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|---|--|---|--------------------|--------------------|-------------------|--------------------|---------------------|---|------------------------|
| <b>OWNER:</b><br><br>شرکت سست و سویی تو سوا ایرانیاں<br>(سهائی فاس) | <b>BUSHEHR PETROCHEMICAL COMPANY<br/>MEG PLANT</b>                             | <b>EPC CONTRACTOR:</b><br><br>Chagalesh-Enerchimi-Steam<br>Joint Venture<br>BUPC-MEG PLANT PROJECT |                    |                    |                   |                    |                     |   |                        |
| <b>MC :</b><br><br>شرکت سست و سویی تو سوا ایرانیاں<br>(سهائی فاس)  | <b>Inspection and Test Plan (ITP) for<br/>Reciprocating Compressor-MEG-303</b> |   |                    |                    |                   |                    |                     | <b>Vendor:</b><br> |                        |
| <b>Owner Document Number:<br/>17811-08</b>  | <b>Project</b><br>BU   | <b>Area</b><br>20   | <b>Phase</b><br>VD | <b>Unit</b><br>303 | <b>Dis.</b><br>QC | <b>Doc.</b><br>ITP | <b>Seq.</b><br>0005 | <b>Contract No : 52-98/445</b>  |                        |
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## Inspection and Test Plan for reciprocating compressor MEG-303





| Rev.                          | Date       | Purpose of Issue | Prepared | Checked | Approved | AC Code |
|-------------------------------|------------|------------------|----------|---------|----------|---------|
| 03                            | 29/10/2021 | For approval;    | JB       | JR      | PW       |         |
| 02                            | 27/08/2021 | For approval;    | JB       | JR      | PW       |         |
| 01                            | 17/06/2021 | For approval     | KP       | JR      | PW       |         |
| 00                            | 30/10/2020 | For approval     | KP       | JR      | PW       |         |
| <b>Class: 1      Phase: P</b> |            |                  |          |         |          |         |

|  |  |      |       |      |      |      |      |  |         |
|--|--|------|-------|------|------|------|------|--|---------|
| OWNER:<br><br>شرکت ست و سوبی آوند ایرانیاان<br>(صنای نیاس) | <b>BUSHEHR PETROCHEMICAL COMPANY<br/>MEG PLANT</b>                             |      |       |      |      |      |      | EPC CONTRACTOR:<br><br>Chagalesh-Enerchimi-Steam<br>Joint Venture<br>BEPC-MEG PLANT PROJECT |         |
|  | <b>Inspection and Test Plan (ITP) for<br/>Reciprocating Compressor-MEG-303</b> |      |       |      |      |      |      | <br>Netherlands   |         |
| MC:<br><br>شرکت ست و سوبی آوند ایرانیاان<br>(صنای نیاس)   | Project  | Area | Phase | Unit | Dis. | Doc. | Seq. | Contract No : 52-98/445  |         |
| Owner Document Number:<br>17811-08   | BU   | 20   | VD    | 303  | QC   | ITP  | 0005 | Rev.:  | Page    |
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| <b>OWNER:</b><br><br>شرکت ست و سوبی آوند ایرانیاان<br>(سهامی خاص) | <b>BUSHEHR PETROCHEMICAL COMPANY<br/>MEG PLANT</b>                             |  |  |  |  |  |  | <b>EPC CONTRACTOR:</b><br><br>Chagalesh-Enerchimi-Steam<br>Joint Venture<br>BEPC-MEG PLANT PROJECT<br> |                   |
| <b>MC :</b><br><br>شرکت ست و سوبی آوند ایرانیاان<br>(سهامی خاص)  | <b>Inspection and Test Plan (ITP) for<br/>Reciprocating Compressor-MEG-303</b> |  |  |  |  |  |  | <b>Contract No : 52-98/445</b>   |                   |
| <b>Owner Document Number:<br/>17811-08</b>  |  |  |  |  |  |  |  | <b>Project</b><br>BU   | <b>Area</b><br>20 |

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| MC :<br><br>شرکت ست و سوبی آسید ایرانین<br>(سهامی خاص)  | <b>Inspection and Test Plan (ITP) for<br/>Reciprocating Compressor-MEG-303</b> |                   |                    |                    |                   |                    |                     |   |                        |
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## 1. GENERAL

### 1.1. Scope

This Inspection Test Plan (ITP) covers the minimum requirements for inspection, testing and fabricating of reciprocating compressor used in the MEG plant of Bushehr Petrochemical Project.

