



Vadodara Gas Limited
Replies to Bidder's Queries

SUBJECT: Procurement of 4” Steel Pipeline on Annual Rate Contract for Vadodara Gas Limited (GA)

TENDER NO.: VGL/CO/C&P-PNG/BD202506S220_RI Dated 03/09/2025 & **TENDER ID:** 221114.

Sl. No.	Description	Bidder's Query	VGL's Reply
1	Grade: Standard: API 5L, PSL -2 Material Grade X-52, Seamless with 3LPE Coating	We understand the requirement of 4” size is of ERW/SMLS CS Pipes; Hence We can provide the BEC qualifying documents of ERW Manufacturing Process to qualify in Clause 1.2. Kindly confirm.	4” of ERW/SMLS CS subject grade pipe required. Hence corrigendum will be issued by VGL.
2	Tender Fee: ₹ 7,500.00	The total E-Tender Processing fee for the tender is INR 7,500/- which is too high for tender. In other Oil & Gas tenders, there are no such fees, only a few customers ask for a tender fee which is nominal around INR 1000 to INR 2000. Hence, we request you to either remove the tender fee or reduce the amount to around INR 1000 to INR 2000 which is more acceptable. Please Confirm	Tender Conditions Prevail.
3	Bid Security: ₹ 4,27,500.00	All the PSU's & PMC's exemption to furnishing Bid Security/EMD has been accepted for Sellers having annual turnover of INR 500 Crore or more at least in one of the past three completed financial year(s). In view of above we would request you to waive off the Bid Security / EMD for subject procurement. Kindly confirm.	Tender Conditions Prevail.
4	Bid Security	We understand that Bank Details of VGL mentioned in Instructions for Furnishing CPS/SP on page 65 are also applicable for issuance of SFMS against EMD/Bid Security of subject procurement. Kindly confirm.	Yes, Confirmed.
5	CONTRACT & DELIVERY PERIOD The contract shall be valid for a period of 24 Months . However, in case; if the entire quantity of ARC order has not been ordered/ procured by VGL, the contract period shall be extended by a period of 06 Months at same rate, terms and conditions and at sole discretion of VGL.	We wish to bring it to your notice that Contractual Period of 24 months with extended period of 6 months is not feasible due to small quantity requirements. We would like to propose for procurement of entire tender quantity in single lot	Tender Conditions Prevail.
6	Delivery period for any of the Release/ Part Order of the ARC shall be 45 Days from the date of award of Release/ Part Order.	We wish to bring it to your notice that delivery period of any of the release/part order of the ARC for 45 days from the date of award of release/part order may not be feasible because of lead time of steel procurement, pipe manufacturing, coating and delivery of pipes to distant locations along with unloading & tacking arrangements. In the view of above we propose to deliver Pipes as per below schedule: Delivery Period within 4 months from the date of award in single LOT. Bidder also request to delete the part order clause since order quantity is too low.	The repeat order can be executed for entire ARC Order Qty.
7	Fall clause	We understand the Fall Clause is not applicable for subject procurement.	Tender Conditions Prevail.
8	INSPECTION	We would request you to confirm the names of approved Third Party Inspection Agency for subject procurement.	Available Qualified agency will be confirmed at the inspection stage. We cannot confirm prior to the bid submission.
9	3.0 TERMS OF PAYMENT 100 % payment within 60 Days of raising the invoice for the supplied material along with all taxes & charges will be paid on submission of documents.	We hereby propose to accept payment terms as 100% within 15 days of raising the invoice for the supplied material along with all taxes & charges to be paid on submission of required documents. Kindly confirm.	Tender Condition privilege.



