



**INDRADHANUSH GAS GRID LIMITED (IGGL)**  
(Joint Venture of IOCL, ONGC, GAIL, OIL and NRL)  
**GUWAHATI, ASSAM**

**NORTH -EAST GAS GRID PIPELINE PROJECT  
(PIPELINE SECTION 4, 6, 7, 13 & 14)**

**REPLY TO PRE BID QUERIES FOR PROCUREMENT  
OF**

**BALANCE BARE & COATED LINE PIPES**

**OPEN DOMESTIC COMPETITIVE BIDDING**

**Tender No.: 05/51/23UU/IGGL/012B**

**Visit: [www.tenderwizard.com/MECON](http://www.tenderwizard.com/MECON)  
(Tender wizard helpdesk: 011-49424365)**



**PREPARED AND ISSUED BY**

**MECON LIMITED**  
(A Govt. of India Undertaking)  
Delhi, India



**REPLY TO BIDDERS QUERIES  
FOR PROCUREMENT OF BALANCE BARE & COATED LINE PIPES FOR NORTH -EAST GAS GRID PIPELINE PROJECT  
(PIPELINE SECTION 4, 6, 7, 13 & 14) OF M/S INDRADHANUSH GAS GRID LIMITED  
Tender no. : 05/51/23UU/IGGL/012B**



**DATED : 19.08.2021  
MECON's Reply**

| S.N. | CL. No. | Section/ Page  | Section Detail/Description   | Clarification / Deviation   | MECON's Reply   |
|------|---------|--|--|---|---|
| 1    |         | 259<br>of<br>253   | Terms of Payment<br>90% Payment: on receipt of materials at Dumpsite progressively within 30 days.<br><br>Balance 10% progressively within 30 days after handing over of coated pipes to the Laying Contractor.  | Request was made to consider the prevailing Payment Terms of most of the PSU in O&G sector which is :<br><br>70% : Against Dispatch progressively within 30 days.<br>25% on progressively on receipt at the Dumpsite.<br>5%: Balance progressively on lifting of pipes by the L.C.<br><br>Most of the Pipe Mills are located in extreme south-west of the country. The transit time to reach destination in Assam and Meghalaya is too much.<br><br>Till such the materials do not receipted at DS the 90% payment is not with the Manufacturer.<br><br>Finance and time determine the cost. Should the payment terms be considered as per the generally prevailing norms, as mentioned here, the Project sure will save on cost. | Tender conditions Prevail.  |
| 2    |         | Page- 13 of 253<br><br>Cl. 1.3   | BEC- Scope of Supply. Sec-II. Delivery Schedule for Group - A Dumpsites  | Observe 2 Dumpsites are there to warehouse the following Quantity of 18" dia pipe:<br>Karinganj- 1676 Meters<br>North Tripura: 424 Meters<br><br>Creation of Dumpsite for such small quantities does not look viable.<br>Feel such quantities diverted to any Dumpsite nearby.  | Tender conditions Prevail.  |
| 3    |         | Annexure-II to SCC<br><br>PAYMENT TERMS AND MODE OF PAYMENT<br><br>Page 249 of 253 | 1. TERMS OF PAYMENT<br><br>1.1. Supply of Coated & Bare Line Pipes<br><br>1.1.1 Indian / Foreign Bidder<br><br>1.1.1.1 90% of Invoice value will be paid progressively against receipt of coated pipes at warehouse/ storage yard/ dumpsite by Purchaser / Consultant after adjustment against monthly PRS and against submission of invoice in triplicate as per GST Act along with   | We understand from the given clause that 90% of the payment shall be paid against receipt of goods at Dumpsite irrespective of delivery terms wherein we have to deliver the pipes lot-wise.<br><br>In case, we deliver the pipes before the schedule then IGGL/MECON will release the payment.<br><br>Kindly confirm.  | Please see the corrigendum  |
| 4    |         | MEC/TS/05/21/012 EDITION: 03, REV. 01 11.2.3                                       | Pipe Marking<br>The pipe number shall be placed by cold rolling or low stress dot or vibroetching on the outside marking on the outside surface of the pipe at an approximate distance of 50 mm from both ends. In case of non-availability of either cold rolling or low stress dot marking facility in pipe mill, an alternative marking scheme of a permanent nature may be proposed by the Manufacturer.   | Pipe no shall be marked by paint stencil  | Tender Conditions Prevail.  |
| 5    |         | MEC/TS/05/21/012 EDITION: 03, REV. 01<br><br>Annexure-B                            | Butst Test<br>Burst test shall be done each grade grade of pipe for each size on lowest thickness at the time of first day production test , Burst pressure of the subject pipe shall not be less than calculated burst pressure based on the minimum actual ultimate tensile strength of the subjected pipe.  | Minimum specified tensile test should be consider for calculation of burst test pressure because pipe will burst at exact acual specified tensile test and test will be failed whereas as per specified minimum tensile strength test is passed .   | Tender Conditions Prevail.  |
| 6    |         | ANNEXURE-I TO SCC<br><br>232 of 253  | Delivery Period  | Bidder hereby put forth that project location being in one of the extreme locations of the country the Logistics of Pipes itself takes 3-4 weeks.<br>Hence, proposes Lot wise delivery to start from 20th week to end of 23rd week.   | Refer Corrigendum #1.   |
| 7    |         | BID PRICES<br><br>53of 253   | Variation on custom duty (on Built-in Import content) is not applicable/ payable   | Bidder understands that CIF (Built In Import Content) is not applicable for subject tender.<br>Please confirm.  | Bidders understanding is correct.<br><br>Tender Condition Prevails. |
| 8    |         | BID EVALUATION CRITERIA (BEC): 16 of 253   | Bidders who do not meet the qualification requirement under clauses 3.1.1 (03) & 3.1.1(04) above, intend to quote for line pipes, such Bidders shall be considered for Supply of Line Pipes covered under scope of supply subject to the bidder demonstrating manufacturing capability of proposed mill(s) of 18"/12"/8" outside diameter or higher linepipe sizes to IGGL and/or MECON as given at Annexure-1 to Section-II, Vol I of II.   | Bidder hereby would like to put forth that, GAIL being one of the stake holders in IGGL, the plant Capability & Capacity Demonstration Certificate issued by M/s EIL, one of the authorized representatives of GAIL apart from esteemed M/s MECON, shall be considered for Pipe Mill Qualification.   | Tender Condition Prevails.  |
| 9    |         | BID EVALUATION CRITERIA (BEC): 17 of 253   | Bidders who do not meet the qualification under clause 3.1.2.1 above, such bidder shall also be considered for coating of line pipes covered under this enquiry subject to submission of coating plant capability & capacity demonstration certificate issued by IGGL / its authorized agency based on satisfactory demonstration of the coating plant(s) capability for 3 LPE coating of line pipe that are of equal or higher in terms of diameter as quoted, in the last 24 months reckoned from bid due date along with their bid. | Bidder hereby would like to put forth that, GAIL being one of the stake holders in IGGL, the Coating plant Capability & Capacity Demonstration Certificate issued by M/s EIL, one of the authorized representatives of GAIL apart from esteemed M/s MECON, shall be considered for Coating Mill Qualification.  | Tender Condition Prevails.  |



**REPLY TO BIDDERS QUERIES**  
**FOR PROCUREMENT OF BALANCE BARE & COATED LINE PIPES FOR NORTH -EAST GAS GRID PIPELINE PROJECT**  
**(PIPELINE SECTION 4, 6, 7, 13 & 14) OF M/S INDRADHANUSH GAS GRID LIMITED**  
**Tender no. : 05/51/23UU/IGGL/012B**