The EPCC/Supplier shall in any case conduct all the tests required by contractual documents, specifications, codes and standards and keep the relevant documentation.

Where required, Inspection Test Plan (ITP) will be finalized during the pre-inspection meeting.

The EPCC/Supplier is responsible for the adequacy and compliance of inspection and tests of equipment with the applicable code and standards requirements, the process conditions and/or other conditions as specified in this ITP.

The OWNER`s Inspection and Test Plan for equipment is an engineering document, which defines:





- The type and extent of OWNER`s Representative Involvement in each phase of fabrication, control and testing requiring an inspection.
- The resulting EPCC/VENDOR`s contractual obligations in accordance with general purchase condition.

During the course of project execution, if an activity is found to be necessary but not covered in the ITP table, any party`s proposal shall be prepared describing the items in ITP format for activity and issued to OWNER/MC for approval prior to commencement of the referred activity.

Compliance with this document and the accompanying data does not relieve the EPCC/VENDOR from his own responsibilities and guarantees nor from any further contractual obligations.






### 1.2. Definition of Terms

The following defines the meaning of specific words used in this document:





|  |  |             |              |             |             |             |             |   |                    |
|--|--|-------------|--------------|-------------|-------------|-------------|-------------|---|--------------------|
| <b>OWNER:</b><br><br>شرکت ست و سوبی توسته ایرانیان<br>(صنای نفت) | <b>BUSHEHR PETROCHEMICAL COMPANY<br/>MEG PLANT</b>                             |             |              |             |             |             |             | <b>EPC CONTRACTOR:</b><br><br>Chagalesh-Enershimi-Steam<br>Joint Venture<br>BUPC-MEG PLANT PROJECT |                    |
|  | <b>Inspection and Test Plan (ITP) for<br/>Reciprocating Compressor-MEG-303</b> |             |              |             |             |             |             |    |                    |
| <b>MC :</b><br><br>شرکت ست و سوبی توسته ایرانیان<br>(صنای نفت)  | <b>Project</b>   | <b>Area</b> | <b>Phase</b> | <b>Unit</b> | <b>Dis.</b> | <b>Doc.</b> | <b>Seq.</b> | <b>Contract No : 52-98/445</b>  |                    |
|  | <b>Owner Document Number:<br/>17811-08</b>                                     | <b>BU</b>   | <b>20</b>    | <b>VD</b>   | <b>303</b>  | <b>QC</b>   | <b>ITP</b>  | <b>0005</b>   | <b>Rev.:</b><br>03 |

|  |   |
|--|---|
| <b>Owner</b>                               | Bushehr Petrochemical Company (BUPC)  |
| <b>MC</b>                                  | Samt-O-Sou-Ye Tose-Eye Iranian (SSTI) Company & Namvaran Delvar Engineering & Construction Company (NDEC).  |
| <b>EPCC</b>                                | Joint Venture of Chagalesh, Enershimi and Steam (CES)   |
| <b>Supplier / Vendor</b>                   | Means the company who will supply and/or manufacture equipment(s) and/or materials under Purchase Order issued by the EPCC , which is FGS Global AB Company for this Contract.  |
| <b>Project</b>                             | Phase 2 Bushehr Petrochemical Project, MEG Plant  |
| <b>Location</b>                            | South of IRAN, Bushehr Province, Assaluyeh city   |
| <b>Third Party Inspection Agency (TPA)</b> | The Company that is responsible for Inspecting of all tests and documents review as Client's representative and checking of fabricated equipment/commodities conformity with Approved procedures and documents before, during and end of manufacturing. |
| <b>Shall</b>                               | Refer to a mandatory requirement.   |
| <b>ITP</b>                                 | Inspection and Test Plan  |
| <b>MR</b>                                  | Material Requisition  |
| <b>P.O</b>                                 | Purchase Order  |
| <b>PIM</b>                                 | Pre-Inspection Meeting  |
| <b>IRN</b>                                 | Inspection Release Note   |
| <b>MTC</b>                                 | Material test certificate   |

OWNER/MC shall be consulted in writing in every case of conflict, for approval.