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10	Quantity Variation: Quantity may vary $\pm 5\%$ for coated pipe & $\pm 25\%$ for bare pipe. Final quantity will be informed to successful bidder.	We would request you to confirm the quantity variation for subject procurement.	Quantity variation will be decided at the time of award of WO/PO.
11	Quantity Variation: 49.1 The Purchaser reserves the right to vary the quantity of each item up to $\pm 15\%$ for each item, at the time of award without any change in quoted unit price or other terms & conditions.	-	Quantity variation will be decided at the time of award to successful bidder.
12	Pipes shall be supplied between 11.5 m to 12.5 m.	We understand the average length of pipe will be 12 meter.	Confirmed
13	Final technical file	We would request you to accept the submission of final technical files in 1 hard copy & 3 soft copies.	Confirmed
14	PPP-MII Policy	We understand that PPP-MII Policy is not applicable for subject procurement.	Yes, Confirmed
15	List of Approved Steel Coil Manufacturer	We would request you to confirm the approved Steel Coil Manufacturer List.	List attached in Tender
16	Technical Specification for HFW Manufacturing Process	We would like to bring your notice that Technical Specification for HFW Manufacturing Process is missing in tender documents to enable us to participate in the subject Tender. In light of above we request to allow us to provide our technical queries within 7 days from the date of receipt of Technical Specification for HFW Manufacturing Process.	HFW manufacturing process attached will be review.
17	Reverse Auction	We understand that Reverse Auction is not applicable for subject procurements. Kindly confirm.	Confirmed
18	Domestic Value Addition in Iron & Steel Products	We understand the Domestic Value Addition in Iron & Steel Products is not applicable for subject procurement. Kindly confirm.	Applicable
19	3.2.2 FUSION BONDED EPOXY (FBE) POWDER Epoxy powder shall comply Canadian Standard Association (CSA) Standard Z245.20-2018. The color of epoxy powder shall be either green or dark red or any other color approved by Company except grey.	Bidder has considered the latest version CAN/CSA Z245.20-2022. Please confirm.	Confirmed
20	3.2.5 COATING SYSTEM PROPERTIES Bond Strength (using Type 2 Test Assembly i.e. Dynamometer • @ 20 \pm 5 ° C @ 65 \pm 5°C	Bidder proposes to bond strength test shall be carried out by manual peel test machine (Spring loaded type test assembly) due to size constraint. Please confirm. We request to kindly consider the practical difficulty.	Tender Conditions Prevail.
21	3.6. MATERIAL IDENTIFICATION All materials to be used shall be packed in damage free containers suitably marked with the following minimum information for identification: a. Name of the manufacturer. b. Type of material and product designation. c. Batch Number. d. Date and place of Manufacture e. Shelf Life / Expiry Date f. Storage Conditions g. Quantity Any materials found without above identification	Bidder clarifies that any missing information shall be traceable to batch test certificate or manufacturer publications.	Tender Conditions Prevail.



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	markings shall be deemed suspect and rejected by Company.		
22	<p>4.2.7. TESTING</p> <p>At least five (5) test pipes, including one (1) pipe partly coated with epoxy and one (1) pipe partly coated with both epoxy and adhesive layers, shall be randomly selected by Company Representative for carrying out PQT as per Table 5.3.1.</p>	<p>There is a contradiction with the requirement stated under the Clause 4.2.1 of coating specification.</p> <p>Bidder understands that Out of 5 (five) test pipes, 1 (one) pipe partly coated with epoxy and partly coated with both epoxy and adhesive layers shall be included.</p> <p>Remaining 4 (four) test pipes shall have all three layers. In accordance with Clause 4.2.1 of coating specification.</p>	Tender Conditions Prevail. However, Process procedure will be submitted for approval.
23	<p>4.2.8. PQT REPORT</p> <p>Upon completion of the testing, the Contractor shall prepare and submit to the Company a detailed report covering operating and controlling parameters, inspection and test reports and material test certificates for Company approval. Only upon written approval from Company, the Contractor shall commence production coating.</p>	<p>Bidder would like clarify that PQT (Pre-Qualification Tests) shall be carried out as a part of first day production and shall be followed by regular production without waiting for the results of the long duration tests. Please confirm.</p>	Confirmed
24	<p>4.3.6. ACCEPTANCE OF SURFACE PREPARATION</p> <p>Upon Completion of the blasting operations, the Contractor's quality control supervisor shall inspect the pipes for their compliance to requirements specified below:</p> <ul style="list-style-type: none"> • The surface finish after blast cleaning shall conform to near white metal finish i.e. Sa 2½ of Swedish Standard SIS 055900. • Anchor pattern/roughness profile shall be between 50 to 70 microns. <p>Dust contamination shall be rating max. 2 as per ISO 8502-3.</p>	<p>Bidder propose test frequency shall be as following.</p> <ul style="list-style-type: none"> • The surface finish (Sa 2½) – each pipe. • Anchor pattern/roughness – once per hour. <p>Dust contamination – once per hour.</p>	Tender Conditions Prevail. However, Process procedure will be submitted for approval.
25	<p>4.4. COATING APPLICATION</p> <p>4.4.1. PIPE HEATING</p> <p>d. Temperature of the pipe surface shall be continuously monitored & recorded by using suitable instruments such as infrared sensors, contact thermometers, thermocouples etc.</p> <p>e. Temperature measuring & monitoring equipment shall be calibrated twice every shift and/or as per Company.</p> <p>f. Representative's instruction.</p>	<p>Bidder clarifies that optical pyrometers are used for pipe surface temperature monitoring before coating application.</p> <p>Pyrometers are specialized equipment and are calibrated in specialized equip outside laboratory, so we propose to review the outside lab calibration certificate.</p> <p>However, the pyrometer shall be checked for errors every shift against a calibrated contact type temperature-measuring instrument.</p>	Tender Conditions Prevail. However, Process procedure will be submitted for approval.
26	<p>4.4.2.APPLICATION OF EPOXY, ADHESIVE AND POLYETHYLENE</p> <p>Note 4: Unless indicated otherwise in Purchase Order, total thickness corresponding to Normal Type (n) coating shall be applicable.</p>	<p>Bidder understands that minimum total coating thickness shall be 1.85 mm and in case of HDPE topcoat 1.70 mm.</p>	Tender Conditions Prevail. However, Process procedure will be submitted for approval.



