: 0-10 barg	1
23	PT-2121B	Connection: 1/2" NPT, 150# RF side, Range: 0-10 barg	1
24	PT-2121C	Connection: 1/2" NPT, 150# RF side, Range: 0-10 barg	1
25	PIT-2122A	Connection: 1/2" NPT, 150# RF side, Range: 0-10 barg	1
26	PIT-2125A	Connection: 1/2" NPT, 300# RF side, Range: 0-25 barg	1
27	PIT-2122B	Connection: 1/2" NPT, 150# RF side, Range: 0-10 barg	1
28	PIT-2125B	Connection: 1/2" NPT, 300# RF side, Range: 0-25 barg	1
29	PIT-2122C	Connection: 1/2" NPT, 150# RF side, Range: 0-10 barg	1
30	PIT-2125C	Connection: 1/2" NPT, 300# RF side, Range: 0-25 barg	1
31	PIT-2131A	Connection: 1/2" NPT, 300# RF side, Range: 0-25 barg	1
32	PIT-2134A	Connection: 1/2" NPT, 600# RF side, Range: 0-100 barg	1
33	PIT-2131B	Connection: 1/2" NPT, 300# RF side, Range: 0-25 barg	1
34	PIT-2134B	Connection: 1/2" NPT, 600# RF side, Range: 0-100 barg	1
35	PIT-2131C	Connection: 1/2" NPT, 300# RF side, Range: 0-25 barg	1
36	PIT-2134C	Connection: 1/2" NPT, 600# RF side, Range: 0-100 barg	1
37	PIT-2135A	Connection: 1/2" NPT, 600# RF side, Range: 0-100 barg	1
38	PIT-2135B	Connection: 1/2" NPT, 600# RF side, Range: 0-100 barg	1
39	PIT-2135C	Connection: 1/2" NPT, 600# RF side, Range: 0-100 barg	1
40	PIT-2151	Connection: 1/2" NPT, 600# RF side, Range: 0-100 barg	1
41	PIT-2202	Connection: 1/2" NPT, 150# RF side, Range: 0-15 barg	1
42	PIT-2201	Connection: 1/2" NPT, 150# RF side, Range: 0-15 barg	1
43	PIT-2203	Connection: 1/2" NPT, 150# RF side, Range: 0-15 barg	1
44	PIT-2201A	Connection: 1/2" NPT, 150# RF side, Range: 0-15 barg	1



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE TRANSMITTER

	TRATOMITIEN									
پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه			
BK	GCS	PEDCO	120	IN	MR	0011	D00			

شماره صفحه: 7 از 21

No.	Item	Description	Total QTY.
45	PIT-2201B	Connection: 1/2" NPT, 150# RF side, Range: 0-15 barg	1
46	PIT-2201C	Connection: 1/2" NPT, 150# RF side, Range: 0-15 barg	1
47	PIT-2213	Connection: 1/2" NPT, 150# RF side, Range: 0-15 barg	1
48	PIT-2214	Connection: 1/2" NPT, 150# RF side, Range: 0-15 barg	1
49	PIT-2211A	Connection: 1/2" NPT, 150# RF side, Range: 0-15 barg	1
50	PIT-2211B	Connection: 1/2" NPT, 150# RF side, Range: 0-15 barg	1
51	PIT-2211C	Connection: 1/2" NPT, 150# RF side, Range: 0-15 barg	1
52	PIT-2272	Connection: 1/2" NPT, 150# RF side, Range: 0-10 barg	1
53	PIT-2271	Connection: 1/2" NPT, 150# RF side, Range: 0-10 barg	1
54	PIT-2281	Connection: 1/2" NPT, 150# RF side, Range: 0-0.5barg	1
55	FT-2101	DP Type, Connection: 1/2" NPTM, 300# RF side, Range: 0-250 mBar	1
56	FT-2102	DP Type, Connection: 1/2" NPTM, 300# RF side, Range: 0-250 mBar	1
57	FT-2111	DP Type, Connection: 1/2" NPTM, 300# RF side, Range: 0-250 mBar	1
58	FT-2271	DP Type, Connection: 1/2" NPTM, 300# RF side, Range: 0-250 mBar	1
59	FT-2211	DP Type, Connection: 1/2" NPTM, 300# RF side, Range: 0-250 mBar	1
60	LT-2113	DP Type, Connection: 2× 2", 300# RF side, C To C: 3100 mm	1
61	LT-2114	DP Type, Connection: 2× 2", 300# RF side, C To C: 11000 mm	1
62	LT-2115	DP Type, Connection: 2× 2", 300# RF side, C To C: 800 mm	1
63	LT-2161	DP Type, Connection: 2× 2", 300# RF side, C To C: 600 mm	1
64	LT-2162	DP Type, Connection: 2× 2", 300# RF side, C To C: 3500 mm	1
65	LT-2291	DP Type, Connection: 1× 2", 300# RF side, C To C: 2100 mm	1
66	LT-2301	DP Type, Connection: 1× 2", 300# RF side, C To C: 11500 mm	1
67	LT-2302	DP Type, Connection: 1× 2", 300# RF side, C To C: 11500 mm	1