**DATED : 19.08.2021**

| S.N. | CL. No. | Section/ Page   | Section Detail/Description   | Clarification / Deviation   | MECON's Reply   |
|------|---------|---|--|---|---|
| 10   |         | Steel AVL<br>22 of 306  | List of acceptable Steel Plate/Coil/Billet Manufacturer:<br>Welspun PCMD, India  | Bidder hereby would like to put forth that JSW Steel Limited (JSW) has completed the acquisition of Welspun Plate and Coil Mills Division (PCMD) as per shared Declaration Letter. Hence, we request to update your records (List Of Approved Steel Plate & Coil Manufacturers) in the name of "JSW Steel Limited –Anjar Works" in place of WELSPUN Plate & Coil Mills Division.  | As, the Memorandum & article of Association and other documents regarding change of ownership of Welspun PCMD to JSW has not been provided by the bidder with the query. As such the name of the Plate manufacturer cannot be modified at this stage.<br><br>Tender Condition Prevails. |
| 11   |         | General   | Applicable References  | While evaluating this enquiry, Bidder has considered following documents in below order of precedence:<br><ul style="list-style-type: none"> <li>• MATERIAL REQUISITION FOR COATED &amp; BARE LINE PIPES Doc. No. MEC/23UU/05/21/M/001/S012B (Bid No. 05/51/23UU/IGGL/012B</li> <li>• AMENDMENT TO LINE PIPE TS &amp; COATING TS</li> <li>• STANDARD SPECIFICATION FOR SAWL LINEPIPE (ONSHORE) (Doc. No. MEC/TS/05/21/012B Ed. 3 Rev. 1 DT. 13.04.2016</li> <li>• INSPECTION &amp; TEST PLAN FOR SAWL LINE PIPES (ONSHORE) (Doc. No. ITP NO.05/21/12B/002 Rev. 1 DT. APR 16)</li> <li>• RAW MATERIAL (HR COIL/PLATE) Quality Requirements for Line Pipes (Doc. No. ITP NO.05/21/12B/006 Rev. 1 DT. APR-16)</li> <li>• API 5L 46th Edition April 2018 &amp; Errata 1 dated May 2018</li> </ul> | Bidder's understanding is correct for order of precedence. However, Purchaser or its representative reserves the right to adopt the most stringent requirement.   |
| 12   |         | General   | Item: Supply of Coated & Bare Line Pipes Group A   | Bidder propose that the pipes shall be manufactured using plates/ CTL (Cut to length) plates from coils / plates procured in double width & sheared/ cut to required width for smaller diameter pipes, manufactured through TMCP route.   | LSAW Pipes shall be manufactured using plates/ CTL (Cut to length) plates from coils are allowed as per tender specification. However Plate procured in double width & sheared /cut to required width is not allowed.<br><br>Tender conditions prevail.                                 |
| 13   |         | B. REMARKS / COMMENTS Cl. No. 4   | <b>CERTIFICATION</b><br>The vendor shall be completely responsible for the design, materials, fabrication, coating, testing, inspection, preparation for shipment, loading of the above item strictly in accordance with the Material Requisition and all attachments thereto. All items shall be provided with EN 10204, 3.2 Certification.<br>The steel plate/coil required for pipe manufacturing shall also be certified as per EN 10204, 3.2 Certification.   | As a pipe manufacturer; Bidder intend to clarify that designing is not a considered under the scope of pipe manufacturer. Pipe shall be manufactured based on project specification & API 5L requirements.  | Design in this case shall be Procurement of steel, manufacturing of pipes, coating application, Loading & unloading, transportation etc as per required tender parameter.<br><br>Tender conditions prevail.   |
| 14   |         | B. REMARKS / COMMENTS SI. No. 6<br><br>6.C<br><br>Cl. 14 of MEC/TS/05/21/012B | The successful Manufacturer/supplier shall submit a prerecorded Training CDs/DVDs and it shall comprise the basic theories and fundamentals, related standards, design parameters, manufacturing & inspection methods, and other relevant details. The CDs/DVDs shall have to be self-contained, user-friendly using animation/videos and other multimedia techniques.<br><b>DOCUMENTS &amp; DATA REQUIREMENTS:</b><br>15. Final technical file: HardCopy-2 Set & Soft copy-4 Set in Pen Drive<br>The Manufacturer shall provide one electronic copy and six hard copies of production report in English language indicating at least the following for each pipe. | Bidder propose to provide 1 set of Hard copy and 4 set of electronic copy of MRB as per approved MRB index of applicable document of SAWL pipe manufacturing.   | Tender conditions prevail.  |
| 15   |         | 3   | Normative references<br>The latest edition (edition enforce at the time of issue of enquiry) of following additional references are included in this specification:<br><br>- ASTM E 1 12-12: Standard Test Methods for Determining Average Grain size.<br>- BS 5996: Specification for Acceptance level for internal imperfection in steel plate, strip & wide flats based on ultrasonic testing   | Bidder has considered the latest edition of ASTM E112 – 13 edition.<br><br>Bidder also understand that Ultrasonic inspection of plate Body and edges for Laminar imperfection shall be carried out as per ISO 10893-9 as per Cl. E.8 & E.9 of Client spec.  | Bidder's understanding is correct.<br><br>Tender Conditions Prevail.  |
| 16   |         | 8.9   | The sizing ratio, $s_r$ , shall be calculated as per the following formula:<br>$S_r = (D_s - D_b) / D_s$<br>where,<br>$D_s$ is the actual outside diameter after sizing<br>$D_b$ is the actual outside diameter before sizing<br><br>The actual outside diameter shall be measured with a tape measure (i.e. perimeter as an average of all possible diameters) at both ends and at the centre of the pipe.  | It seems be a typo error as it should be:<br>$S_r = D_a - D_b$<br>$D_b$<br>$D_a$ = Actual outside diameter after sizing<br>$D_b$ = Actual outside diameter before sizing<br>Based on API 5L Cl. 8.9.3.  | Bidder's understanding is correct.<br><br>Tender Conditions Prevail.  |
| 17   |         | 9.8.2.1, 9.8.2.2  | ... test temp of 0degC or a lower test temperature as specified in PO.   | Bidder has considered the CVN Impact test temp as 0 deg C, please confirm.  | Bidder's understanding is correct. However, tests shall be performed for other temperatures for plotting Transition Curves as per tender requirements.<br><br>Tender Conditions Prevail.  |



**REPLY TO BIDDERS QUERIES**  
**FOR PROCUREMENT OF BALANCE BARE & COATED LINE PIPES FOR NORTH -EAST GAS GRID PIPELINE PROJECT**  
**(PIPELINE SECTION 4, 6, 7, 13 & 14) OF M/S INDRADHANUSH GAS GRID LIMITED**  
**Tender no. : 05/51/23UU/IGGL/012B**



