AAVANTIKA GAS LIMITED

(A JOINT VENTURE COMPANY OF GAIL & HPCL)

CITY GAS DISTRIBUTION PROJECT IN INDORE,
UJJAIN, PITHAMPUR & GWALIOR

REQUEST FOR QUOTATION

SUPPLY OF SS 316 GRADE SS FITTINGS FOR CNG APPLICATION

RFQ No.: AGL/503/MKTG/CNG SS FITTINGS/06/2025-26

OPEN COMPETITIVE BIDDING

ISSUE DATE: 18.06.2025

Important Dates

Date of Start for Manually Submission of RFQ at AGL HO	**18/06/2025**
Last Date & Time of Submission of RFQ	**26/06/2025 up to 16.00 Hrs**
Date & Time of Opening of Priced Bid	**26/06/2025 up to 16.30 Hrs**

Aavantika Gas Ltd. (AGL) is a Joint venture of GAIL & HPCL for implementation of City Gas projects in Indore, Ujjain, Pithampur & Gwalior for transportation, industrial, commercial and domestic consumers.

1. SCOPE OF WORK:

The scope of work covers the design, engineering, fabrication/manufacturing, inspection, supply, testing of SS 316 Grade fittings for CNG applications. Detailed Technical and scope of work is annexed with this RFQ.

2. TECHNICAL BEC:

The bidder should have satisfactorily executed similar work for Supply of Stainless Steel FITTINGS / ACCESSORIES / VALVES of minimum value not less than Rs. 3.56 Lakhs in a single Order/Contract* during previous 5 years reckoned from the bid due date.

*(*Multiple Purchase orders / Contracts issued against a Single Tender process will be considered as a single Purchase Order / Contract.).*

3. DOCUMENTS TO BE SUBMITTED IN SUPPORT OF BEC:

1. Bidder has to submit copy of Work Order/Contract Order/Any Equivalent Order and its Completion Certificate issued by client having cross reference to Work Order/Contract Order/Any Equivalent Order. In absence of Completion Certificate, bidder can also submit Tax Invoice and Proof of Payment having cross reference to Work Order/Contract Order/Any Equivalent Order.
2. Bidder has to submit copy of financial statements including Balance Sheet and Profit & Loss account statement certified by Chartered Accountant for last audited financial year.
3. In case of Firm, Bidder to submit copy of the Firm Registration certificate.
4. Sealed and Signed copy of RFQ document.
5. GST and Pan Card.

4. BID EVALUATION:

- Evaluation shall be done on overall lowest basis at least cost to the Purchaser.
- If quoted amount of two or more L-1 ranked bidders are same, then contract will be awarded to that L-1 bidder whose Turnover as per Last Audited Balance Sheet will be higher

5. COMPLETION PERIOD:

Completion period for above Scope of Work will be Eight (08) weeks form date of Issuance of Order. All materials are to be ordered on One time basis.

6. PAYMENT TERMS:

100% (GST Compliant Invoice) Invoice value with taxes and duties will be paid within 30 days, progressively after delivery of material, after adjustment against PRS (PRS will apply on value excluding Input Tax Credit amount) and on submission of invoice, in duplicate, along with:

- Invoice in duplicate
- Inspection Release note by Owner or his appointed or approved agency (TPIA)
- Material Test Certificate issued by manufacturer.
- GR / LR in Original
- Packing List
- A certificate from manufacturer that the all items/ equipment under supply including its component or raw material used with manufacturing are new and conform to the tender requirement. In case manufacturer is not the contractor, the contractor owning overall responsibility will duly endorse this certificate.
- Performance Bank Guarantee(s) of 10% of individual Order Value. If already submitted, a copy of the same.
- Document related to Input Tax Credit to be claimed by Owner, if applicable.

- Documents as specified in the Technical Specifications / Material Requisitions of the Tender Document.
- Proof of customs clearance including payment of custom duty for imports permitted in the contract, If applicable.
- No Dues- No Claim certificate

MODE OF PAYMENT

- Payment will be made by way of normal banking channels.
- Deduction at source
  Purchaser will release the payment after off-setting all dues to the Purchaser payable by the seller under the contract. Deduction will be effected at source as per the law in force.

PAYING AUTHORITY:
DGM - F & A and EIC (Engineer-In-Charge)
Aavantika Gas Limited
202 – B, 2ndFloor, NRK Business Park, Vijay Nagar Square, A.B. Road.