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

FI	TRANSMITTER							
پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه	
BK	GCS	PEDCO	120	IN	MR	0011	D00	

شماره صفحه: 8 از 21

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, the supplier shall be considered to be in full compliance with the relevant document.

The supplier 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

The supplier shall supply Pressure /Differential Pressure/Flow(DP)/Level(DP) Transmitter. The scope of supply is detailed at part 5. The supplier shall include in the supply, all other equipment/devices/items not listed in part 2, 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.

5.0 LIMITS OF SUPPLY

5.1 SCOPE OF SUPPLY

5.1.1 MAIN DESCRIPTION

The scope of supply includes 67 Nos. Pressure /Differential Pressure/Flow(DP)/Level(DP) Transmitter Main feature are as below:



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE TRANSMITTER

	TRANSMITTER								
پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه		
BK	GCS	PEDCO	120	IN	MR	0011	D00		

شماره صفحه: 9 از 21

- Pressure /Differential Pressure Transmitter/DP Flow transmitter /DP level transmitter
- Local Indicator
- Sunshade
- 2 or 5 valve manifold
- Painting and coating(if required)

The supplier 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.
 - Qualification of all personnel performing tests to be reviewed by the inspector
 - Vendor shall also provide the description of the following quality activities:
 - Sub vendors' products quality
 - 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, precommissioning, 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



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PI	WIR FOR DI		LEVEL /P		JRE/DIFF. PI	RESSURE	
پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سر يال	نسخه
BK	GCS	PEDCO	120	IN	MR	0011	D00

شماره صفحه: 10 از 21

- 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.

6.0 INSPECTION AND TESTS

The equipment shall be inspected and tested in accordance with the quality control plan issued by the vendor and approved by the CLIENT/EPC CONTRACTOR before the award of the order. The QC plan shall at least be according to the Commodity Procurement and Manufacturing Inspection Instruction (Doc.s No.s E&C-QC-INSP-1, ICE-EID-MI-SP01) and data sheets (if any).

The supplier 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.

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 the supplier.

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.



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PI	PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE TRANSMITTER							
پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه	
BK	GCS	PEDCO	120	IN	MR	0011	D00	

شماره صفحه: 11 از 21

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.

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



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE TRANSMITTER							
پروژه	نسخه سريال نوع مدرک رشته تسهيلات صادر کننده بسته کاری پروژه						
BK	GCS	PEDCO	120	IN	MR	0011	D00

شماره صفحه: 12 از 21

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.