**DATED : 19.08.2021**  
**MECON's Reply**


| S.N.    | CL. No.  | Section/ Page                                  | Section Detail/Description   | Clarification / Deviation   | MECON's Reply   |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
|---------|--|--|--|---|---|-------------------------|----|----------------|--------------------------------|----|-------------------|--|----|----------------------------------|---|----|--|---|--|---|
| 18      |  | Table 10                                       | Out off roundness - at End 0.005 D   | Requirement specified is very stringent; bidder proposes out of roundness at pipe ends to be permitted as 3.0 mm max for 7.92mm & 9.53mm WT.  | Tender Conditions Prevail.  |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 19      |  | 10.2.1.2                                       | <p style="text-align: center;">Table 10 - Inspection frequency of pipe</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Sl. no.</th> <th>Type of inspection</th> <th>Frequency of inspection</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Heat analysis*</td> <td>One analysis per heat of steel</td> </tr> <tr> <td>2.</td> <td>Product analysis*</td> <td>Two pipes per lot (maximum 100 pipes) per heat</td> </tr> <tr> <td>3.</td> <td>Tensile testing of the pipe body</td> <td>Once per lot and of not more than 100 pipes</td> </tr> <tr> <td>4.</td> <td>Tensile testing of the longitudinal seam weld of pipe*</td> <td>Once per lot and of not more than 100 pipes</td> </tr> </tbody> </table> <p>c. Pipe produced by each welding machine shall be tested.</p> | Sl. no.   | Type of inspection  | Frequency of inspection | 1. | Heat analysis* | One analysis per heat of steel | 2. | Product analysis* | Two pipes per lot (maximum 100 pipes) per heat | 3. | Tensile testing of the pipe body | Once per lot and of not more than 100 pipes | 4. | Tensile testing of the longitudinal seam weld of pipe* | Once per lot and of not more than 100 pipes | <p>Bidder confirms for product analysis in pipes with 2 samples / 100 pipes / heat shall be selected randomly from the heat used at pipe mill for pipe production with lot of 100 pipes.</p> <p>For foot note c (Weld Tensile test), Bidder understands that Tensile testing of SAWL seam weld of pipe shall be performed on pipe produced from each welding machine at a frequency of 1 test per welding line per week.<br/>Please confirm.</p> | <p>For the first part, purchaser or its representative shall identify and select the pipe for testing.</p> <p>For the second part, Bidder's understanding is correct.</p> <p>Tender Conditions Prevail.</p> |
| Sl. no. | Type of inspection                                     | Frequency of inspection                        |  |   |   |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 1.      | Heat analysis*   | One analysis per heat of steel                 |  |   |   |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 2.      | Product analysis*                                      | Two pipes per lot (maximum 100 pipes) per heat |  |   |   |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 3.      | Tensile testing of the pipe body                       | Once per lot and of not more than 100 pipes    |  |   |   |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 4.      | Tensile testing of the longitudinal seam weld of pipe* | Once per lot and of not more than 100 pipes    |  |   |   |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 20      |  | Table 18                                       | Product analysis b :<br>b Pipes selected shall be such that one at the beginning of the heat and one at the end of the heat are also represented.  | Bidder clarifies that pipe for product analysis shall be selected randomly as it is practically not possible for pipe selected one at the beginning of the heat and one at the end of the heat.   | <p>Purchaser or its representative shall identify and select the pipe for testing.</p> <p>Tender Conditions Prevail.</p>  |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 21      |  | 10.2.5.3                                       | Vickers hardness tests shall be carried out on each test piece taken for metallographic examination in accordance with ISO 6507-1, at locations indicated in Fig. 10.2.5.3.2 of this specification.  | Bidder clarifies that fig. 10.2.5.3.2 refers to Out of line weld Bead measurement by radiography, however Bidder proposes that Hardness test shall be performed as per Fig. H1.b of API 5L.   | Tender Conditions Prevail.  |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 22      |  | E.5.1.2  | The equipment for the automatic inspection shall allow the localization of both longitudinal and transverse defects corresponding to the signals exceeding the acceptance limits of the reference standard. The equipment shall be fitted with a paint spray or automatic marking device and alarm device for areas giving unacceptable ultrasonic indications and probe decoupling.   | <p>Bidder clarifies that:<br/>Automatic plate ultrasonic system is not having paint marking device as the location of indication is located by graph in terms of coordinates &amp; identified location are subjected to manual ultrasonic testing in accordance with approved Manual ultrasonic testing procedure.</p> <p>However, Automatic weld ultrasonic testing machine is equipped with paint marking facility.</p> | Tender Conditions Prevail.  |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 23      |  | General  | General  | Bidder understands that the received ITP for SAWL pipe is a generic ITP & has been retained for information purpose. However, Bidder clarifies that the project specific ITP shall submitted for review & approval in case of award.  | <p>Bidder's understanding is correct.</p> <p>Tender Conditions Prevail.</p>   |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 24      |  | C.4.2  | LINE PIPE: Amendment to TS No. MEC/TS/05/21/012C (SAWH):<br>In addition to the API Spec 5L, following requirements shall also be complied with for repair welding:<br>b. No repair of weld seam is permissible at pipe ends up to a length of 300 mm.  | Bidder understand that weld repair shall be restricted as 300mm weld length from pipe end.  | <p>300 mm indicated in this clause refers to the pipe length from the pipe end.</p> <p>Tender conditions prevail.</p>   |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 25      |  | 3  | Normative references<br>The latest edition (edition enforce at the time of issue of enquiry) of following additional references are included in this specification:<br><br>- ASTM E 1 12-12: Standard Test Methods for Determining Average Grain size.<br>- BS 5996: Specification for Acceptance level for internal imperfection in steel plate, strip and wide flats Based on ultrasonic testing   | <p>Bidder has considered the latest edition of ASTM E112 – 13.</p> <p>Bidder clarifies that Ultrasonic inspection of coil edge &amp; body shall be performed as per ISO 10893-9 as per Cl. E.8 &amp; E.9 of client specification.</p>   | <p>Bidder's understanding is correct.</p> <p>Tender Conditions Prevail.</p>   |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 26      |  | 8.9.1  | Pipes furnished to this specification shall be non-expanded.   | Bidder propose to that the end correction shall be permitted ( if necessary )   | Tender Conditions Prevail.  |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 27      |  | 9.8.2.1  | The average (set of three test pieces) absorbed energy value (KvT) for each pipe body test shall be as specified in Table 8 of this specification, based upon full sized test pieces at a test temperature of 0°C (32°F) or at a lower test temperature as specified in the Purchase Order.  | Bidder has considered the CVN Impact test temp as 0 deg C, please confirm.  | <p>Bidder's understanding is correct. However, tests shall be performed for other temperatures for plotting Transition Curves as per tender requirements.</p> <p>Tender Conditions Prevail.</p> |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |
| 28      |  | Table 10                                       | Out off roundness - at End 0.005 D   | Requirement specified is very stringent; bidder proposes out of roundness at pipe ends to be permitted as 3.0 mm max for 7.92mm & 9.53mm OD'.   | Tender Conditions Prevail.  |                         |    |                |                                |    |                   |  |    |                                  |   |    |  |   |  |   |



**REPLY TO BIDDERS QUERIES  
FOR PROCUREMENT OF BALANCE BARE & COATED LINE PIPES FOR NORTH -EAST GAS GRID PIPELINE PROJECT  
(PIPELINE SECTION 4, 6, 7, 13 & 14) OF M/S INDRADHANUSH GAS GRID LIMITED  
Tender no. : 05/51/23UU/IGGL/012B**