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27	<p>4.4.3. COATING CUT BACK</p> <p>Coating and/or adhesive shall terminate 120 mm +20 / -0 mm from pipe ends. Contractor shall adopt mechanical brushing for termination of the coating at pipe ends. Edge of the coating shall be shaped to form a bevel angle of 30° to 45°.</p>	Bidder use tool instead of mechanical brushing.	Tender Conditions Prevail.
28	<p>5.3. TESTING OF COATING</p> <p>5.3.5. BOND STRENGTH TEST</p> <p>One test shall be performed at cut back portion at each end and one in the middle of test pipe for each specified temperature (i.e. total 6 tests per pipe).</p>	For bond strength at each cut back ends, bidder confirms to comply. Bidder proposes to perform bond strength test at maximum feasible distance from either end instead of middle of the pipe. It is not possible to maintain the test temperature required at the middle of the pipe due to size constraint. Please confirm.	Tender Conditions Prevail. However, Process procedure will be submitted for approval.
29	<p>Table 5.3.2: Testing Requirement During Production Coating</p> <p>Bond Strength: One out of 25 Pipes</p>	Bidder clarifies that the test frequency of Middle peel test is very high. Middle peel test area is repaired by patch repair. From technical point of view bond strength and mechanical strength at patch repair portion is lower than other extruded 3LPE coated portion of the pipe. Hence bidder proposes that peel test at both ends of the pipe shall be carried out one in out of 25 pipes and middle peel test shall be carried out one in out of 50 pipes. Please confirm.	Tender Conditions Prevail. However, Process procedure will be submitted for approval.
30	<p>5.3. TESTING OF COATING</p> <p>5.3.12. HOLIDAY DETECTION</p> <p>ONLY EPOXY / EPOXY AND ADHESIVE COATED PIPES</p> <p>Only epoxy coated section shall be subject to holiday inspection at a test voltage set to exceed 5V / micron of epoxy thickness. Section of pipe coated with both epoxy and adhesive shall be tested at a voltage of 25kV. No holidays are permitted.</p>	<p>Bidder clarifies that it is practically difficult to achieve no holiday at 200 microns thickness of FBE layer. Hence holiday acceptance criteria shall be ≤ 1.0 Holiday per meter as per Table-9 of CSA Z245.20-22 for FBE coated portion of partly coated pipe.</p> <p>Bidder proposes to pipe coated with both epoxy and adhesive shall be tested at a voltage of 5V/microns and holiday if any will be reported.</p> <p>Bidder understands that the epoxy coated & both epoxy and adhesive coated holiday test shall be applicable for procedure qualification test (PQT) only. Please confirm.</p>	Tender Conditions Prevail. However, Process procedure will be submitted for approval.
31	<p>5.6 Soluble Salt Measurements</p> <p>After blast cleaning, all pipes shall be tested for salt contamination. One test shall be carried out at each end of each pipe using salt meter (SCM 400 or approved equivalent). The acceptance criteria shall be $2 \mu\text{g}/\text{cm}^2$.</p>	Bidder proposes that the salt contamination test shall be performed at one end of each pipe. Please confirm.	Tender Conditions Prevail. However, Process procedure will be submitted for approval.
32	<p>5.6 Soluble Salt Measurements</p> <p>After blast cleaning, all pipes shall be tested for salt contamination. One test shall be carried out at each end of each pipe using salt meter (SCM 400 or approved equivalent). The acceptance criteria shall be $2 \mu\text{g}/\text{cm}^2$. Any pipe having salt contamination exceeding $2 \mu\text{g}/\text{cm}^2$ shall be treated by phosphoric acid wash followed by de- ionized water wash in accordance with the recommendations of the manufacturer. The Contractor shall submit a detailed procedure for phosphoric acid wash for Company approval.</p>	Bidder understands that the phosphoric acid wash followed by de-ionized water wash shall be carried out only in case salt contamination level of blast cleaned pipe exceeds $2 \mu\text{g}/\text{cm}^2$. Please confirm.	Tender Conditions Prevail. However, Process procedure will be submitted for approval.