- 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
- 5) Other fee (if any)

ATTACHMENT 1

11.1 LIST OF REFRENCE / APPLICABLE DOCUMENTS

No.	Document No.	Document Title	REV.	Status		
	Instrument					
1	BK-GNRAL-PEDCO-000- IN-SP-0001	Specification For Instrumentation		IFA		
2	BK-GCS-PEDCO-120-IN-	Data sheet for	D00	IFC		



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PI	PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE TRANSMITTER								
پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرک	سريال	نسخه		
BK	GCS	PEDCO	120	IN	MR	0011	D00		

شماره صفحه: 13 از 21

No.	Document No.	Document Title	REV.	Status
	DT-0013	Orifice Plate / Restriction Orifice		
3	BK-GCS-PEDCO-120-IN- DT-0004	Data Sheets For Pressure/Diff. Pressure Transmitter	D00	IFC
4	BK-GCS-PEDCO-120-IN- DT-0019	Data Sheets For Diff. Pressure Type Level Transmitter	D00	IFC
5	BK-GCS-PEDCO-120-IN- DG-0002	Instrument Hook-up Diagram	D01	IFA
6	BK-GCS-PEDCO-120-IN- DC-0002	Instrument & Control System Design Criteria	D01	IFA
		Safety		
7	BK-GCS-PEDCO-120-SA- PI-0001	P&ID - Fire Water Network	D01	IFA
		Piping		
8	BK-GCS-PEDCO-120-PI- SP-0001	Piping Material Specification	D01	IFA
		Process		
9	BK-GCS-PEDCO-120-PR- PI-0001	Symbol & Legend For PFD and P&ID	D02	IFA
10	BK-GCS-PEDCO-120-PR- PI-0002	P&ID - Gas Compression Inlet Gas Pipeline (Binak)	D03	IFA
11	BK-GCS-PEDCO-120-PR- PI-0003	P&ID - Gas Compression Inlet Gas Pipeline (Golkhari)	D03	IFA
12	BK-GCS-PEDCO-120-PR- PI-0004	P&ID - Slug Catcher System	D03	IFA
13	BK-GCS-PEDCO-120-PR- PI-0005	P&ID - Gas Compression Inlet Knock Out Drum	D03	IFA
14	BK-GCS-PEDCO-120-PR- PI-0006	P&ID - 1st Stage Gas Compression Suction Drums	D03	IFA
15	BK-GCS-PEDCO-120-PR- PI-0007	P&ID - 1st Stage Gas Compression Compressors	D03	IFA
16	BK-GCS-PEDCO-120-PR- PI-0008	P&ID - 1st Stage Gas Compression Air Coolers	D03	IFA
17	BK-GCS-PEDCO-120-PR- PI-0009	P&ID - 2nd Stage Gas Compression Suction Drums	D03	IFA
18	BK-GCS-PEDCO-120-PR- PI-0010	P&ID - 2nd Stage Gas Compression Compressors	D03	IFA
19	BK-GCS-PEDCO-120-PR- PI-0011	P&ID - 2nd Stage Gas Compression Air Coolers	D03	IFA
20	BK-GCS-PEDCO-120-PR- PI-0012	P&ID - 2nd Stage Gas Compression Discharge Drum	D03	IFA
21	BK-GCS-PEDCO-120-PR- PI-0013	P&ID - Gas Compression Dehydration Package	D03	IFA
22	BK-GCS-PEDCO-120-PR- PI-0014	P&ID - Lean Glycol Storage Tank	D03	IFA
23	BK-GCS-PEDCO-120-PR- PI-0015	P&ID - Instrument & Plant Air System	D03	IFA
24	BK-GCS-PEDCO-120-PR- PI-0016	P&ID - Nitrogen Generation System	D03	IFA
25	BK-GCS-PEDCO-120-PR- PI-0017	P&ID - Close Drain System	D03	IFA



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE									
TRANSMITTER									
پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه		
RK	GCS	PEDCO	120	IN	MR	0011	DOO		