**DATED : 19.08.2021**

| S.N.    | CL. No.   | Section/ Page   | Section Detail/Description  | Clarification / Deviation  | MECON's Reply   |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
|---------|---|---|---|--|---|-------------------------|----|-----------------|--------------------------------|----|--------------------|--|----|----------------------------------|---|----|---|---|----|---|---|---|---|
| 29      |   | 10.2.1.2  | <table border="1"> <thead> <tr> <th>Sl. no.</th> <th>Type of inspection</th> <th>Frequency of inspection</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Heat analysis *</td> <td>One analysis per heat of steel</td> </tr> <tr> <td>2.</td> <td>Product analysis *</td> <td>Two pipes per lot (maximum 100 pipes) per heat</td> </tr> <tr> <td>3.</td> <td>Tensile testing of the pipe body</td> <td>Once per test unit of not more than 100 pipes</td> </tr> <tr> <td>4.</td> <td>Tensile testing of the helical seam weld of pipe<sup>b</sup></td> <td>Once per test unit of not more than 100 pipes</td> </tr> <tr> <td>5.</td> <td>Tensile testing of all weld test specimen</td> <td>Once, during manufacturing procedure qualification tests (MPQT) and whenever batch of electrode or wire &amp; flux combination is changed (see Annex B)</td> </tr> </tbody> </table> <p>b Pipes selected shall be such that one at the beginning of the heat and one at the end of the heat are also represented.</p> <p>c Pipe produced by each welding machine shall be tested.</p> | Sl. no.  | Type of inspection  | Frequency of inspection | 1. | Heat analysis * | One analysis per heat of steel | 2. | Product analysis * | Two pipes per lot (maximum 100 pipes) per heat | 3. | Tensile testing of the pipe body | Once per test unit of not more than 100 pipes | 4. | Tensile testing of the helical seam weld of pipe <sup>b</sup> | Once per test unit of not more than 100 pipes | 5. | Tensile testing of all weld test specimen | Once, during manufacturing procedure qualification tests (MPQT) and whenever batch of electrode or wire & flux combination is changed (see Annex B) | <p>Bidder confirms for product analysis in pipes with 2 samples / 100 pipes / heat shall be selected randomly from the heat used at pipe mill for pipe production with lot of 100 pipes.</p> <p>For foot note c (Weld Tensile test), Bidder understands that Tensile testing of helical seam weld of pipe shall be performed on pipe produced from each welding machine at a frequency of 1 test per welding line per week.<br/>Please confirm.</p> | <p>For the first part, purchaser or its representative shall identify and select the pipe for testing.</p> <p>For the second part, Bidder's understanding is correct.</p> <p>Tender Conditions Prevail.</p> |
| Sl. no. | Type of inspection  | Frequency of inspection   |   |  |   |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
| 1.      | Heat analysis *   | One analysis per heat of steel  |   |  |   |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
| 2.      | Product analysis *  | Two pipes per lot (maximum 100 pipes) per heat  |   |  |   |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
| 3.      | Tensile testing of the pipe body                              | Once per test unit of not more than 100 pipes   |   |  |   |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
| 4.      | Tensile testing of the helical seam weld of pipe <sup>b</sup> | Once per test unit of not more than 100 pipes   |   |  |   |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
| 5.      | Tensile testing of all weld test specimen                     | Once, during manufacturing procedure qualification tests (MPQT) and whenever batch of electrode or wire & flux combination is changed (see Annex B) |   |  |   |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
| 30      |   | Table 18  | Product analysis b :<br>b Pipes selected shall be such that one at the beginning of the heat and one at the end of the heat are also represented.   | Bidder clarifies that pipe for product analysis shall be selected randomly as it is practically not possible for pipe selected one at the beginning of the heat and one at the end of the heat.  | Purchaser or its representative shall identify and select the pipe for testing.<br><br>Tender Conditions Prevail.   |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
| 31      |   | Annex B<br>B.5.2.d.vi   | One test piece from one pipe end shall be taken for Residual Stress test.   | Bidder understand that one test piece from one pipe end shall be taken for Residual stress test from any one pipe out of selected four pipe during MPQT.<br>Please confirm.  | Kindly refer cl. no. B.5.1 of Annexure-B. Test shall be performed on all pipes at the time of MPQT.<br><br>Tender Conditions Prevail.   |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
| 32      |   |   | INSPECTION & TEST PLAN FOR HELICAL (SPIRAL) SEAM SAW LINE PIPES (ONSHORE) (DOC. NO. ITP NO.05/21/12C/003 REV. 1 DT. OCT 15) & INSPECTION & TEST PLAN FOR HR COIL/PLATE (Doc. No. ITP NO.05/21/12B/006 Rev. 1 DT. APR-16   | Bidder understands that Inspection and Test Plan DOC. NO. ITP NO.05/21/12C/003 & INSPECTION & TEST PLAN FOR HR COIL/PLATE (Doc. No. ITP NO.05/21/12B/006 is indicative only, the project specific ITP shall be submitted. Bidder also understands that for raw material, mill control test is not required to perform at pipe mill as the same shall be witnessed at steel mill.                       | Bidder's understanding is correct.<br><br>Tender Conditions Prevail.  |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
| 33      |   | B.2   | Compliance with specification<br>The vendor shall be completely responsible for the receiving/taking over, design, materials, fabrication, testing, inspection, preparation for shipment, transport, storage at specified Dump Yard/Warehouse of the above items strictly in accordance with the Material Requisition and all attachments thereto.  | Bidder clarifies that design is not under our scope of work.   | Design in this case shall be Procurement of steel, manufacturing of pipes, coating application, Loading & unloading, transportation etc as per required tender parameter.<br><br>Tender conditions prevail. |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
| 34      |   | 6   | Vendor's documents  | To be discussed in PPM, after order finalization   | Vendor's query not clear.   |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
| 35      |   | C   | Documents & data requirements   | To be discussed in PPM, after order finalization   | Vendor's query not clear.   |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
| 36      |   | C. Note 3   | Final technical file shall be supplied in hard copy-2 set as indicated, and in electronic format (.pdf Acrobat files) on four (4) Pen drive.  | For electronic format, CD/ DVD shall also be permitted.  | Tender Conditions Prevail.  |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |
| 37      |   | 7   | Bar coding (new)  | <p>Bidder understands that QR code is required. As per Bidder's understanding the sample barcode sticker with QR code is given below:</p>  <p>Kindly confirm Bidder's understanding for 3D type barcodes.</p> <p>Bidder considers the bar-coding shall be done at both ends at 4, 8 &amp; 12 O'clock position.</p> | <p>Bidder understanding is correct.</p> <p>Tender conditions prevail.</p>   |                         |    |                 |                                |    |                    |  |    |                                  |   |    |   |   |    |   |   |   |   |



**REPLY TO BIDDERS QUERIES**  
**FOR PROCUREMENT OF BALANCE BARE & COATED LINE PIPES FOR NORTH -EAST GAS GRID PIPELINE PROJECT**  
**(PIPELINE SECTION 4, 6, 7, 13 & 14) OF M/S INDRADHANUSH GAS GRID LIMITED**  
**Tender no. : 05/51/23UU/IGGL/012B**



**DATED : 19.08.2021**  
**MECON's Reply**

| S.N. | CL. No.   | Section/ Page        | Section Detail/Description   | Clarification / Deviation   | MECON's Reply  |
|------|---|----------------------|--|---|--|
| 38   | • Standard Technical Specification for ERW HFW Linepipe (Onshore), Doc. No.: MEC/TS/05/21/012 Rev. 1 edition 3 Dated 13.04.2016 & Amendment to Specification MEC/TS/05/21/012 |                      | Scope  | Welspun intend to clarify that HFW pipes shall be manufactured, inspected, tested and certified confirming to the requirement of API 5L 46th Edition April 2018 & Errata 1 dated May 2018 (latest edition of API 5L) along with Client Specification requirement for each pipe size and grade specified in this comment sheet from TMCP (Thermo mechanical rolled) coil with Delivery condition "M" | Bidder understanding is correct.<br><br>Tender conditions prevail.   |
| 39   | • Standard Technical Specification for ERW HFW Linepipe (Onshore), Doc. No.: MEC/TS/05/21/012 Rev. 1 edition 3 Dated 13.04.2016 & Amendment to Specification MEC/TS/05/21/012 | 3                    | Normative References<br>ASTM E112 — 12: Standard Test Methods for Determining Average Grain size<br>BS 5996: Specification for Acceptance Level for internal perfection in steel plate, stripe and wide flats based on Ultrasonic testing.   | Welspun confirms to use the latest edition of ASTM E112 i.e of year 2013.<br><br>Bidder understands, BS 5996 is no more referenced in API 5L, 46th Edition. Accordingly We shall follow ISO 10893 respective parts for different NDT methods as per API 5L.   | Bidder's understanding is correct.<br><br>Tender Conditions Prevail.   |
| 40   | • Standard Technical Specification for ERW HFW Linepipe (Onshore), Doc. No.: MEC/TS/05/21/012 Rev. 1 edition 3 Dated 13.04.2016 & Amendment to Specification MEC/TS/05/21/012 | Table 5              | C: 0.16% max (for X56)<br>C: 0.12% max (for X70)<br>Mn: 1.6% max (for C70)<br>Mn: 1.40% max (for X56)<br><br>Note b: Deleted   | Welspun request to permit the Carbon-Manganese relationship as defined in API 5L Table 5 footnote b i.e:<br>"For each reduction of 0.01 % below the specified maximum for C, an increase of 0.05 % above the specified maximum for Mn is Permissible, up to a maximum of 1.75% for X56 & 2.00 % for X70."   | Tender Conditions Prevail.   |
| 41   | • Standard Technical Specification for ERW HFW Linepipe (Onshore), Doc. No.: MEC/TS/05/21/012 Rev. 1 edition 3 Dated 13.04.2016 & Amendment to Specification MEC/TS/05/21/012 | 9.8.2.1<br><br>9.8.3 | CVN Pipe Body, Weld & HAZ:<br>...based upon full sized test pieces at a test temperature of 0°C (32°F) or at a lower test temperature as specified in the Purchase Order.<br><br>Pipe weld and HAZ tests<br>The minimum average (set of three test pieces) absorbed energy value (KIT) for each pipe weld and HAZ test shall be as specified in Table 8 of this specification, based upon full-size test pieces at a test temperature of 0°C (32°F) or at a lower test temperature as specified in the Purchase Order. | Welspun has considered the test temperature for CVN impact test (pipe body, weld & HAZ) as 0°C.   | Bidder's understanding is correct. However, tests shall be performed for other temperatures for plotting Transition Curves as per tender requirements.<br><br>Tender Conditions Prevail. |
| 42   | • Standard Technical Specification for ERW HFW Linepipe (Onshore), Doc. No.: MEC/TS/05/21/012 Rev. 1 edition 3 Dated 13.04.2016 & Amendment to Specification MEC/TS/05/21/012 | 9.12.5.7             | Bevel Protectors<br>Both Pipe ends of each pipe shall be provided with metallic or high impact plastic bevel protectors as per manufacturer's standard.  | Bidder confirms to provide pipes with metallic bevel end protector on both ends of the pipes.   | Bidder's understanding is correct.<br><br>Tender Conditions Prevail.   |