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33	ANNEXURE – II PIPE END PROTECTION g. Following are the approved manufacturer for the end seal tape: 1) M/s Dhatec • M/s Seal For Life 2) (Formerly Berry Plastics) OR Equivalent	Bidder propose end seal tape manufactured by MAASH Industries for approval. Please confirm.	Tender Conditions Prevail. However, Process procedure will be submitted for approval.
34	INSPECTION AND TEST PLAN	Bidder understands that inspection and test plan for 3-layer polyethylene coating of line pipes is for information only. Bidder to follow 3LPE coating specification for all the testing, test frequency and acceptance criteria except the comments / clarification given in this comments sheet.	Tender Conditions Prevail. However, Process procedure will be submitted for approval.

Note: This Replies to Bidder's Queries as uploaded on n-Procure & VGL's Website. Please upload the same duly Sign and Seal with Techno–Commercial Bid as this is an Integral Part of the Tender.

1 MANUFACTURING

1.1 Process of Manufacture

Pipe furnished to this specification shall be manufactured in accordance with the applicable requirements and limitations given in Table 2 of API Spec 5L and Table 3 of this specification.

Table 3 of API Spec 5L stands replaced by Table 3 of this specification.

Table 3 - Acceptable manufacturing routes for PSL 2 pipe

Type of Pipe	Starting Material	Pipe forming	Pipe Heat treatment	Delivery condition
HFW	Thermomechanical-rolled coil	Cold forming	Heat treating ^a of weld area only	M
See clause 4.3 of this specification for applicable heat treatment				

High frequency electric welding shall be performed with a minimum welding current frequency of 200 kHz. The welding system shall have an integrated control in which following data as a minimum shall be monitored:

- Welding Temperature
- Welding speed
- Current and Voltage

Abutting edges of the coil shall be milled or machined immediately before welding. The width of the coil shall be continuously monitored.

1.2 Starting Material

1.2.1 Line pipe furnished to this specification shall be made from steel produced in basic oxygen or electric arc furnace. Steel shall be made by continuous casting only.

1.2.2 The steel used for manufacture of pipe shall be fully killed and fine grained with ASTM grain size number 7 or finer as per ASTM E 112.

1.3 Treatment of Weld Seams in EW and LW Pipes

1.3.1 LW pipe and PSL 2 HFW pipe

The weld seam and the entire Heat Affected Zone (HAZ) shall be heat treated so as to stimulate a normalizing heat treatment in order to control the grain structure so that no un-tempered martensite remains in the weld seam and the HAZ, and the mechanical properties of heat treated zone approximate that of the parent metal.

Heat treatment temperature of the weld seam and the entire HAZ shall be continuously measured and recorded.

1.4 **Cold Sizing and Cold Expansion** - Pipes furnished to this specification shall be non-expanded.

1.5 **Jointers** - Jointers on pipes are not permitted.