شماره صفحه: 14 از 21

No.	Document No.	Document Title	REV.	Status
26	BK-GCS-PEDCO-120-PR- PI-0018	P&ID - Corrosion Inhibitor Package	D03	IFA
27	BK-GCS-PEDCO-120-PR- PI-0019	P&ID - Methanol Injection Package	D03	IFA
28	BK-GCS-PEDCO-120-PR- PI-0020	P&ID - LP Flare System	D03	IFA
29	BK-GCS-PEDCO-120-PR- PI-0021	P&ID - Oily Water Sewer	D03	IFA
30	BK-GCS-PEDCO-120-PR- PI-0022	P&ID - Fuel Gas System	D03	IFA
31	BK-GCS-PEDCO-120-PR- PI-0023	P&ID - Diesel Oil System	D03	IFA
32	BK-GCS-PEDCO-120-PR- PI-0024	P&ID - Potable Water System		IFA
33	BK-GCS-PEDCO-120-PR- PI-0025	P&ID - Glycol Sump Drum	D03	IFA
34	BK-GNRAL-PEDCO-000- PR-DC-0001	Process Design Criteria	D02	AFD
35	BK-GNRAL-PEDCO-000- PR-DB-0001	Process Basis Of Design	D07	IFA
		General		
36	ICE-EID-MI-SP01-Rev01	دستورالعمل بازرسی خرید و ساخت کالا	-	-
37	ICE-EID-MI-SP02-Rev01	سطح بازرسي كالا و تجهيزات	ı	-
38	E&C-QC-SP-1	دستورالعمل تامین قطعات یدکی راه اندازی و راهبردی دوساله	-	-
39	BK-GNRAL-PEDCO-000- QC-PR-0022	Specification For Final Data Book (FDB) Requirements		
40	BK-GNRAL-PEDCO-000- QC-PR-0045	Packing, Marking, Transportation Procedure		

^{**}NOTE: List of Documents will be Finalized in VDLS.



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE TRANSMITTER							
پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه
BK	GCS	PEDCO	120	IN	MR	0011	D00