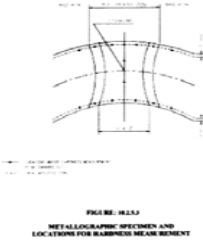
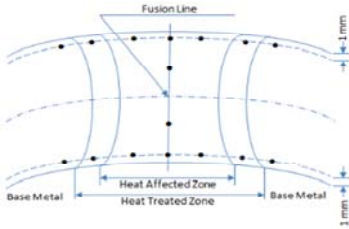
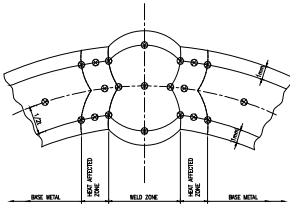


**REPLY TO BIDDERS QUERIES**  
**FOR PROCUREMENT OF BALANCE BARE & COATED LINE PIPES FOR NORTH -EAST GAS GRID PIPELINE PROJECT**  
**(PIPELINE SECTION 4, 6, 7, 13 & 14) OF M/S INDRADHANUSH GAS GRID LIMITED**  
**Tender no. : 05/51/23UU/IGGL/012B**



**DATED : 19.08.2021**

**MECON's Reply**

| S.N. | CL. No.   | Section/ Page     | Section Detail/Description   | Clarification / Deviation  | MECON's Reply   |
|------|---|-------------------|--|--|---|
| 43   | • Standard Technical Specification for ERW HFW Linepipe (Onshore), Doc. No.: MEC/TS/05/21/012 Rev. 1 edition 3 Dated 13.04.2016 & Amendment to Specification MEC/TS/05/21/012 | 10.2.1.2 Table 18 |  <p>b Pipes selected shall be such that one at the beginning of the heat and one at the end of the heat are also represented.</p>   | Bidder confirms for product analysis in pipes with 2 samples / 100 pipes / heat shall be selected randomly from the heat used at pipe mill for pipe production with lot of 100 pipes.  | Purchaser or its representative shall identify and select the pipe for testing.<br><br>Tender Conditions Prevail.   |
| 44   | • Standard Technical Specification for ERW HFW Linepipe (Onshore), Doc. No.: MEC/TS/05/21/012 Rev. 1 edition 3 Dated 13.04.2016 & Amendment to Specification MEC/TS/05/21/012 | 10.2.8.7          | The measuring equipment requiring calibration or verification under the provisions of API Spec 5L shall be calibrated with manual instruments at least once per operating shift (12 hours maximum). Such calibration records shall be furnished to Purchaser's Representative on request | Welspun confirms that repeatability of measuring instruments Verification of all measuring instruments shall be done in each shift of 12 hours at final station. Record of same shall be furnished to the appointed representative.<br>However, Welspun clarifies that calibration of dimension measuring equipment shall be done on yearly basis from an external NABL lab. | Bidder's understanding is correct.<br><br>Tender Conditions Prevail.  |
| 45   | • Standard Technical Specification for ERW HFW Linepipe (Onshore), Doc. No.: MEC/TS/05/21/012 Rev. 1 edition 3 Dated 13.04.2016 & Amendment to Specification MEC/TS/05/21/012 | Fig 10.2.5.3      |    | Bidder requests to provide the clear image for our reference.<br><br>However, clarifies the hardness indentation figure basis HFW pipes and specification as below. Please confirm:<br><br>   | Please find the locations for Hardness Testing in the row below.<br><br> |
| 46   | • Standard Technical Specification for ERW HFW Linepipe (Onshore), Doc. No.: MEC/TS/05/21/012 Rev. 1 edition 3 Dated 13.04.2016 & Amendment to Specification MEC/TS/05/21/012 | General           | General  | Bidder has retained Inspection & Test Plan of Electric Welded Line Pipes for information only, however project specific ITP shall be submitted upon receipt of award of Contract.  | Bidder's understanding is correct.<br><br>Tender Conditions Prevail.  |



**REPLY TO BIDDERS QUERIES  
FOR PROCUREMENT OF BALANCE BARE & COATED LINE PIPES FOR NORTH -EAST GAS GRID PIPELINE PROJECT  
(PIPELINE SECTION 4, 6, 7, 13 & 14) OF M/S INDRADHANUSH GAS GRID LIMITED  
Tender no. : 05/51/23UU/IGGL/012B**



**DATED : 19.08.2021**

**MECON's Reply**

| S.N. | CL. No.   | Section/ Page  | Section Detail/Description  | Clarification / Deviation   | MECON's Reply   |
|------|---|--|---|---|---|
| 47   | Standard Technical Specification for ERW HFV Linepipe (Onshore), Doc. No.: MEC/TS/05/21/012 Rev. 1 edition 3 Dated 13.04.2016 & Amendment to Specification MEC/TS/05/21/012 | 6  | Destructive Testing :<br>Quantum of check : Material Specification, 6-71-0005, PR   | Bidder considers only Technical Specification for Line Pipe (Onshore) MEC/TS/05/21/012 Rev. 1 Edition 3 Date 13.04.2016. Provide 6-71-0005 (if applicable).   | This is a typographical error - " 6-71-0005".<br><br>Referred Tech. Spec. is MEC/TS/05/21/012 Rev. 1 Edition 3.<br><br>Tender Conditions Prevail.         |
| 48   | Standard Technical Specification for ERW HFV Linepipe (Onshore), Doc. No.: MEC/TS/05/21/012 Rev. 1 edition 3 Dated 13.04.2016 & Amendment to Specification MEC/TS/05/21/012 | Page 8 of 26, MR No. MEC/23UU/05/21/M/01/S012B Rev.0               | ii. Colour bands of 50 mm width to be placed at both the ends, inside of Bare Pipes at a distance of 150 mm from the pipe ends and outside of 3LPE Coated Pipes at a distance of 450 mm from the pipe ends.<br>iii. White Band marking inside for all the items.<br>iv. Yellow Band Marking outside on each Pipes for Item A1 and Violet Marking outside on each pipes for item A2 & White Marking outside on each pipes for item A3 as per instruction given in the MR.<br>v. Yellow Band Marking outside on each Pipes for Item B1 and Violet Marking outside on each pipes for item B2 as per instruction given in the MR.<br>vi. Inspection by vendor appointed TPI shall be as per EN 10204, 3.2 certification. Inspection of Steel Plate/Coil/Billet required for manufacturing of Line Pipe shall also be 3.2 certified as per EN 10204. | Bidder understands that colour bend is not required for item C1, 8" OD x 7.04 mm pipe size. Please confirm  | Tender Conditions Prevail.  |
| 49   | External 3LPE Coating comment as per Spec. No.: MEC/TS/05/21/014 , Rev.: 1, Edition: 2, Dated: June 2020  | Spec. No.: MEC/TS/05/21/014, Rev.: 1, Edition: 2, Dated: June 2020 | As per Specification for 3LPE coating of line pipes:<br>First page of Specification No.: MEC/TS/05/21/014<br><br>Page No. 1 to 40: Document No.: MEC/S/05/21/014  | Bidder understands that there is typographical error. The document number mentioned in Cover page (MEC/TS/05/21/014) is different from the document number mentioned in Page No. 1 to 40 of client specification (MEC/S/05/21/014) for 3LPE coating.<br><br>Bidder has considered the Spec. No.: MEC/TS/05/21/014, Rev.: 1, Edition: 2, Dated: June 2020 for external 3LPE coating. Please confirm.   | Bidder's understanding is correct.<br><br>Tender Conditions Prevail.  |
| 50   | External 3LPE Coating comment as per Spec. No.: MEC/TS/05/21/014 , Rev.: 1, Edition: 2, Dated: June 2020  | Cl. 5.2 of 3LPE Spec. No.: MEC/TS/05/21/014                        | The coating materials Manufacturer shall carry out tests for all properties specified in Table 2, Table 3 & Table 4 for each batch of epoxy, adhesive and polyethylene compound respectively. In addition, the Manufacturer shall also furnish Infra-red Scan for each batch of epoxy powder. The coating materials manufacturer shall issue test certificates as per DIN EN 10204, 3.1 for each batch of materials supplied to Applicator and the same shall be submitted to COMPANY for approval prior to their use.  | Bidder would like to inform that the material manufacturer will provide test certificate for all properties specified in Table 2, Table 3 and Table 4 of specification for each batch of epoxy, adhesive and polyethylene compound respectively. However all the properties will not be tested for each batch. Epoxy, Adhesive and Polyethylene manufacturer will provide batch test certificate for the measured value and typical value as mentioned below:<br><br>Epoxy Powder: All Properties tested for each batch as per Table 2.<br><br>PE Adhesive: MFI, Density and Water content results shall be reported as measured value for each batch whereas the Tensile Yield Strength, Elongation at break, Vicat Softening Temperature and Flexural Modulus will be reported as typical values supported by reputed lab reports.<br><br>High Density Polyethylene:<br>Density, Melt Flow Rate, Oxidation Induction Time, Carbon Black Content, Water Content results shall be reported as measured value for each batch. The properties –Melting Point, Hardness Shore D, Elongation at break, Tensile Strength, Vicat Softening Temperature, ESCR, Indentation, Impact Resistance, Volume Resistivity and Dielectric Withstand shall be reported as typical value supported by independent lab test report valid for one year.<br><br>For UV resistance, Thermal ageing and Coating Resistivity test bidder will submit independent laboratory test report furnished by material manufacturer. These test certificates will not be older than three years. | Bidder's understanding is correct for UV Resistance, Thermal ageing and Coating Resistivity tests.<br><br>For all other tests, tender conditions prevail. |
| 51   | External 3LPE Coating comment as per Spec. No.: MEC/TS/05/21/014 , Rev.: 1, Edition: 2, Dated: June 2020  | Cl. 5.3 (c) of 3LPE Spec. No.: MEC/TS/05/21/014                    | In house testing<br>Polyethylene<br>Thermal stabilization test (as per ASTM D3895)  | Bidder would like to clarify that as per ASTM D3895: Oxidative Induction Time shall be performed to determine qualitative assessment for the stabilization of the material. Bidder understands that OIT shall be carried out at 220°C as per Table 4 of MEC/TS/05/21/014, Rev.: 1, Edition: 2, Dated: June 2020.  | Bidder understanding is correct.<br><br>Tender conditions prevail.  |