7. PRICE REDUCTION SCHEDULE (PRS):

In supply contract, the portion of supply completed in all respects which can be used for commercial operation shall not be considered for applying PRS, if delivered within contractual delivery period. The remaining supplies which are completed beyond the contractual delivery shall attract the price reduction schedule @0.5% per week of the delayed delivery value maximum up to 5% of the order value (Excluding Taxes and Duties)

8. GUARANTEE:

The manufacturer shall guarantee that the design, materials, manufacturing and testing of intended material comply with the requirements of specification, applicable codes and standards. Manufacturer shall replace the material, which are defective or fail to perform satisfactorily due to inadequate engineering, substandard material and workmanship
The manufacturer shall guarantee the intended material against any defect, failure or malfunctioning occurring during 12 months from the date of commissioning or 24 months from the date of supply, whichever is earlier

9. SUBMISSION OF QUOTATION:

PLEASE SUBMIT YOUR MOST COMPETITIVE QUOTATION IN SEALED ENVELOPE COMPLETE WITH ABOVE DETAILS IN SCHEDULES OF RATES(SOR) LATEST BY 26.06.2025 UPTO 16:00 HRS.

Quotation Opening Time: 26.06.2025 at 16:30 HRS.

Bid should be submitted in a single envelope containing below:

i. **The Original copy of SOR with QUOTED prices.**

ii. **Documents pertaining to Serial No. 2 & 3 above.**

iii. **Bidder has to submit No Deviation Confirmation in their Letter head as per Form-1.**

iv. **In case bidder is not covered under GST, than a declaration has to be submitted stating the same.**

All the above are to be enclosed in a Sealed Envelope super scripted as – "QUOTATION – NOT TO BE OPENED"–

To,

Contracts and Procurement Department

Aavantika Gas Limited
202 – B, 2nd Floor, NRK Business Park,
Vijay Nagar Square, A.B. Road,
Indore (M.P), Pin – 452010, Contact No. 0731-4222520

NOTE:

a. **Bidder should fill their rates in the prescribed Schedule of Rates (SOR) format as per Serial No. 14 in this RFQ, no other format is acceptable.**
b. **Bid shall be accepted only after complying the Technical BEC as per Serial No. 3 above.**

10. APPLICABILITY OF LAW & JURISDICTION:

The RFQ shall be governed and interpreted in accordance with the applicable laws of India and Courts at Indore (Madhya Pradesh) shall be exclusive Jurisdiction.

11. OTHER TERMS & CONDITIONS:

a) AGL reserves the right to accept or reject any or all Quotations received at its absolute Discretion without assigning any reason whatsoever.
b) Validity of submitted proposal should be 02 Months from the due date of RFQ submission.

12. SCHEDULE OF RATES (SOR):

Sr. No.	Description	Unit	Quantity	Total Amount Excluding GST in Rs.	GST %	Total Amount Including GST in Rs.
1	**1/2" OD X 1/2" OD, Union nut with ferrule set**	Nos	150			
2	**3/4" OD X 1/2" OD, Reducing Union**	Nos	60			
3	**1/2" insulated Stainless Steel Cable Clamp/ 1/2" Box Clamp**	Nos	2000			
4	**2-way Full Bore Ball valve 3/4", W.P.: 255bar g, Size: 3/4" OD with nut, front and back ferrule on both sides Nylon with SS/Brass inserts Handle, Body: SS 316, Peek Seats (suitable for 5000 psi pressure CNG application)**	Nos	45			
Total Amount in Rs. (Figures)						
Total Amount in Rs. (Words)						

Please submit your most competitive **Quotation in Sealed Envelope** complete with above details in **Schedule of Rates (SOR) latest by 26.06.2025 upto 16:00 Hrs.**

FORM - 1

NO DEVIATION CONFIRMATION
(ON BIDDER'S LETTERHEAD)

Aavantika Gas Limited
202 – B, 2ndFloor, NRK Business Park,
Vijay Nagar Square, A.B. Road,
Indore (M.P), Pin – 452010

RFQ No.: AGL/503/MKTG/CNG SS FITTINGS/06/2025-26 Dated 18.06.2025

Dear Sir,

We understand that any deviation / exception in any form may result in rejection of bid. We, therefore, certify that we have not taken any exceptions/deviations anywhere in the bid and we agree that if any deviation / exception is mentioned or noticed, our bid may be rejected.

SEAL AND SIGNATURE OF BIDDER

FORM – 2

DECLARATION
(ON BIDDER'S LETTER HEAD)

No. Date:

Aavantika Gas Limited,
Indore (M.P.)

We hereby confirm that we have not been by any CGD Company for the tendered product/service.

SEAL AND SIGNATURE OF BIDDER

TECHICAL SPECIFICATION FOR SS FITTINGS

References

The latest edition of following standards are referred to in this specification:

ASME/ASTM B 31.3	:	Chemical Plant and Petroleum Refinery Piping
ANSI B31.1	:	For Power Piping
ASME Sec. VIII	:	For Boilers and Pressure Vessels
SAE-J-514	:	For Wall Thickness.