شماره صفحه: 15 از 21

ATTACHMENT 2

11.2 VENDOR DOCUMENTS MIN. REQUIREMENT

NO. DESCRIPTION Q_TYPE C Type C Ty			WITH BID		AFTER OR	DERING		AT THE
Vendor Document Index and Schedule	NO.	DESCRIPTION		PE		SE		INSPECTION
2 Organization Brief 4N (5) 2W 1 (5) 3 Schedule Level 1, 2, 3 & 4 showing Engineering, Procurement, Fabrication, Inspection, Testing, and Delivery Plan. 4N (5) 2W 1 (5) X 4 Physically Progress Report (Every 2 Weeks)) (5) 2W 1 (5) X 5 Project Organization Chart 4N (5) 2W 1 (5) X 6 Reference List 4N (5) 2W 1 (5) X 1 (5) X		MA	NAGEMEN	Т				
Schedule Level 1, 2, 3 & 4 showing Engineering, Procurement, Fabrication, Inspection, Testing, and Delivery Plan. 4N (5)	1	Vendor Document Index and Schedule	4N	(5)	2W	Α	(5)	Х
Engineering, Procurement, Fabrication, Inspection, Testing, and Delivery Plan.	2	Organization Brief	4N	(5)	2W	I	(5)	
Second Complete	3	Engineering, Procurement, Fabrication,	4N	(5)	3W	А	(5)	Х
Reference List	4	Physically Progress Report (Every 2 Weeks))		(5)	2W	1	(5)	
Vendor Catalogue	5	Project Organization Chart	4N	(5)	2W	ı	(5)	X
No.	6	Reference List	4N	(5)	2W	I	(5)	
8 HSE Procedure (5) 4W A (5) X ENGINEERING 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 General Arrangement 4N (5) 4W A (5) X 13 Detailed Dimensions of Cut- Outs (5) 4W A (5) X 14 Parts/Material List 4N (5) 4W A (5) X 15 Technical Description and Relevant Catalogues 4N (5) 4W A (5) X 16 List of Deviations from the Specification and Data Sheets 4N (5) 4W A (5)	7	Vendor Catalogue	4N	(5)	2W	I	(5)	Х
Specifications/Data Sheets (Completed) Specifications/Data Sheets (Specification and Data Sheets (Specification and Specification and Specificati			HSE					
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 General Arrangement 4N (5) 4W A (5) X 13 Detailed Dimensions of Cut- Outs (5) 4W A (5) X 14 Parts/Material List 4N (5) 4W A (5) X 15 Technical Description and Relevant Catalogues 4N (5) 4W A (5) X 16 List of Deviations from the Specification and Data Sheets 4N (5) 4W A (5)	8	HSE Procedure		(5)	4W	А	(5)	Х
10 Dimensional Outlines 4N (5) 4W A (5) X 11 Mounting Details (5) 4W A (5) X 12 General Arrangement 4N (5) 4W A (5) X 13 Detailed Dimensions of Cut- Outs (5) 4W A (5) X 14 Parts/Material List 4N (5) 4W A (5) X 15 Technical Description and Relevant Catalogues 4N (5) 4W A (5) X 16 List of Deviations from the Specification and Data Sheets 4N (5) 4W A (5)		EN	GINEERIN	G				
11 Mounting Details (5) 4W A (5) X 12 General Arrangement 4N (5) 4W A (5) X 13 Detailed Dimensions of Cut- Outs (5) 4W A (5) X 14 Parts/Material List 4N (5) 4W A (5) X 15 Technical Description and Relevant Catalogues 4N (5) 4W A (5) X 16 List of Deviations from the Specification and Data Sheets	9	Specifications/Data Sheets (Completed)		(5)	4W	А	(5)	Х
12 General Arrangement 4N (5) 4W A (5) X 13 Detailed Dimensions of Cut- Outs (5) 4W A (5) X 14 Parts/Material List 4N (5) 4W A (5) X 15 Technical Description and Relevant Catalogues 4N (5) 4W A (5) X 16 List of Deviations from the Specification and Data Sheets (5) 4W A (5)	10	Dimensional Outlines	4N	(5)	4W	А	(5)	Х
13 Detailed Dimensions of Cut- Outs (5) 4W A (6) X 14 Parts/Material List 4N (5) 4W A (6) X 15 Technical Description and Relevant Catalogues 4N (5) 4W A (6) X 4N (5) 4W A (7) X 4N (8) 4W A (8) X 4N (9) A (9) A (10) A (11) A (12) A (12) A (13) Detailed Dimensions of Cut- Outs 4N (13) A (14) A (15) A (15) A (16) A (17) A (17) A (18) A (19) A (19) A (19) A (10) A (10) A (10) A (10) A (11) A (11) A (12) A (12) A (13) A (14) A (15) A (15) A (16) A (17) A (17) A (17) A (18) A (19) A (19	11	Mounting Details		(5)	4W	Α	(5)	Х
14 Parts/Material List 4N (5) 4W A (5) X 15 Technical Description and Relevant Catalogues 4N (5) 4W A (5) X 16 List of Deviations from the Specification and Data Sheets 4N (5) 4W A (5) X	12	General Arrangement	4N	(5)	4W	А	(5)	Х
15 Technical Description and Relevant Catalogues 16 List of Deviations from the Specification and Data Sheets 17 Description and Relevant AND	13	Detailed Dimensions of Cut- Outs		(5)	4W	А	(5)	Х
Catalogues 16 List of Deviations from the Specification and Data Sheets 4N (5) 4W A (5) A (5) A (6) A (7) A (8) A (9) A (10) A (11) A (12) A (13) A (14) A (15) A (15) A (15) A (16) A (17) A (17) A (18) A (18) A (19) A	14	Parts/Material List	4N	(5)	4W	A	(5)	X
Data Sheets 4IN (3) 4VV A (3)	15	Catalogues	4N	(5)	4W	А	(5)	Х
PROCUREMENT	16		4N	(5)	4W	А	(5)	
		PRO	CUREMEN	NT				