**REPLY TO BIDDERS QUERIES**  
**FOR PROCUREMENT OF BALANCE BARE & COATED LINE PIPES FOR NORTH -EAST GAS GRID PIPELINE PROJECT**  
**(PIPELINE SECTION 4, 6, 7, 13 & 14) OF M/S INDRADHANUSH GAS GRID LIMITED**  
**Tender no. : 05/51/23UU/IGGL/012B**



**DATED : 19.08.2021**  
**MECON's Reply**

| S.N. | CL. No.  | Section/ Page  | Section Detail/Description  | Clarification / Deviation  |   |
|------|--|--|---|--|---|
| 52   | External 3LPE Coating comment as per Spec. No.: MEC/TS/05/21/014 . Rev.: 1, Edition: 2, Dated: June 2020 | Table 5 (I 2), (I 4), (I 14), (III 15) & (IV 20) of 3LPE Spec. No. MEC/TS/05/21/ 014 | I (2): Air pressure in epoxy spray guns – Continuous monitoring & recording<br><br>I (4): Pipe surface temperature: Continuous monitoring & recording<br><br>I (14): Extrusion temperature of adhesive: Continuous monitoring & recording<br><br>III (15): PE extrusion temperature: Continuous monitoring & recording<br><br>IV (20): Water quenching – Continuous monitoring & recording  | Bidder propose and consider that the following application parameters shall be monitored continuously & recorded at once per hour during the regular production.<br><br>• Air pressure in epoxy spray guns;<br>• Pipe temperature prior to epoxy application;<br>• Temperature of adhesive film;<br>• Temperature of PE film.<br>• Water quenching temperature<br><br>Bidder understands that "Water quenching temperature" refers to the coated pipe temperature after quenching / cooling. Kindly confirm.   | Tender conditions prevail.  |
| 53   | External 3LPE Coating comment as per Spec. No.: MEC/TS/05/21/014 . Rev.: 1, Edition: 2, Dated: June 2020 | Table 5 (I 7) of 3LPE Spec. No. MEC/TS/05/21/014                                     | Properties : Holiday detection (Test voltage set to exceed 5V per µm of epoxy thickness)<br><br>Inspection frequency during PQT : Each pipe<br><br>No holiday   | Bidder would like to state that it is practically difficult to achieve no holiday at 200 microns to 400 microns dry film thickness. Hence holiday acceptance criteria shall be one per meter length as per clause 10.3.2.2 of ISO 21809-2 for FBE coated portion of partly coated pipe.  | Tender conditions prevail.  |
| 54   | External 3LPE Coating comment as per Spec. No.: MEC/TS/05/21/014 . Rev.: 1, Edition: 2, Dated: June 2020 | Table 5 (IV 23) & Cl. 7.6.2 (a) & 10.5 of 3LPE Spec. No. MEC/TS/05/21/014            | Properties : Bond Strength (Peel Test)<br>- @ 23±2°C<br>- @ 80±2°C<br><br>Test method :ISO 21809-1 Annex C, (clause C.2 or C.5 hanging mass) and clause 10.5 (a) & 7.6.2 (a) of this spec.  | Bidder proposes that bond strength test shall be carried out by manual peel test machine due to pipe diameter constraint for 12"OD & 8"OD pipes. Please confirm.   | Tender conditions prevail.  |
| 55   | External 3LPE Coating comment as per Spec. No.: MEC/TS/05/21/014 . Rev.: 1, Edition: 2, Dated: June 2020 | Table 5 (IV 24) of 3LPE Spec. No. MEC/TS/05/21/ 014                                  | Properties : Specific electrical coating resistance<br>@ 23 °C ± 2 °C<br><br>Inspection frequency During PQT : One pipe (Test carried out in an independent laboratory of national/ International recognition on PE topcoat is also acceptable).  | Bidder understands that the Coating resistivity is the long term tests and shall be performed by PE topcoat raw material supplier / manufacturer. Test certificates shall be furnished by raw material supplier / manufacturer shall be submitted for review and acceptance.   | Bidder understanding is correct.<br>Tender conditions prevail.  |
| 56   | External 3LPE Coating comment as per Spec. No.: MEC/TS/05/21/014 . Rev.: 1, Edition: 2, Dated: June 2020 | Cl. 8.6.5 of 3LPE Spec. No. MEC/TS/05/21/014   | The salt tests shall be carried out after de-ionized water rinse. One test shall be carried out at one end of each pipe. The acceptance criteria shall be 2µg/cm2. An approved salt meter (SCM 400 or equivalent) shall be used to carry out salt tests and shall be calibrated in accordance with the equipment manufacturer's recommendation. Test shall be performed on each pipe during production and on each end of every pipe at the time of PQT.  | Bidder proposes to perform surface preparation inspection and salt contamination test after 2nd abrasive blast cleaning and prior to phosphoric acid wash and high pressure DI water wash as per Clause 8.5 of Specification.<br><br>If salt contamination exceeds 2µg/cm² then pipe shall be re-blasted and again rechecked for salt contamination.<br>At Bidder's plant the surface pre-treatment (Acid wash followed by deionized water wash and chromate application) and application of coating is a continuous process to avoid any contamination after surface pre-treatment prior to application of coating. | Tender conditions prevail.  |
| 57   | External 3LPE Coating comment as per Spec. No.: MEC/TS/05/21/014 . Rev.: 1, Edition: 2, Dated: June 2020 | Cl. 8.15.4 of 3LPE Spec. No. MEC/TS/05/21/014  | The Applicator shall check that the concentration for the chemical pre-treatment solution remains within the range recommended by the chemical manufacturer for the pipe coating process. The concentration shall be checked at the make up of each fresh solution and once per hour, using a method approved by the chemical manufacturer. The Applicator shall also ensure that the chemical pre-treatment solution remains free from contamination at all times. Recycling of chemical pretreatment solution is not permitted. | Bidder proposes test frequency for checking concentration of pre-treatment solution once per shift.  | Tender conditions prevail.  |
| 58   | External 3LPE Coating comment as per Spec. No.: MEC/TS/05/21/014 . Rev.: 1, Edition: 2, Dated: June 2020 | Cl. 9.2.7 of 3LPE Spec. No. MEC/TS/05/21/014   | The extrusion temperatures of the adhesive and polyethylene shall be continuously recorded. The monitoring instruments shall be independent of the temperature control equipment. The instruments shall be calibrated prior to start of each shift.   | Bidder clarifies that pyrometers that are used for PE & adhesive temperature monitoring, are specialized equipment and are calibrated in specialized equip outside laboratory, so we propose to review the outside lab calibration certificate.<br>However the pyrometer shall be checked for errors every shift against a calibrated temperature-measuring instrument. Which is also addressed in clause no 9.1.5 of MEC/TS/05/21/014 Rev. 1 Edt. 2.  | Kindly refer cl. no. 9.1.5 of Tech. Spec. MEC/TS/05/21/014, wherein this aspect has already been taken care of.<br>Tender conditions prevail. |