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| MC :<br><br><br>شرکت سست و سوبی آوند ایرانیان<br>(سهامی خاص) | <b>Inspection and Test Plan (ITP) for<br/>Reciprocating Compressor-MEG-303</b> |  |  |  |  |  |  | <b>Contract No : 52-98/445</b>  |                   |
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- HOLD POINT (H):** Hold point is a designate point during or following specific activity which are defined in ITP and which inspection or examination shall not proceed unless the designate parties have witnessed the inspection or examination or test.
  - WITNESS POINT (W):** A designated point during or following an important activity at which inspection or examination is required in accordance with the relative procedure. Work may proceed through the designated witness point if the required party is not present for the previously established activity, provided that inspection and test records are made available to OWNER/MC/TPI for review.
  - SPOT WITNESS POINT (20% W):** A designated point during or following an activity at which spot inspection or spot examination is required in accordance with the relative procedure. Work may proceed through the designated spot witness point if the required party is not present for the previously established activity.  
 This may include a wide variety of actions taken by in charge person to inspect, check, control of activities and their sequence by means of observation, information collection, and verbal instruction, verify the routing and supporting documents for the purpose of proper expedition. Any non-conformity found during above mentioned inspection by TPI shall be reported to OWNER/MC immediately.
- REVIEW POINT (R):** It is processed through reviewing any results of inspection or test as a method of ensuring that the inspection or test is performed in accordance with any approved drawing, procedure, specifications or acceptance criteria.
- Inspection result shall review, but presence of involved party at inspection time is not mandatory, all documents shall be sign and stamp as reviewed and results all activates shall be specified clearly by term Accepted/Rejected.

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| MC :<br><br>شرکت سست و سوبی آوند ایرانیاان<br>(صنای نفتی)  | <b>Inspection and Test Plan (ITP) for<br/>Reciprocating Compressor-MEG-303</b> |                   |                    |                    |                   |                    |                     | <b>Contract No : 52-98/445</b>  |                        |
| <b>Owner Document Number:<br/>17811-08</b>  | <b>Project</b><br>BU   | <b>Area</b><br>20 | <b>Phase</b><br>VD | <b>Unit</b><br>303 | <b>Dis.</b><br>QC | <b>Doc.</b><br>ITP | <b>Seq.</b><br>0005 | <b>Rev.:</b><br>03  | <b>Page</b><br>7 of 19 |

- **REVIEW & APPROVAL (RA):** RA means that the document reviewed by involved parties shall be signed and stamped as reviewed & approved. Where a document is specified to be subjected to a party's approval, work shall not be proceeding until this approval to be obtained.

### 1.3. Applicable codes and standards

ASME VIII Div. 1

ASME XI

ASME B31.3

AWS D1.1






API 618 (latest edition) with deviations and clarifications as per PO

### 1.4. Abbreviations






E.P.M = engineering and production manual, can be supplied on request

## 2. INSPECTION REQUIREMENTS

- OWNER/MC could have witness during and on any of the manufacturing steps.
- EPCC/Supplier shall inform other parties for 7 calendar days prior to subjected action for H/W/SW inspection points for LOCAL inspection.