AGA 1-93, BS970 Para 4 1970 Grade SS316. C.G.A. and NGV Standards

The quality assurance program of the fittings manufacturer shall have been audited and ISO 9000 certification achieved by the manufacturer through any one of the following auditing/inspection agencies:-

i. ASME
ii. British Standard Institute
iii. Det Norske Veritas (DNV)
iv. Lloyd's Registrar of Shipping
v. TUV

1. The fittings shall have type approval certificates from Lloyds Registrar of Shipping.

2. Fittings shall be manufactured from the following materials
   - **A.** The basic material for fittings shall be SS 316.
   - **B.** Bar stock shall be as per BS (&)-316-S31, DIN 4401 or ASME SA 479-316 but with carbon Content < 0.05% to provide increased resistance to corrosion.
   - **C.** Forgings shall be as per BS 970-316-S31, DIN 4401 or ASME SA-182-316

3. The fitting end connections shall be compatible to tube of hardness $\leq$ Rb80.

4. All component parts of the fitting shall be of the same material.
   i. The ferrule material shall be able to withstand an atmosphere of natural gas, oil and moisture without rusting

5. Design and Manufacture

i. All fittings shall be designed for 6000 psig working pressure.
ii. All fittings shall be designed in conformance with the requirements of ASME B31.3 and applicable standards. Area classification applicable for all items shall be Class 1, Division 1, Group D as per NEC or Zone-1, Group IIA/IIB specification or equivalent specification. All fittings shall be designed so that all parts / components meet the requirements for the specified area classification.
iii. The SS fittings shall be of flare less design and four piece construction, consisting of front and rear ferrules, nut and body suitable for use on SS tubes conforming to ASTM A 269 TP 316. All the parts should be interchangeable with any other reputed fittings.
iv. Fittings shall be rated for at least the design pressure as stipulated in the material requisition. The design of fitting shall ensure that they shall be capable of holding full tube burst pressure after only one and a quarter turn pull of the nut.
v. The threaded ends of fittings shall be NPT as per ANSI B.1.20.1. Especially male threads are to be made by cold rolling method and shall be protected by plastic caps.
vi. Spanner hold shall be metric for metric type of fittings and imperial for imperial type of fittings.

vii. All Fittings should be hydro-tested to a pressure of 1.5 times the working pressure. For Hydro test a typical type test report will be submitted. Also if the fittings are hydrotested, the ferrules get utilized and then have to be replaced.
- The fittings shall hold the tube with a collecting action producing a firm grip on the tube without substantially reducing the wall thickness

viii. Fittings shall not torque the tubing during original or subsequent make up of the connection and should use geometry for inspection before and after make up. The fitting shall not require disassembly for inspection before or after make up.

ix. The tube fittings shall be gaugeable for sufficient pull up after one and a quarter turn. Tube fittings shall have a gaugeable shoulder and there shall be no radius at the point where the shoulder meets the neck of the fitting body.

x. The gap inspection gauge shall be easily insertable at finger tight position of nut. The gap inspection gauge shall not be insertable between the nut and shoulder of the fitting after completing only one and a quarter turn pull up of the nut.

xi. The tube seat counter bore in the body shall be faced flat 90^0 to the axis of the tubing to minimize tube expansion and subsequent galling.

xii. The sealing and gripping power of the fitting shall be controlled such that the action between ferrules will overcome commercial variations in tubing wall thickness, hardness, diameter and installer skill.

xiii. The seal contact areas of the fitting body shall have a machined finish of 32 Ra or better.

xiv. The fitting body shall have no machined stop or shoulder to preclude additional tightening in subsequent make up. If shoulder is provided, supplier to supply hydraulic swaging tool with the supply of fittings to enable efficient swaging. This shall be at no extra cost to AGL.

xv. Front Ferrule:
- The front ferrule shall affect a long, smooth repeatable seal by contact with body and a grip hold on the tube surface.
- The front ferrule shall always remain in a sprung condition to compensate for thermal stresses and to accomplish repeated make or break.
- Front ferrule which is wetted part shall not be hardened by Heat treatment.
- The sealing cone of body where front ferrule seats shall be burnished to remove tool marks and to give extra smooth surface for proper sealing

xvi. Rear Ferrule:
- The rear ferrule shall collet the tubing surface, improving the performance of the tubing in systems of high impulse or vibration.
- The rear ferrule shall have a machined recess on the inside diameter and shall have complete surface hardening so as to substantially reduce the required pull up torque. Both the requirements i.e. complete surface hardness and machined recess shall be met for all rear ferrules.
- Rear ferrule, which grips the tubing and not typically wetted part shall be significantly hardened than the tubing up to RC 60 hardness.
- Rear ferrule shall not be hardened by Heat treatment.
- For hardening of back ferrule multiple processes shall not be-used.

xvii. Nuts shall have silver plated threads to act as a lubricating agent to avoid galling and to reduce tightening torque.

xviii. Fitting body, nut and Ferrules shall be Electro polished.

xix. Fittings shall be suitable to operate at high temperature and pressure combinations.