**REPLY TO BIDDERS QUERIES  
FOR PROCUREMENT OF BALANCE BARE & COATED LINE PIPES FOR NORTH -EAST GAS GRID PIPELINE PROJECT  
(PIPELINE SECTION 4, 6, 7, 13 & 14) OF M/S INDRADHANUSH GAS GRID LIMITED  
Tender no. : 05/51/23UU/IGGL/012B**



DATED : 19.08.2021  
MECON's Reply



| S.N. | CL. No.  | Section/ Page   | Section Detail/Description  | Clarification / Deviation   | MECON's Reply   |
|------|--|---|---|---|---|
| 59   | Internal Solvent Base Epoxy Coating comment as per Spec. No.: MEC/TS/05/21/014 B, Rev. 00, Edition: 1, Dated: Aug 2008 |   | Page No. 278 to 284 of Volume – II of II<br><br>Content list – Carbon steel coating line pipe<br><br>Document title / Description:<br>Inspection & test plan for internal liquid epoxy Coating of line pipes<br>Document /Drawing No. ITP NO. 05/21/14/005  | Bidder intent to clarify that the document number mentioned in the list (05/21/14/005) is different from the document number mentioned on the ITP (05/21/14B/005) for internal liquid epoxy Coating.<br>For evaluation of this enquiry, We have considered the Inspection & test plan for internal liquid epoxy Coating, ITP No. 05/21/14B/005 Rev.01, dated: Apr-2016. Please confirm. | Bidder understanding is correct.<br><br>Tender conditions prevail                               |
| 60   | Internal Solvent Base Epoxy Coating comment as per Spec. No.: MEC/TS/05/21/014 B, Rev. 00, Edition: 1, Dated: Aug 2008 | Cl. A, 1.1 (x) of MR - MEC/23VA/05/21/M/0 01/S012A Rev. 0 & Cl. 5.3, Table – 02 of MEC/TS/05 /21/014B & Cl. 6.0 of ITP No. 05/21/14B/005- ITP for Internal liquid epoxy coating | Cl. A, 1.1 (x) of MR: Works associated with External & Internal coating of Line Pipes. Bidder shall submit its methods and material proposed to be used for executing the internal coating to Company and shall receive approval from Company prior to start of production. The material being proposed shall have been applied successfully in at least one project in last five years. The coating material shall be qualified as per ISO 15741/ API RP 5L 2 Latest Edition and all qualification testing should be performed by an independent laboratory. If testing is undertaken at the coating manufacturer's premises, the test shall be witnessed by the Company or by third party. The coating manufacturer shall obtain the results in the form of a full qualification report showing test method and results.<br>As per Cl. 6.0 of ITP No. 05/21/14B/005- ITP for Internal liquid epoxy coating & As per Cl. 5.3, Table – 02 of MEC/TS/05 /21/014B<br>Cured paint film on steel panel, 5 no. sample<br>Procedure qualification test and repair procedure qualification test:<br>1) Adhesion test<br>2) Buchholz hardness<br>3) Resistance to neutral salt spray<br>4) Resistance to artificial ageing<br>5) Bend test (conical Mandrel)<br>6) Resistance to gas pressure variation<br>7) Resistance to water immersion<br>8) Resistance to chemicals<br>9) Resistance to hydraulic blistering<br>10) Porosity (glass panel dry +wet)<br>11) WFT (on all 25 pipes)<br>12) DFT (on all 25 pipes) | Bidder understands that the qualification test certificate furnished by paint raw material manufacturer (the tests shall be conducted any third party lab) in accordance ISO 15741 shall be submitted for client review and approval at the time of PQT. Please confirm.  | Please refer cl. no. 5.5 of Tech. Spec. no. MEC/TS/05/21/014B<br><br>Tender conditions prevail. |
| 61   | Internal Solvent Base Epoxy Coating comment as per Spec. No.: MEC/TS/05/21/014 B, Rev. 00, Edition: 1, Dated: Aug 2008 | Cl. A, 1.1 (xi) of MR - MEC/23VA/05/21/M/0 01/S012A Rev. 0  | Pipe surfaces shall be cleaned to SA 2½ (in accordance with ISO 8502 -3) using suitable grit/ shot, free of any deleterious contamination or moisture.  | Bidder intent to clarify that the surface cleanliness checking shall be carried out in accordance with ISO 8501-1. Please confirm   | Bidder understanding is correct.<br><br>Tender conditions prevail.                              |
| 62   | Internal Solvent Base Epoxy Coating comment as per Spec. No.: MEC/TS/05/21/014 B, Rev. 00, Edition: 1, Dated: Aug 2008 | Cl. A, 1.1 (xi) of MR - MEC/23VA/05/21/M/0 01/S012A Rev. 0 & Cl. 6.2 of Doc. No. MEC/TS/05/21/014B  | Cl. A, 1.1 (xi) of MR<br>The surface roughness shall be checked at random and shall be of the range of 30-60 microns in accordance with ISO 4287-1.<br><br>Cl. 6.2 of Doc. No. MEC/TS/05/21/014B<br>Check the surface profile. Unless otherwise agreed, it shall be such that R y5 (see ISO 8503-1) is between 25 µm and 60 µm.   | Bidder intent to clarify that the surface roughness checking shall be carried out in accordance with ISO 8503-4. Using stylist roughness gauge. Please confirm  | Bidder understanding is correct.<br><br>Tender conditions prevail.                              |
| 63   | Internal Solvent Base Epoxy Coating comment as per Spec. No.: MEC/TS/05/21/014 B, Rev. 00, Edition: 1, Dated: Aug 2008 | Cl. 5.1 of Doc. No. MEC/TS/05/21/014B   | The typical operating-temperature range for this type of coating is between - 20 °C and 110°C.  | Bidder has considered the operating-temperature as -20°C to 80°C for internal flow coating. Please confirm.   | Tender conditions prevail.  |
| 64   | Internal Solvent Base Epoxy Coating comment as per Spec. No.: MEC/TS/05/21/014 B, Rev. 00, Edition: 1, Dated: Aug 2008 | CL. 5.2, Table – 03 of MEC/TS/05/21/014B & Cl. 1b of ITP No. 05/21/14B/005- ITP for Internal liquid epoxy coating   | In addition to MTC review, contractor shall test sample as per specification as minimum but not limited to following:<br>a) Non-volatile matter (by mass)<br>b) Non-volatile matter (by volume)<br>c) Viscosity<br>d) Density<br>e) Ash residue on ignition<br>f) Pot life  | Bidder proposes to submit the raw material manufacturer batch test certificate for following tests of internal flow coating:<br>• Non-volatile matter (by volume)<br>• Ash residue on ignition<br>• Pot life  | Tender conditions prevail.  |