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| <b>MC :</b><br> <br>شرکت سست و سوهی آستد ایرانین<br>(سهامی خاص) | <h2 style="text-align: center;">Inspection and Test Plan (ITP) for<br/>Reciprocating Compressor-MEG-303</h2> |  |  |  |  |  |  | <b>Contract No : 52-98/445</b>   |                   |
| <b>Owner Document Number:<br/>17811-08</b>  |  |  |  |  |  |  |  | <b>Project</b><br>BU   | <b>Area</b><br>20 |

- EPCC/Supplier shall inform OWNER/MC for 14 calendar days prior to subjected action for H/W/SW inspection points for OVERSEAS inspection.
- All items and their materials shall be inspected according to OWNER/MC's requirements. However, the acceptance of any work and/or release of the material/equipment by the OWNER /MC shall in no way relieve the supplier of any responsibility for carrying out all the provisions of the applicable codes, standards and the specification.
- Inspectors or representatives shall have free access to all shops of the supplier or sub-supplier.

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|   | <b>Inspection and Test Plan (ITP) for Reciprocating<br/>Compressor-MEG-303</b> |      |       |      |      |      |      | <b>Contract No : 52-98/445</b>  |         |
| MC :<br>  | Project  | Area | Phase | Unit | Dis. | Doc. | Seq. | <b>Rev.:</b> <b>Page</b>  |         |
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### 3. INSPECTION AND TEST PLAN TABLE





| Row | Activities            | Reference Documents | Acceptance Criteria | Verifying Document | Action              |                |     |         |
|-----|-----------------------|---------------------|---------------------|--------------------|---------------------|----------------|-----|---------|
|     |                       |                     |                     |                    | Manufacturer/Vendor | CES Contractor | TPA | BUPC/MC |
| A.1 | Kick of Meeting (KOM) | Contract/PO         | Contract/PO         | MOM                | H                   | H              | R   | H       |

|   |  |      |       |      |      |      |      |  |          |
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| OWNER:<br><br>شرکت مست و سوتی تومر ایرانیان<br>(سهامی خاص)                                 | <b>BUSHEHR PETROCHEMICAL COMPANY<br/>MEG PLANT</b>                             |      |       |      |      |      |      | EPC CONTRACTOR:<br><br>Chagalesh-Enerchimi-Steam<br>Joint Venture<br>BUFC-MEG PLANT PROJECT |          |
|   | <b>Inspection and Test Plan (ITP) for Reciprocating<br/>Compressor-MEG-303</b> |      |       |      |      |      |      |   |          |
| MC :<br>  | Project  | Area | Phase | Unit | Dis. | Doc. | Seq. | Contract No : 52-98/445  |          |
| Owner Document Number: 17811-08   | BU   | 20   | VD    | 303  | QC   | ITP  | 0005 | Rev.:  | Page     |
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|-----|---|--|--|---|---|----|----|---|
| B.1 | Pre-Inspection Meeting (PIM)                            | Project Specification                        | Project Specification                        | MOM and ITP                             | H | H  | R  | H |
| B.2 | Engineering documents                                   | According to VPIS                            | Contract/PO                                  | Approved Docs                           | H | RA | R  | R |
| B.3 | <b>Procedures</b>                                       | According to VPIS, Project Spec              | According to VPIS, Project Spec              | Approved Procedures                     | H | RA | R  | R |
| B.4 | <b>Welder Qualifications<sup>1</sup></b>                | ASME Sec IX                                  | ASME Sec IX                                  | Welder Qualification Certificates       | H | RA | RA | R |
| B.5 | WPS & PQR   | Project Spec, Related Standards, ASME Sec IX | Project Spec, Related Standards, ASME Sec IX | Approved WPS-PQR                        | H | RA | RA | R |
| B.6 | <b>NDT Personnel Qualification<sup>1</sup></b>          | SNT-TC-1A                                    | SNT-TC-1A                                    | NDT Personnel Qualification Certificate | H | RA | RA | R |
| B.7 | IECEX, IP, ATEX and SIL Certificate (as per Data Sheet) | API 618, Related Standards, Project Spec     | API 618, Related Standards, Project Spec     | Certificates                            | H | RA | RA | R |

**Notes:**

- Welder qualification and NDT personnel qualification will be presented during inspection if requested by the inspector, no prior approval required.**