TESTING REQUIREMENT FOR FITTINGS

The Manufacturer shall submit typical type test reports for the following tests AS MINIMUM.

i. Visual Examination
ii. Hydraulic burst pressure test
iii. Helium leak test under 0.0002 psia negative pressure, leaks into assembly greater than 4.0 x 10-9 atm-cc/sec being unacceptable.
iv. Gas pressure test for 25 remarks at 6000 psig. No leakage should be detectable even after 25 remakes.
v. Impulse and vibration testing by "rotary beam method" or 500,000 impulse cycles and 10 million vibration cycles with detectable leakage at full working pressure throughout till the end of the test.
vi. Make and Break Hydrostatic Test.
vii. Temperature Cycling Test

TEST REPORTS AND CERTIFICATES

i. The manufacturer shall supply material compliance certificates conforming that raw material for fittings conforms to the requirements of ASME Section-II and ASME Section-III sub sections NB, NC and ND.
ii. The manufacturer shall furnish test procedure and typical test reports of all tests conducted on fittings as per the requirements

MARKINGS, PACKING AND SHIPMENT

i. Heat code traceability number shall be stamped or etched on both body nut and ferrules (front and back) of each fitting.
ii. Replacement nuts and ferrules shall be packaged in a manner so as to allow safe and simple replacement.
iii. All items shall be suitably wrapped and packaged to withstand rough handling during shipment and inland journey.
iv. Items shall be properly tagged and packaged separately to facilitate easy identification.
v. Items shall be wrapped and packaged in such a way that they can be preserved in original as new condition

SPECIFICATION FOR SS VALVES

AMBIENT CONDITIONS : The climatic conditions to be considered for selection, design and derating of SS Valves shall be as indicated below:

- Ambient Temp. min/max degree C : 4.7 0C / 47 0C
- Relative humidity : 94 %

The latest edition of following standards are referred to in this specification: MSS SP-99 :Instrument Valves
ASME/ASTM B 31.3 : Chemical Plant and Petroleum Refinery Piping

MATERIAL

- The valve body will be made out of material conforming to ASTM A 479 Gr. SS 316.
- MOC of ball shall conform to ASTM A 276 Gr. SS 316.
- MOC of seat shall be PEEK

DESIGN AND MANUFACTURE

A. All ball valves shall be designed in conformance with the requirements of ASME B31.3, MSS SP-99 and applicable standards. Area classification applicable for all items shall be Class 1, Division 1, Group D as per NEC or Zone-1, Group IIA/IIB as per IS/IEC specification or equivalent specification. All parts / components shall meet the requirements for the specified area classification.

B. Valves shall be rated for a maximum pressure rating of 6000 psig and shall be capable of operation between Design Temperature range of –400F to +2500F.

C. Valves shall have spring loaded PEEK seats allowing seal-ability over the full pressure range at any port and low operating torque over the full range of pressure and temperatures.

D. Valve shall have Nylon with brass insert handle. Handle shall indicate the direction of flow.

INSPECTION AND TESTING

The Valve Manufacturer shall submit factory test reports for the following tests carried out on each valves:

i. Hydrostatic seat leak test shall be carried out with de-ionized water. There shall be no detectable seat leakage at 1.1 times the rated pressure of the valve. For Hydro test a typical type test report will be submitted. Also if the fittings are hydrotested, the ferrules get utilized and then have to be replaced.

ii. Gas pressure test for seat shall be carried out with nitrogen at 1000 psig. There shall be no detectable external leakage. Maximum allowable seat leakage shall be 0.1 std-cc/min.

OTHER REQUIREMENTS

Manufacturer should conform that valves are approved by Rail Road Commission of axes, LP Gas Division under regulation for compressed natural gas or ANSI / AGA NGV 3.1 1995, CAN / CGA-12-3-M95 “Fuel Systems Components for Natural Gas Powered Vehicles” by “Canadian and Association”.

SPARES AND ACCESSORIES

Manufacturer shall furnish a list of recommended spares and accessories for valves required during startup and commissioning.

TEST REPORTS AND CERTIFICATES

- The manufacturer shall supply material compliance certificates.
- The valve manufacturer shall provide test procedure and valve inspection and test report for type test carried out on similar valves as per the requirements

APPROVED VENDOR LIST

- Swagelok,
- Parker,
- SSP,
- Hamlet,
- Hy-Lok,
- Dk-Lok,
- Fluid Controls,
- Astec
- Sealexcel
- Dawson Tech