**REPLY TO BIDDERS QUERIES  
FOR PROCUREMENT OF BALANCE BARE & COATED LINE PIPES FOR NORTH -EAST GAS GRID PIPELINE PROJECT  
(PIPELINE SECTION 4, 6, 7, 13 & 14) OF M/S INDRADHANUSH GAS GRID LIMITED  
Tender no. : 05/51/23UU/IGGL/012B**



**DATED : 19.08.2021  
MECON's Reply**

| S.N. | CL. No.  | Section/ Page  | Section Detail/Description   | Clarification / Deviation   |   |
|------|--|--|--|---|---|
| 65   | Internal Solvent Base Epoxy Coating comment as per Spec. No.: MEC/TS/05/21/014 B, Rev. 00, Edition: 1, Dated: Aug 2008 | CL. 5.3, Table – 02 of MEC/TS/05 /21/014B & Cl. 6.0 of ITP No. 05/21/14B /005- ITP for Internal liquid epoxy coating | CL. 5.3, Table – 02 of spec. & Cl. 6.0 of ITP<br>Particular requirements of qualification of the cure paint film:<br>1. Resistance to neutral salt spray<br>2. Resistance to artificial aging<br>3. Resistance to gas pressure variation<br>4. Resistance to water immersion<br>5. Resistance to chemicals<br>6. Resistance to hydraulic blistering  | Bidder intent to clarify that the following tests are long term tests and shall be performed by coating material supplier. The test certificates shall be furnished to client for review.<br>1. Resistance to neutral salt spray<br>2. Resistance to artificial aging<br>3. Resistance to gas pressure variation<br>4. Resistance to water immersion<br>5. Resistance to chemicals<br>6. Resistance to hydraulic blistering   | Please refer cl. no. 5.5 of Tech. Spec. no. MEC/TS/05/21/014B<br><br>Tender conditions prevail. |
| 66   | Internal Solvent Base Epoxy Coating comment as per Spec. No.: MEC/TS/05/21/014 B, Rev. 00, Edition: 1, Dated: Aug 2008 | Table 4 of Doc. No. MEC/TS/05/21/014B  | Table 4 – Minimum items to be checked and recorded during the coating process<br>Flash point: At every change of shift   | Bidder requests more clarity for Flash point measurement requirement during coating application.<br><br>Bidder understands that flash point is paint material property and the paint material manufacturer declares the same in PDS and / or MSDS. Bidder intent to clarify that the flash point tests shall be reported in PDS / MSDS.   | Tender conditions prevail.  |
| 67   | Internal Solvent Base Epoxy Coating comment as per Spec. No.: MEC/TS/05/21/014 B, Rev. 00, Edition: 1, Dated: Aug 2008 | Cl. No. 7 of Amendment to technical specifications   | This procedure defines to identify the pipes through barcode label scanning. This procedure covers the application of 3D type bar code and pipe marking on Bare Pipe, 3LPE coated pipes and 3LPP coated pipes after the final coating of bare pipes.   | Bidder understands that QR code is required. As per Bidder's understanding the sample barcode sticker with QR code is given below:<br><br><br><br>Kindly confirm Bidder's understanding for 3D type barcodes.   | Bidder understanding is correct.<br><br>Tender conditions prevail.                              |
| 68   | Internal Solvent Base Epoxy Coating comment as per Spec. No.: MEC/TS/05/21/014 B, Rev. 00, Edition: 1, Dated: Aug 2008 | Cl. No. 7 (3.1.1) of Amendment to technical specifications   | Pipe marking (stencil) shall be made from both end of the pipe opposite to the weld line.  | Bidder has considered external 3LPE coating stencil marking shall be at outside surface of coating at one end of the coated pipe as per Cl. No. 13.0 of client specification for 3LPE coating.  | Bidder understanding is correct.<br><br>Tender conditions prevail.                              |
| 69   | Internal Solvent Base Epoxy Coating comment as per Spec. No.: MEC/TS/05/21/014 B, Rev. 00, Edition: 1, Dated: Aug 2008 | Cl. No. 7 & 7 (3.1.3) of Amendment to Line Pipe TS & Coating TS  | Cl. No. 7: Bar Coding / QR coding (New)<br>Bar-coding of line pipes as a requirement so that the pipe can be traced using bar coding scanner in the field. We propose bar coding at 4 equal spaced points on the pipe at 3, 6, 9, 12 O'clock position for easy identification. Alternatively, bar-coding can be done at both ends at 4, 8 & 12 O'clock position.<br>Barcode directly printed on the pipe with permanent ink may be preferred.<br><br>3.1.3 FIXING OF LABELS ON PIPES<br>Ensure that the surface area in which labels are pasted should be clean, dry and free from dust. For each pipe two (2) labels shall be fixed, one for each end at outside (fixed approx. 200 mm from the cutback / bevel area at an angle of 180° on each end). Refer Figure -I, all bar code shall be oriented perpendicular to the weld seam. The barcode label shall be put on completely finished pipe. Barcode label should not be overlapped with stenciling or any other marking outside coated pipe. (i.e. external coated pipe surface).<br><br> | Bidder intent to clarify there is a conflict regarding the requirement for fixing of number of bar code labels on pipes, mentioned in Clause 7 of Amendment to Line Pipe TS & Coating TS.<br><br>As of now bidder has considered the fixing of bar code labels on pipes shall be as per Clause 7 (3.1.3) of Amendment to Line Pipe TS & Coating TS (i.e. For each pipe two (2) labels shall be fixed, one for each end at outside (fixed approx. 200 mm from the cutback / bevel area at an angle of 180° on each end). Refer Figure -I). | Bidder understanding is correct.<br><br>Tender conditions prevail.                              |



**REPLY TO BIDDERS QUERIES  
FOR PROCUREMENT OF BALANCE BARE & COATED LINE PIPES FOR NORTH -EAST GAS GRID PIPELINE PROJECT  
(PIPELINE SECTION 4, 6, 7, 13 & 14) OF M/S INDRADHANUSH GAS GRID LIMITED  
Tender no. : 05/51/23UU/IGGL/012B**



**DATED : 19.08.2021  
MECON's Reply**

| S.N. | CL. No.  | Section/ Page | Section Detail/Description   | Clarification / Deviation  | MECON's Reply   |
|------|--|---------------|--|--|---|
| 70   | Internal Solvent Base Epoxy Coating comment as per Spec. No.: MEC/TS/05/21/014 B, Rev. 00, Edition: 1, Dated: Aug 2008 |               | <p>As per Page1 of 2 of Document No. - MEC/23UU/05/21/M/001/S012B:<br/>           SI. No. 13, INSPECTION &amp; TEST PLAN FOR 3-LAYER POLYETHYLENE COATING OF LINE PIPES: ITP NO. 05/21/14/004<br/>           SI. No. 14, INSPECTION &amp; TEST PLAN FOR INTERNAL LIQUID EPOXY COATING OF LINE PIPES:<br/>           ITP NO.05/21/14/005</p> <p>As per Internal coating ITP Document :<br/>           ITP No. 05/21/14B/005, Rev.: 1, Dated: APR-16</p> | <p>Bidder understands that inspection and testing frequency for regular production shall be as per Spec. No. MEC/TS/05/21/014, Rev.: 1, Edition: 2, Dated: June 2020: Standard technical specification for 3-layer Polyethylene coating of line pipes and Spec. No. MEC/TS/05/21/014B, Rev. 0, Edition: 1, Dated: Aug 2008 for Internal coating of line pipes except the proposal for test frequency mentioned in this comment sheet.</p> <p>Bidder understands there is a typo error in internal coating ITP No. 05/21/14B/005, Rev.: 1, Dated: APR-16. ITP document numbers shall be consider as per Page1 of 2 of Document No. MEC/23UU/05/21/M/001/S012B.</p> <p>Please confirm.</p> | <p>Bidder understanding is correct.<br/><br/>Tender conditions prevail.</p> |