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|   | <b>Inspection and Test Plan (ITP) for Reciprocating<br/>Compressor-MEG-303</b> |           |           |            |           |            |             |   |          |
| MC :<br><br>شرکت سست و سوبی آوند ایران<br>(سهامی خاص)  | Project  | Area      | Phase     | Unit       | Dis.      | Doc.       | Seq.        | Contract No : 52-98/445  |          |
| <b>Owner Document Number: 17811-08</b>  | <b>BU</b>  | <b>20</b> | <b>VD</b> | <b>303</b> | <b>QC</b> | <b>ITP</b> | <b>0005</b> | Rev.:  | Page     |
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| C.1         | Raw Materials Inspection                                   | GA, DWG, Data Sheet, Project Spec                | GA, DWG, Data Sheet, Project Spec                | MTC EN10204 type 3.1 | H | RA | RA | R |
| C.2         | Welding  | WPS/PQR  | AWS D1.1<br>WPS/PQR                              | VT Report            | H | SW | SW | R |
| C.3         | NDT<br>100% MT on lifting lugs                             | NDT Procedure and NDT Map, AWS D1.1              | NDT Procedure and NDT Map, AWS D1.1              | NDT Report           | H | SW | SW | R |
| C.4         | Visual and Dimensions Inspection                           | GA, DWG, Data Sheet                              | GA, DWG, Data Sheet                              | Inspection Report    | H | W  | W  | R |
| C.5         | Painting Inspection (Check Visual, RAL and DFT) During FAT | Surface Preparation and Painting procedure, SSPC | Surface Preparation and Painting procedure, SSPC | Painting report      | H | W  | W  | R |

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|---|--|------|-------|------|------|------|------|--|----------|
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|   | <b>Inspection and Test Plan (ITP) for Reciprocating<br/>Compressor-MEG-303</b> |      |       |      |      |      |      |   |          |
| MC :<br><br>شرکت ست و سوتی توسعه ایرانین<br>(سهامی خاص)  | Project  | Area | Phase | Unit | Dis. | Doc. | Seq. | Contract No : 52-98/445  |          |
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| Piping (CS) |  |  |  |  |   |    |    |   |  |
|-------------|--|--|--|--|---|----|----|---|--|
| D.1         | Raw Materials Inspection                                   | GA, DWG, Data Sheet, Project Spec            | GA, DWG, Data Sheet, Project Spec                | MTC EN10204 type 3.1                       | H | RA | RA | R |  |
| D.2         | Visual & Dimensional (Fit-up)                              | Project Spec, GA, DWG, Data Sheet, WPS       | Project Spec, GA, DWG, Data Sheet, WPS           | QC Report                                  | H | SW | SW | R |  |
| D.3         | Welding Inspection   | WPS/PQR                                      | ASME IX, WPS/PQR                                 | VT Report                                  | H | SW | SW | R |  |
| D.4         | NDT <sup>1</sup><br>5% RT according ASME B31.1             | NDT Procedure and NDT Map, ASME B31.3        | NDT Procedure and NDT Map, ASME B31.3            | NDT Report                                 | H | SW | SW | R |  |
| D.5         | Hydrostatic Test   | ASME 31.3, Hydrostatic Test Procedure        | ASME B31.3, Hydrostatic Test Procedure           | Hydrostatic Test Report, Inspection Report | H | W  | W  | R |  |
| D.6         | Painting Inspection (Check Visual, RAL and DFT) During FAT | Surface Preparation Painting procedure, SSPC | Surface Preparation and Painting procedure, SSPC | Painting report                            | H | W  | W  | R |  |

<sup>1</sup> Action point for RT in NDT is RA for TPA and CES representative.

