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| **طرح نگهداشت و افزایش تولید 27 مخزن** |
| **EQUIPMENT LIST****نگهداشت و افزایش تولید میدان نفتی بینک** |
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| V01 | OCT. 2023 | IFR | Havayar Co. | M.Fakharian | S. Faramarzpour |  |
| V00 | MAY. 2023 | IFR | Havayar Co. | M.Fakharian | A.M.Mohseni |  |
| **Rev.** | **Date** | **Purpose of Issue/Status** | **Prepared by:** | **Checked by:** | **Approved by:** | **CLIENT Approval** |
|  |
| **Status:** | **IFA: Issued For Approval****IFR: Issued For Review****IFI: Issued For Information****AFC: Approved For Construction**  |

**REVISION RECORD SHEET**

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| **2** | X | X |  |  |  | **67** |  |  |  |  |  |
| **3** | X |  |  |  |  | **68** |  |  |  |  |  |
| **4** | X |  |  |  |  | **69** |  |  |  |  |  |
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1. **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 – General Facilities |
| EPD/EPC CONTRACTOR (GC):  | Petro Iran Development Company (PEDCO) |
| OWNER:  | OWNER is collectively refer to National Iranian South Oil Company (NISOC) and Petro Iran Development Company (PEDCO) |
| EPC CONTRACTOR: | Joint Venture of: Hirgan Energy – Design & Inspection(D&I) Companies |
| VENDOR: | Havayar Company |
| 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. |
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1.
2. **Equipment List**

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| **Item** | **Equipment Description** | **Tag No.** | **Service** | **Operating Pressure (barg)** | **Design Pressure (barg)** | **Operating / Design Temp. (°C)** | **QTY.** | **P&ID No.** | **Dimension (mm)** | **Material** | **C.A. (mm)** | **Insulation** | **Hazardous Area** | **Rated Capacity (kg/hr)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1st Stage Suction Snubber | C-2101-D1 A/B/C | Hydrocarbon | 4.9 | 24.5 | 36.8 / 180 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | A106 B / A234 WPB | 3 | Heat Traced | - | - |
|  | 1st Stage Discharge Snubber | C-2101-D2 A/B/C | Hydrocarbon | 18 | 24.5 | 129 / 180 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | A106 B / A234 WPB | 3 | Personnel Protection | - | - |
|  | 2nd Stage Suction Snubber | C-2102-D1 A/B/C | Hydrocarbon | 17.1 | 62 | 59.9 / 180 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | A106 B / A234 WPB | 3 | Heat Traced | - | - |
|  | 2nd Stage Discharge Snubber | C-2102-D2 A/B/C | Hydrocarbon | 54.9 | 62 | 147 / 180 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | A106 B / A234 WPB | 3 | Personnel Protection | - | - |
|  | Compressor | C-2101/2 A/B/C | Hydrocarbon | 1st stage | 4.8 / 18 | 1st stage | 24.5 | 1st stage | 36.8 / 180 | 3 | BK-GCS-HY-120-PR-PI-0001 | Width: 7925 | Details Acc. to Datasheet | - | - | - | 8935.5 |
| 2nd stage | 17 / 54.9 | 2nd stage | 62 | 2nd stage | 59.9 / 180 | 8935.5 |
|  | Main Oil Pump | P-2101-MP A/B/C | Lubrication Oil | 5 | 8 | 70 / 85 | 3 | BK-GCS-HY-120-PR-PI-0001 | Length: 410Dia.: 430 | Casing: A536 | - | - | Zone 2 | 6923.874 |
|  | Aux. Oil Pump | P-2101-AP A/B/C | Lubrication Oil | 5 | 8 | 70 / 85 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | TBD | - | - | Zone 2 | 6923.874 |
|  | Lube Oil Filter | F-2101-OF A/B/C | Lubrication Oil | 5 | 8 | 60 / 85 | 6 | BK-GCS-HY-120-PR-PI-0001 | TBD | Element:SS | 0 | - | - | - |
|  | Lube Oil Air Cooler | AE-2101-OC A/B/C | Lubrication Oil | 5 | 8 | 70 / 85 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | Stainless Steel | 0 | - | Zone 2 | TBD |
|  | Packing Leakage Collection Pot | V-2104 A/B/C | Nitrogen / Hydrocarbon | 1.5 | 5 | 60 / 85 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | A106 B / A234 WPB | 6 | Personnel Protection | - | - |
|  | Distance Piece Collecting Pot | V-2105 A/B/C | Nitrogen / Hydrocarbon | 1.5 | 5 | 60 / 85 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | A106 B / A234 WPB | 6 | Personnel Protection | - | - |
|  | Buffer Gas Filter | F-2101-BF A/B/C | Nitrogen | 7.5 | 10 | 60 / 85 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | Stainless Steel | - | - | Zone 2 | - |
|  | Main Water Pump | P-2101-WP A/B/C | Water | 3 | 7 | 65 / 85 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | Cast Iron | - | - | Zone 2 | TBD |
|  | Aux. Water Pump | P-2101-AX A/B/C | Water | 3 | 7 | 65 / 85 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | Cast Iron | - | - | Zone 2 | TBD |
|  | Water Air Cooler | AE-2101-WC A/B/C | Water | 3 | 7 | 65 / 85 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | Carbon Steel | TBD | - | Zone 2 | TBD |
|  | Cooling Water Filter | F-2101/02-WF A/B/C | Water | 3 | 7 | 58 / 85 | 6 | BK-GCS-HY-120-PR-PI-0001 | TBD | TBD | - | Personnel Protection | - | - |
|  | Strainer | ST-2101/02 A/B/C | Hydrocarbon | 1st stage | 4.9 | 1st stage | 7 | 1st stage | 36.8 / 180 | 6 | BK-GCS-HY-120-PR-PI-0001 | TBD | Stainless Steel mesh | 3 | Heat Traced | - | - |
| 2nd stage | 17.1 | 2nd stage | 24.5 | 2nd stage | 59.9 / 180 |
|  | Electrical Oil Heater | H-2101-OH A/B/C | Lubrication Oil | ATM | ATM | 60 / 85 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | TBD | - | - | Zone 2 | - |
|  | Electrical Water Heater | H-2101-WH A/B/C | Water | ATM | ATM | 58 / 85 | 3 | BK-GCS-HY-120-PR-PI-0001 | TBD | TBD | - | - | Zone 2 | - |
|  | Water Reservoir | TK-2101-WR A/B/C | Water | ATM | ATM | 58 / 85 | 3 | BK-GCS-HY-120-PR-PI-0001 | 1.5 m3 | Carbon Steel | 3 | Personnel Protection | - | - |

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General Note:

TBD: To be determined.