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| **طرح نگهداشت و افزایش تولید 27 مخزن** | | | | | | | |
| **SPECIFICATION FOR LINE PIPES**  **نگهداشت و افزایش تولید میدان نفتی بینک** | | | | | | | |
| D04 | DEC. 2021 | AFD | H.Shahrokhi | M.Fakharian | A.M.Mohseni |  |
| D03 | DEC. 2021 | AFD | H.Shahrokhi | M.Fakharian | M.Mehrshad |  |
| D02 | OCT. 2021 | IFA | H.Shahrokhi | M.Fakharian | Sh.Ghalikar |  |
| D01 | SEP. 2021 | IFA | H.Shahrokhi | M.Fakharian | Sh.Ghalikar |  |
| D00 | JUL. 2021 | IFC | M.Asgharnejad | M.Fakharian | Sh.Ghalikar |  |
| **Rev.** | **Date** | **Purpose of Issue/Status** | **Prepared by:** | **Checked by:** | **Approved by:** | **CLIENT Approval** |
| **Class: 2** | | **CLIENT Doc. Number: F0Z-707152** | | | | |
| **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** | | | | | |

**REVISION RECORD SHEET**

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| **PAGE** | **D00** | **D01** | **D02** | **D03** | **D04** |  | **PAGE** | **D00** | **D01** | **D02** | **D03** | **D04** |
| **1** | X | X | X | X | X | **66** |  |  |  |  |  |
| **2** | X | X | X | X | X | **67** |  |  |  |  |  |
| **3** | X |  |  |  |  | **68** |  |  |  |  |  |
| **4** | X | X |  |  |  | **69** |  |  |  |  |  |
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| **9** |  |  |  |  |  | **74** |  |  |  |  |  |
| **10** |  |  |  |  |  | **75** |  |  |  |  |  |
| **11** |  |  |  |  |  | **76** |  |  |  |  |  |
| **12** |  |  |  |  |  | **77** |  |  |  |  |  |
| **13** |  |  |  |  |  | **78** |  |  |  |  |  |
| **14** |  |  |  |  |  | **79** |  |  |  |  |  |
| **15** |  |  |  |  |  | **80** |  |  |  |  |  |
| **16** |  |  |  |  |  | **81** |  |  |  |  |  |
| **17** |  |  |  |  |  | **82** |  |  |  |  |  |
| **18** |  |  |  |  |  | **83** |  |  |  |  |  |
| **19** |  |  |  |  |  | **84** |  |  |  |  |  |
| **20** |  |  |  |  |  | **85** |  |  |  |  |  |
| **21** |  |  |  |  |  | **86** |  |  |  |  |  |
| **22** |  |  |  |  |  | **87** |  |  |  |  |  |
| **23** |  |  |  |  |  | **88** |  |  |  |  |  |
| **24** |  |  |  |  |  | **89** |  |  |  |  |  |
| **25** |  |  |  |  |  | **90** |  |  |  |  |  |
| **26** |  |  |  |  |  | **91** |  |  |  |  |  |
| **27** |  |  |  |  |  | **92** |  |  |  |  |  |
| **28** |  |  |  |  |  | **93** |  |  |  |  |  |
| **29** |  |  |  |  |  | **94** |  |  |  |  |  |
| **30** |  |  |  |  |  | **95** |  |  |  |  |  |
| **31** |  |  |  |  |  | **96** |  |  |  |  |  |
| **32** |  |  |  |  |  | **97** |  |  |  |  |  |
| **33** |  |  |  |  |  | **98** |  |  |  |  |  |
| **34** |  |  |  |  |  | **99** |  |  |  |  |  |
| **35** |  |  |  |  |  | **100** |  |  |  |  |  |
| **36** |  |  |  |  |  | **101** |  |  |  |  |  |
| **37** |  |  |  |  |  | **102** |  |  |  |  |  |
| **38** |  |  |  |  |  | **103** |  |  |  |  |  |
| **39** |  |  |  |  |  | **104** |  |  |  |  |  |
| **40** |  |  |  |  |  | **105** |  |  |  |  |  |
| **41** |  |  |  |  |  | **106** |  |  |  |  |  |
| **42** |  |  |  |  |  | **107** |  |  |  |  |  |
| **43** |  |  |  |  |  | **108** |  |  |  |  |  |
| **44** |  |  |  |  |  | **109** |  |  |  |  |  |
| **45** |  |  |  |  |  | **110** |  |  |  |  |  |
| **46** |  |  |  |  |  | **111** |  |  |  |  |  |
| **47** |  |  |  |  |  | **112** |  |  |  |  |  |
| **48** |  |  |  |  |  | **113** |  |  |  |  |  |
| **49** |  |  |  |  |  | **114** |  |  |  |  |  |
| **50** |  |  |  |  |  | **115** |  |  |  |  |  |
| **51** |  |  |  |  |  | **116** |  |  |  |  |  |
| **52** |  |  |  |  |  | **117** |  |  |  |  |  |
| **53** |  |  |  |  |  | **118** |  |  |  |  |  |
| **54** |  |  |  |  |  | **119** |  |  |  |  |  |
| **55** |  |  |  |  |  | **120** |  |  |  |  |  |
| **56** |  |  |  |  |  | **121** |  |  |  |  |  |
| **57** |  |  |  |  |  | **122** |  |  |  |  |  |
| **58** |  |  |  |  |  | **123** |  |  |  |  |  |
| **59** |  |  |  |  |  | **124** |  |  |  |  |  |
| **60** |  |  |  |  |  | **125** |  |  |  |  |  |
| **61** |  |  |  |  |  | **126** |  |  |  |  |  |
| **62** |  |  |  |  |  | **127** |  |  |  |  |  |
| **63** |  |  |  |  |  | **128** |  |  |  |  |  |
| **64** |  |  |  |  |  | **129** |  |  |  |  |  |
| **65** |  |  |  |  |  | **130** |  |  |  |  |  |