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|   | <b>Inspection and Test Plan (ITP) for Reciprocating<br/>Compressor-MEG-303</b> |      |       |      |      |      |   |                         |          |
| MC :<br><br>شرکت سست و سوز توربو ایران<br>(مسابی خاص)  | Project  | Area | Phase | Unit | Dis. | Doc. | Seq.   | Contract No : 52-98/445 |          |
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| Pulsation damper (CS, ASME VIII Div 1) |  |  |  |  |   |    |    |   |
|--|--|--|--|--|---|----|----|---|
| E.1                                    | Raw Materials Inspection   | GA, DWG, Data Sheet, Project Spec                | GA, DWG, Data Sheet, Project Spec                | MTC EN10204 type 3.1                       | H | RA | RA | R |
| E.2                                    | Visual & Dimensional<br>{Fit-up}                                 | Project Spec and Drawing                         | Drawing  | QC Report                                  | H | SW | SW | R |
| E.3                                    | Welding Inspection   | WPS/PQR  | ASME IX, WPS/PQR                                 | VT Report                                  | H | SW | SW | R |
| E.4                                    | NDT <sup>2</sup><br>As per ASME VIII (if any)                    | NDT Procedure and NDT Map, ASME VIII             | NDT Procedure and NDT Map, ASME VIII             | NDT Report                                 | H | RA | RA | R |
| E.5                                    | Hydrostatic Test   | ASME VIII, Hydrostatic Test Procedure            | ASME VIII, Hydrostatic Test Procedure            | Hydrostatic Test Report, Inspection Report | H | W  | W  | R |
| E.6                                    | Painting Inspection<br>(Check Visual, RAL and DFT)<br>During FAT | Surface Preparation and Painting procedure, SSPC | Surface Preparation and Painting procedure, SSPC | Painting report                            | H | W  | W  | R |





<sup>2</sup> Action point for RT in NDT is RA for TPA and CES representative. If there are other types of NDT, action points for those tests shall be SW for TPA and CES representative.

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| MC :<br><br>شرکت سست و سوهی توسه ایرانین<br>(دسائی ناس)  | <b>Inspection and Test Plan (ITP) for Reciprocating<br/>Compressor-MEG-303</b> |      |       |      |      |      |      |   |          |
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**After cooler (SS, ASME VIII Div 1 and TEM C)**





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|-----|---|--|--|--|---|-------|-------|---|
| F.1 | Raw Materials Inspection                                      | GA, DWG, Data Sheet, Project Spec                | GA, DWG, Data Sheet, Project Spec                | MTC EN10204 type 3.1                       | H | RA    | RA    | R |
| F.2 | Visual & Dimensional<br>(Fit-up)                              | Project Spec and Drawing                         | Drawing  | QC Report                                  | H | SW    | SW    | R |
| F.3 | Welding Inspection  | WPS/PQR  | ASME IX, WPS/PQR                                 | VT Report                                  | H | SW    | SW    | R |
| F.4 | NDT <sup>3</sup><br>As per ASME VIII (if any)                 | NDT Procedure and NDT Map, ASME VIII             | NDT Procedure and NDT Map, ASME VIII             | NDT Report                                 | H | RA/SW | RA/SW | R |
| F.5 | Hydrostatic Test  | ASME VIII, Hydrostatic Test Procedure            | ASME VIII, Hydrostatics Test Procedure           | Hydrostatic Test Report, Inspection Report | H | W     | W     | R |
| F.6 | Painting Inspection (Check Visual, RAL and DFT)<br>During FAT | Surface Preparation and Painting procedure, SSPC | Surface Preparation and Painting procedure, SSPC | Painting report                            | H | W     | W     | R |

<sup>3</sup> Action point for RT in NDT is RA for TPA and CES representative. If there are other types of NDT, action points for those tests shall be SW for TPA and CES representative.