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE TRANSMITTER

 المحمد
 المحمد

شماره صفحه: 16 از 21

		WITH BID		AFTER OR	DERING		AT THE
NO.	DESCRIPTION	Q./TYPE (1)	Q./TY PE (1)	DELIVERY DATE (2)	PURPO SE (3)	FINAL ISSUE	FINAL INSPECTION (4)
17	List of Sub-Vendors (table giving: part of equipment, tag no., sub-vendor reference)(5.1.3) (if any)	4N	(5)	4W	А	(5)	
18	Unpriced copy of sub-orders	4N	(5)	4W	I	-	
19	Packing Spec. / Shipping Schedule	4N	(5)	4W	I	-	
20	Weight List/ Shipping List	4N	(5)	4W	I	(5)	
21	Mechanical & Performance Guarantees	4N	(5)	4W	I	-	
	QUALITY , MAN	UFACTUR	ING, TE	STING			
22	Quality Assurance Manual /Quality Management System Certificate (according to latest rev. of ISO)		(5)	3W	А	(5)	
23	Preliminary Project Schedule		(5)	4W	I	-	
24	Weld and NDT Map (if any)		(5)	4W	I	(5)	Х
25	Surface Preparation and Painting Procedures		(5)	4W	I	(5)	Х
26	Welding Procedure Specification (including repair procedures). (if any)		(5)	4W	I	(5)	Х
27	Welder Qualification Procedure (if any)		(5)	4W	I	(5)	Х
28	Fabrication Degree		(5)	4W	I	(5)	Х
29	Manufacturing, Test & Inspection Procedures	4N	(5)	4W	Α	(5)	Х
30	Performance & Functional Test Procedure		(5)	4W	Α	(5)	Х
31	Non-DestructiveTesting/Examination Procedures		(5)	4W	А	(5)	Х
32	Factory Acceptance Test (FAT) Procedure		(5)	4W	Α	(5)	Х
	RECORDS, REP	ORTS & C	ERTIFIC	CATES			
33	Material Conformity Certificate		(5)	4W	I	(5)	Х
34	Testing Authority Approval Certificate (if any)		(5)	4W	I	(5)	Х
35	Hazardous Area Certificates.		(5)	4W	I	(5)	Х
36	Ingress Protection Certificate		(5)	4W	ı	(5)	X
37	Conformity Certificates (subvendor/equipment)		(5)	4W	I	(5)	Х



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE TRANSMITTER

TRANSMITTER								
نسخه سریال نوع مدرک رشته تسهیلات صادرکننده بسته کاری پروژه								
BK	GCS	PEDCO	120	IN	MR	0011	D00	

شماره صفحه: 17 از 21

		WITH BID		AFTER OR	DERING		AT THE
NO.	DESCRIPTION	Q./TYPE (1)	Q./TY PE (1)	DELIVERY DATE (2)	PURPO SE (3)	FINAL ISSUE	FINAL INSPECTION (4)
38	Material Certificates Identification Diagram. (cross-reference material location; certificates for critical components)		(5)	4W	I	(5)	Х
39	Welding Procedure Qualification Record. (if any)		(5)	4W	1	(5)	
40	Welder Qualification Records. (if any)		(5)	4W	I	(5)	
41	NDT Operator Qualifications		(5)	4W	I	(5)	Х
42	Detailed NDT Reports		(5)	4W	Α	(5)	
43	Weld/ NDT Identification Diagram. (Cross- reference weld locations, WPS, welders, NDT reports). (if any)		(5)	4W	А	(5)	Х
44	Dimensional Control Reports		(5)	4W	Α	(5)	
45	Hardness Test Reports		(5)	4W	Α	(5)	X
46	PWHT Charts & Reports, including calibration records of recorders (for each heat treatment)		(5)	4W	I	(5)	Х
47	Pressure Test Reports / Certificates		(5)	4W	Α	(5)	Х
48	FAT Test Report / Certificates		(5)	4W	Α	(5)	
49	Performance Test Report / Certificates		(5)	4W	Α	(5)	Х
50	Material Test Certificates		(5)	4W	I	(5)	Х
51	Calibration Curves of Control Equipment		(5)	4W	I	(5)	Х
52	Calibration Test Certificates		(5)	4W	I	(5)	X
53	Surface Preparation & Coating Reports		(5)	4W	Α	(5)	
54	Hydrostatic / Pneumatic Testing Certificates		(5)	4W	1	(5)	Х
55	Welding Consumable Certificate(if any)		(5)	4W	I	(5)	Х
56	Test & Inspection Reports		(5)	4W	Α	(5)	
57	Rust Prevention Report		(5)	4W	Α	(5)	
58	Non-Conformities Report		(5)	4W	Α	(5)	
59	Letter of Conformity		(5)	4W	Α	(5)	
	INS	TALLATIO	N				