2 ACCEPTANCE CRITERIA

2.1 Chemical composition

2.1.1 For pipes supplied as per this specification, the chemical composition of each heat of steel on product analysis shall be as given in Table 5 of this specification.

Table 5 of API Spec 5L stands replaced by Table 5 of this specification.

Table 5 - Chemical composition for pipe

Element	Mass fraction based upon heat and product analyses (%)	
C ^b	0.16	max. (For Grade BM to X56M)
	0.12 ^f	max. (For Grade X60M to X70M)
Si	0.15 m(new)	min.
	0.45	max.
Mn ^b	1.20	max. (For Grade BM to X46M)
	1.40	max. (For Grade X52M & X56M)
	1.60	max. (For Grade X60M & X65M)
	1.70	max. (For Grade X70M)
P	0.020	max.
S	0.015	max.
V	0.05	max. (For Grade BM to X46M)
	d	max. (For Grade X52M to X70M)
Nb	0.05	max. (For Grade BM to X46M)
	d	max. (For Grade X52M to X70M)
Ti	0.04	max. (For Grade BM to X46M)
	d	max. (For Grade X52M to X70M)
Al n (new)	0.02 o(new)	min.
	0.07	max.
Cr	0.20	max.
Mo	0.10	max. (For Grade BM to X65M)
	0.20	max. (For Grade X70M)
Cu	0.35	max.
Ni	0.20	max.
N n (new)	0.012	max.
B	0.0005	max.

a Based upon product analysis as per clause 9.2.4 and 9.2.5 of API Spec 5L, the CE Pcm limits apply if $C \leq 0.12\%$ and CE IIW limits apply if $C > 0.12\%$. For pipes of all grades, sizes and wall thicknesses, Carbon Equivalent shall comply with the following limits:
CE Pcm $\leq 0.20\%$ CE IIW $\leq 0.40\%$

Boron content shall be considered in CE Pcm formula even if it is less than 0.0005% . b Deleted c Deleted

d Deleted

d Nb + V + Ti $\leq 0.15\%$

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(New)m: Minimum for Si is not applicable for AI killed steel

For heat analysis and product analysis, all the elements listed in Table 5 of this specification shall be analyzed and reported, even if those are not purposely added but are present as residuals only.

If alloying elements other than those specified in Table 5 of this specification are added to the steel, the limits of the additional components shall be agreed with the Purchaser.

Tensile properties

The finished pipe (after all heat treatment & sizing operations) shall conform to the requirements of Table 7 of API Spec 5L and as modified herein.

The actual yield strength shall be as close as possible to the specified minimum yield strength (SMYS) but in no case it shall exceed the limits specified here under:

API Spec 5L Grade	Permissible in excess of SMYS, MPa (psi)
Up to and including X46 M	131 (19,000)
X52M to X60M	125 (18,000)
X65M to X70M	120 (17,400)

The ratio of body yield strength and body tensile strength of each test pipe on which yield strength and ultimate tensile strength are determined, shall not exceed 0.90.

The tensile strength of the weld (after heat treatment of the weld seam) shall be equal to or higher than the specified minimum tensile strength of the base metal.

The minimum elongation of base metal shall be determined in accordance with the formula given in foot note (f) of Table 7 of API Spec 5L, however, minimum elongation in no case shall be less than 20%.

5.4 Flattening Test

Acceptance criteria for flattening tests shall be as follows:

5.4.2 For HFW pipe of grade $\geq X60$ and $t \geq 12.7$ mm, there shall be no opening of the weld before the distance between the plates is less than 66% of the original outside diameter. For all other combinations of pipe grade and specified wall thickness, there shall be no

cracks or breaks in either weld or parent metal before the distance between the plates is less than 50% of the original outside diameter. Dye penetrant testing shall be used to positively confirm the presence of crack, break or opening.

5.4.3 For HFW pipe with a $D / t > 10$, there shall be no cracks or breaks other than in the weld before the distance between the plates is less than 33% of the original outside diameter.

5.4.4 For all pipes, there shall be no evidence of lamination or burnt metal during the entire test before opposite walls of the pipe meet.

Note: The weld extends to a distance of 13 mm on each side of the weld line. The original outside diameter is the specified outside diameter.

List of Steel coil manufacturing company

1. Jindal Stainless
2. Tata Steel
3. J.K. Steel Strips
4. JSW Steel