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|---|--|------|-------|------|------|------|------|---|----------|
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| MC :<br><br>شرکت تست و سنجش و سوهان ایرانیان<br>(سهامی خاص)  | <b>Inspection and Test Plan (ITP) for Reciprocating<br/>Compressor-MEG-303</b> |      |       |      |      |      |      | Contract No : 52-98/445   |          |
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| Compressors |  |  |  |                              |              |              |              |              |
|-------------|--|--|--|------------------------------|--------------|--------------|--------------|--------------|
| G.1         | Raw Materials Inspection <sup>4</sup>                        | GA, DWG, Data Sheet, Project Spec                    | GA, DWG, Data Sheet, Project Spec                    | MTC EN10204 type 3.1         | H            | RA           | RA           | R            |
| G.2         | Components Inspection  | GA, DWG, Data Sheet, Project Spec                    | GA, DWG, Data Sheet, Project Spec                    | MCC, COC                     | H            | RA           | RA           | R            |
| G.3         | Visual and Dimensions Inspection                             | GA, DWG, Data Sheet, Project Spec                    | GA, DWG, Data Sheet, Project Spec                    | Inspection Report            | H            | W            | W            | R            |
| G.4         | NDT for Main Parts   | <del>NDT Procedure and NDT Map, ASME Standards</del> | <del>NDT Procedure and NDT Map, ASME Standards</del> | <del>QC Report</del>         | <del>H</del> | <del>W</del> | <del>W</del> | <del>R</del> |
| G.4         | Hydrostatic Test   | ASME VIII div.1 Hydrostatic Test Procedure           | Hydrostatic Test Procedure                           | Hydrostatic Test Certificate | H            | W            | W            | R            |
| G.5         | Gas Leak Test (during FAT)                                   | Gas Leak Test Procedure, API 618                     | Gas Leak Test Procedure, API 618                     | Test Report                  | H            | W            | W            | R            |
| G.6         | Painting Inspection (Check Visual, RAL and DFT) (During FAT) | Surface Preparation and Painting procedure, SSPC     | Surface Preparation and Painting procedure, SSPC     | Painting report              | H            | W            | W            | R            |





<sup>4</sup> For all pressured and wetted parts and components of compressor EN 10204 3.1 shall be presented.

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|  | <b>Inspection and Test Plan (ITP) for Reciprocating<br/>Compressor-MEG-303</b> |      |       |      |      |      |      |   |          |
| MC :<br><br>شرکت سست و سویی ژوند ایرانیان<br>(سهامی خاص)  | Project  | Area | Phase | Unit | Dis. | Doc. | Seq. | Contract No : 52-98/445  |          |
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| Main motor |  |  |  |  |   |    |    |   |
|------------|--|--|--|--|---|----|----|---|
| H.1        | Components Inspection  | GA, DWG, Data Sheet, Project Spec                | GA, DWG, Data Sheet, Project Spec                | MCC, COC                                     | H | RA | RA | R |
| H.2        | Visual and Dimensions Inspection (During FAT)                | GA, DWG, Data Sheet, Project Spec                | GA, DWG, Data Sheet, Project Spec                | Inspection Report                            | H | W  | W  | R |
| H.3        | Type Test  | IEC 60034-1, Data Sheet                          | IEC 60034-1, Data Sheet                          | Type Test Certificates and Reports           | H | RA | RA | R |
| H.4        | Painting Inspection (Check Visual, RAL and DFT) (During FAT) | Surface Preparation and Painting procedure, SSPC | Surface Preparation and Painting procedure, SSPC | Painting report                              | H | W  | W  | R |
| H.5        | Name Plate Check (During FAT)                                | GA, DWG, Data Sheet                              | GA, DWG, Data Sheet                              | Approved FAT Procedure; Equipment check list | H | W  | W  | R |