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE
TRANSMITTER

TRANSMITTER								
نسخه سريال نوع مدرک رشته تسهيلات صادر کننده بسته کاری پروژه								
BK	GCS	PEDCO	120	IN	MR	0011	D00	

شماره صفحه: 18 از 21

		WITH BID		AFTER OR	DERING		AT THE	
NO.	DESCRIPTION	Q./TYPE (1)	Q./TY PE (1)	DELIVERY DATE (2)	PURPO SE (3)	FINAL ISSUE	FINAL INSPECTION (4)	
60	Sub-Assembly Documentation		(5)	4W	Α	(5)		
61	Sub-Assembly Drawings		(5)	4W	Α	(5)		
62	Erection/Installation Manual (if required)		(5)	4W	Α	(5)		
63	Name Plate Documents	4N	(5)	4W	Α	(5)		
64	Handling, Transportation & Storage Instructions	4N	(5)	4W	Α	(5)		
65	Unpacking & Inspection Instructions		(5)	4W	Α	(5)		
66	Preliminary Packing List		(5)	4W	Α	(5)		
67	Packing List		(5)	4W	Α	(5)		
	OPERATION & MAINTENANCE							
68	Operating Instructions		(5)	4W	Α	(5)		
69	Maintenance Instructions		(5)	4W	Α	(5)		
70	Commissioning & Start-up Manual		(5)	4W	Α	(5)		
71	List of Spare Parts Commissioning & Start-up	4N	(5)	4W	Α	(5)		
72	List of Spare Parts 2 Years Operation	4N	(5)	4W	Α	(5)		
73	List of Special Tools	4N	(5)	4W	Α	(5)		
74	Lube Oil Schedule		(5)	4W	Α	(5)		
75	Software Manual (incl. Troubleshooting)		(5)	4W	Α	(5)		
76	Consumables List		(5)	4W	Α	(5)		
77	Function Test Procedure		(5)	4W	Α	(5)	Х	
		OTHERS						
78	Vendor Final Book		(5)	4W	А	(5)	х	
79	All others documents (if required) will be listed in the order							
80								







شماره پیمان:

053 - 073 - 9184

PMR FOR DP FLOW /DP LEVEL /PRESSURE/DIFF. PRESSURE TRANSMITTER بسته کاری صادر كننده تسهيلات نوع مدرك نسخه پروژه سريال GCS BK PEDCO 120 IN MR 0011 D00

شماره صفحه: 19 از 21

		WITH BID		AFTER OR	DERING		AT THE FINAL INSPECTION (4)
NO.	NO. DESCRIPTION	Q./TYPE (1)	Q./TY PE (1)	DELIVERY DATE (2)	PURPO SE (3)	FINAL ISSUE	
81							

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.



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

TRANSMITTER								
نسخه سریال نوع مدرک رشته تسهیلات صادر کننده بسته کاری پروژه								
BK	GCS	PEDCO	120	IN	MR	0011	D00	

شماره صفحه: 20 از 21

ATTACHMENT 3

11.3 DEVIATIONS / EXCEPTIONS TO JOB SPECIFICATION

Requisition No.:		

Equipment No.:

Description:

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



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

053 - 073 - 9184

TRANSMITTER								
پروژه	نسخه سریال نوع مدرک رشته تسهیلات صادرکننده بسته کاری پروژه							
BK	GCS	PEDCO	120	IN	MR	0011	D00	

شماره صفحه: 21 از 21

ATTACHMENT 4

11.4 ALTERNATIVES TO JOB SPECIFICATION

_		
$D \wedge c$	uuicition	· NIA ·
VEC	uisitior	I INO

Description:

Equipment No.:

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