**CONTENTS**

[1. INTRODUCTION 4](#_Toc89187142)

[2. Scope 5](#_Toc89187143)

[3. NORMATIVE REFERENCES 5](#_Toc89187144)

[4. ADDENDUM/MODIFICATION TO IPS 7](#_Toc89187145)

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 CLIENT (NISOC) |
| PROJECT: | Binak Oilfield Development – General Facilities |
| 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. |

**GUIDANCE FOR USE OF THIS DOCUMENT**

The amendments/supplement to the related IPS Standard(s) given in this document are directly related to the equivalent sections or clauses in the IPS Standard(s). For clarity, the section and paragraph numbering of the IPS Standard(s) has been used as long as possible. Where clauses in IPS are referenced within this document, it shall mean those clauses are amended by this document. Clauses in” IPS” that are not amended by this document shall remain valid as written.

For ease of reference, the clause or section numbering of the related IPS Standard(s) has been used throughout this specification. For the purpose of this specification, the following definitions shall hold:

**D04**

Sub. (Substitution): The clause in IPS-M-PI-190(3) shall be deleted and replaced by a new clause in this specification.

Del. (Deletion): The clause in IPS-M-PI-190(3) shall be deleted without any replacement.

Add. (Addition): A new clause with a new number is added based on numbering format of IPS-M-PI-190(3) in this specification.

Mod. (Modification): Part of a clause in IPS-M-PI-190(3) is modified, and/or a new description and/or condition is added to that clause in this specification.

1. **Scope**

This document defines minimum requirements for manufacturing, supply, inspection, testing and packaging of seamless and welded pipe for use in pipelines of this PROJECT.

1. **NORMATIVE REFERENCES**

The latest edition of following codes & standards are applicable in this project (unless otherwise mentioned):

## Local Codes andStandards

* IPS-M-PI-190 “Material and Equipment Standard for Line Pipe".

## International Codes and Standards

* API 5L Specification for Line Pipe
* ASME B36.10M Welded and Seamless Wrought Steel Pipe
* ASME B36.19M Stainless Steel Pipe
* EN 10204 Metallic products - Types of inspection documents
* NACE MR 0175/ISO 15156 Petroleum and Natural Gas Industries. Materials for use in H2S Containing Environments in Oil and Gas Production
* NACE TM 0284 Evaluation of pipeline and pressure vessel steels for resistance to hydrogen-induced cracking
* NACE TM 0177 Laboratory Testing of Metals for Resistance to Sulfide Stress Cracking and Stress Corrosion Cracking in H2S Environments
* ASME B31.4 Pipeline Transportation Systems for Liquid Hydrocarbons
* ASME B31.8 Gas Transmission and Distribution Piping Systems
* ASME B16.25 Butt welding Ends
* ASME Section V Non- Destructive Examination
* BS 1133 Protection of Metal Surfaces against Corrosion during Transit and Storage
* BS 381C Specification for Colour Identification, Coding and Special Purpose
* BS 5383 Material Identification of Steel by continuous Marking and Colour coding of steel tubes

## The Project Documents

* BK-GNRAL-PEDCO-000-PL-SP-0001 Pipeline Material Specification
* BK-GNRAL-PEDCO-000-PL-DC-0001 Pipeline Design Criteria
* BK-GNRAL-PEDCO-000-PL-SP-0007 Specification for Pipeline Coating
* BK-GNRAL-PEDCO-000-PI-SP-0001 Specification For Color Coding and Marking’
* BK-GNRAL-PEDCO-000-PI-SP-0002 Specification For Transportation, Handling, Storage of pipes
* BK-GNRAL-PEDCO-000-PI-SP-0008 Specification For Material Requirements in Sour service

## ENVIRONMENTAL DATA

Refer to "Process Basis of Design; Doc. No. BK-GNRAL-PEDCO-000-PR-DB-0001".

## ORDER OF PRECEDENCE

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.

1. **ADDENDUM/MODIFICATION TO IPS**

**D04**

This specification is based on the latest edition of IPS-M-PI-190(3) “Material and Equipment   
Standard for Line Pipe" without any modification.