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|  | <b>Inspection and Test Plan (ITP) for Reciprocating<br/>Compressor-MEG-303</b> |      |       |      |      |      |      | <b>Contract No : 52-98/445</b>  |                  |
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| FAT |                                 |  |   |  |   |    |    |   |
|-----|---------------------------------|--|---|--|---|----|----|---|
| I.1 | Manufacturing data book check   | Index Manufacturing Data Book                    | Inspection Test Plan, Index Manufacturing Data Book   | Manufacturing Data Book                      | H | RA | RA | R |
| I.2 | FAT Test Instrument calibration | FAT procedure                                    | Relevant Standards                                    | Calibration certificate                      | H | RA | RA | R |
| I.3 | Quality Inspection              | General Arrangement Drawing P&ID                 | FAT Procedure   | Approved FAT Procedure; Equipment Check List | H | W  | W  | R |
| I.4 | P&ID Review                     | P&ID   | FAT Procedure   | Approved FAT Procedure; Equipment Check List | H | RA | RA | R |
| I.5 | Visual and Dimensions           | General Arrangement Drawing                      | FAT Procedure   | Approved FAT Procedure; Equipment Check List | H | W  | W  | R |
| I.6 | Painting                        | Surface preparation and Painting Procedure, SSPC | Surface preparation and Painting Procedure, SSPC, FAT | Approved FAT Procedure; Equipment Check List | H | W  | W  | R |
| I.7 | Control Panel                   | Wiring diagram Panel lay-out, FAT Procedure      | FAT Procedure   | FAT Test Report                              | H | W  | W  | R |

|  |  |             |              |             |             |             |   |                                |             |
|--|--|-------------|--------------|-------------|-------------|-------------|---|--------------------------------|-------------|
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| MC :<br><br>شرکت سست و سویی آوس ایران<br>(سهایی خاص)  | <b>Project</b>   | <b>Area</b> | <b>Phase</b> | <b>Unit</b> | <b>Dis.</b> | <b>Doc.</b> | <b>Seq.</b>   | <b>Contract No : 52-98/445</b> |             |
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|------|---|---|-------------------------|-----------------|---|---|---|---|
| I.8  | Instruments   | Wiring diagram<br>P&ID, FAT<br>Procedure                | FAT Procedure           | FAT Test Report | H | W | W | R |
| I.9  | Function check<br>control panel                         | Control Philosophy,<br>Wiring Diagram,<br>FAT Procedure | FAT Procedure           | FAT Test Report | H | H | H | R |
| I.10 | Mechanical Run Test,<br>Performance Test                | Control Philosophy<br>P&ID                              | FAT Procedure           | FAT Test Report | H | H | H | R |
| I.11 | Noise level test  | FAT Procedure   | Equipment Data<br>Sheet | FAT Test Report | H | H | H | R |
| I.12 | Vibration level test                                    | FAT Procedure   | FAT Procedure           | FAT Test Report | H | H | H | R |
| I.13 | Leak test   | Leak Test Procedure,<br>FAT<br>Procedure                | FAT Procedure           | FAT Test Report | H | W | W | R |
| I.14 | Strip Down Test (if Issue<br>appear during<br>Run-Test) | FAT Procedure   | FAT Procedure           | FAT Test Report | H | R | R | R |

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| Final inspection |  |   |   |   |   |    |    |   |
|------------------|--|---|---|---|---|----|----|---|
| J.1              | Punch Items Inspection                             | Punch list, Data Sheet,                           | MTO   | Approved Signed Punch List                                    | H | RA | RA | R |
| J.2              | Quantity Inspection                                | MTO, Data Sheet                                   | MTO, Data Sheet                                   | Inspection Report   | H | W  | W  | R |
| J.3              | Two Years Spare Parts and Commissioning Inspection | Two Years Spare Parts and Commissioning List, MTO | Two Years Spare Parts and Commissioning List, MTO | Approved Two Years Spare Parts and Commissioning Packing List | H | W  | W  | R |
| J.3              | Packing and Marking Inspection                     | Packing and Marking Procedure                     | Packing and Marking Procedure                     | Signed Packing List   | H | W  | W  | R |
|                  | Manufacturer Certificates                          | Data Sheet, MR, GA, DWG                           | Data Sheet, MR, GA, DWG                           | MCC, COG  | H | RA | RA | R |
| J.4              | Inspection releaseNote                             | Signed PL, MTO                                    | Signed PL   | Signed InspectionRelease Note                                 | H | R  | H  | R |
| J.6              | FINAL DATA BOOK                                    | Index-<br>Manufacturing Data Book, VPIS           | Index-<br>Manufacturing Data Book, VPIS           | Approved FDB  | H | RA | RA | R |