

REQUEST FOR QUOTATION

TO,
GAIL WEBSITE VENDOR
India
Vendor Code - 101019938

RFQ No.: GAIL/08/RJ19140/3300025749/
Dated : 23.07.2008

Kind Attn : Mr/Ms

Dear Sir/Madam,
GAIL (India) Ltd. invites you to submit your offer in sealed envelope superscribing RFQ No. & Due date for the following services in complete accordance with enquiry documents/attachments:

Name of work : Annexure-1 attached for Scope of work and Special condition of contract, Annexure-2 Technical Details of Masters

Bid Due Date & Time : 13.08.2008 at 14:00 Hrs

Opening of Bids on : 13.08.2008 at 15:00 Hrs (In case of Two Bid system tender, unpriced bids shall be opened.)

Validity of Offer Upto : 30.12.2008

Date of Pre Bid Conference : at _____ Hrs

Instruction to Bidders :

OFFERS ARE REQUIRED TO SUBMIT IN 2 BID SYSTEM. TECHNICAL BID AND PRICE BID SEPARATELY AND BOTH SHOULD BE IN ONE ENVELOPE TO SR MANAGER(C&P), AV APPA RAO ROAD, GAIL INDIA LTD, RAJAHMUNDRY. ANDHRA PRADESH. 533103.
IF YOU ARE NOT PARTICIPATING PL RETURN THE TENDER DOCUMENT WITH THE REASONS FOR OUR RECORDS

Delivery/Completion Schedule :

ONE YEAR FROM THE DATE OF FOI

Terms of Payment :

100% AFTER CALIBRATION OF INSTRUMENTS AND SUBMISSION OF INVOICE

Price Reduction Schedule :

LD WILL BE APPLICABLE 0.5% PER WEEK MAXIMUM OF 5% ON TOTAL ORDER VALUE.

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Dated : 23.07.2008

Other Contractual Stipulations:

AS PER RFQ AND TENDER DOCUMENT.

General Conditions of Contract :

AS PER GCC AND TENDER DOCUMENT

Special Conditions of Contract :

AS PER ENCLOSED

Bid Evaluation Criterion:

AS PER ENCLOSED

Bids complete in all respects should reach office of Incharge (C&P), GAIL (India) Ltd., at the above address on or before 14.00 hrs of the scheduled date. Bids received after the due date and time are liable to be rejected.

GAIL reserves the right to accept or reject any or all tenders received at its absolute discretion without assigning any reason whatsoever.

Thanking You,

Yours truly,
For & on behalf of
GAIL (India) Ltd.

(Authorised Signatory)

SCHEDULE OF RATES

Out. lev. Item No.	Service Description	Qty.	UOM	Rate	Amount
ITEM 00001 Calibration of Masters at NABL Lab					
Plant : 3130,NG Transmission - Rajamundhry					
10	TEMPERATURE BATH Model MP40R,Make-Nagman,Range -40~123degc	1	EA	_____	_____
20	MULTIFUNCTION CALIBRATOR 20DPC Model:Microcal20DPC Make:Eurotran, External High Pr.Sensor 0~160 Bar,External low Pr.Sensor: -1~2bar	1	EA	_____	_____
30	MULTIFUNCTION CALIBRATOR CA100 Model:CA100-255701 Make:Yokogawa generation Function:18 ranges,Measurement Function:8ranges	1	EA	_____	_____
40	RTD TEMPERATURE CALIBRATOR 100DEGC Model:18591 PDG Make:Apex Range: 0~100degc	1	EA	_____	_____
50	RTD TEMPERATURE CALIBRATOR 300DEGC Model:18591 PDG Make:Apex, Range:0~300degc	1	EA	_____	_____
60	BORE GAUGE 35~60 MM S.L No:573778 Make:Mitutyo,Range:35~60 MM, No of Pins:7, No of washers:4	1	EA	_____	_____
70	BORE GAUGE 50~150 MM S.L No:591580 Make:Mitutyo,Range:50~150 MM, No of Pins:10, No of washers:4	1	EA	_____	_____
80	BORE GAUGE 160~250 MM S.L No:620199 Make:Mitutyo,Range:160 ~ 250 MM, No of Pins:7, No of washers:7	1	EA	_____	_____
90	BORE GAUGE 250~400 MM S.L No:602136 Make:Mitutyo,Range:250~400 MM, No of Pins:5, No of washers:4	1	EA	_____	_____
100	DIGIMATIC DIGITAL INDICATOR S.L No:44408 Make:Mitutyo,Range: 0 ~ 12.7 mm,	1	EA	_____	_____
110	VERNIER CALIPER 0~300 MM Model:Digital Make:Mitutyo,Range: 0 ~ 300 mm,Internal Dia,External Dia,Depth	1	EA	_____	_____
120	VERNIER CALIPER 0~150 MM Model:Digital Make:Mitutyo,Range: 0 ~ 150 mm,Internal Dia,External Dia,Depth	1	EA	_____	_____

Quotation Item 00001 Total Value :

TOTAL QUOTATION VALUE :

Bid Evaluation Criterion:

- i. Bidders calibration lab must be NABL accredited laboratory Bidder should submit copy of NABL accreditation certificate along with the scope of accreditation.

Conditions of Contract:

1.0 SCOPE:

- The Calibration of Master measuring Instruments (DUC) as per the list is to be done against Master instruments with calibration Reference standards traceable to National, International Standards.
- The Test instrument validity period of calibration need to be mentioned in the certificate after the calibration is completed.
- The Accuracy of reference masters after considering uncertainty Compared to instrument under calibration should be better than at least 4:1 ratio.
- Necessary Calibration certificates shall be issued separately for each instrument, duly certified by the testing authority.

The calibration certificate should invariably contain the following information

- i. Allowable deviation or error of each measurement value as per manufacturer specification.
- ii. Deviation found for each measured value of DUC w.r.t reference standard,
- iii. Expanded uncertainty for each parameter in the unit of measured value.
- iv. Coverage factor (K) and measurement confidence level.
- v. TUR (test uncertainty ratio) for each measured Range.
- vi. General details of DUC.
- vii. Details of reference master including Accuracy/validity of calibration/uncertainty/certificate number issued by primary master laboratory/S.L.No/Make/Model.
- viii. Environment conditions like temperature, relative humidity in which calibration is done.
- ix. General impression of laboratory for the usability of DUC for calibrations
- x. The agency should also issue the copy of the original calibration certificates of all Master Reference calibrators used for calibration as a reference purpose.
- xi. However calibration agency can submit separate additional sheet for TUR, uncertainty value and other calibration parameter if their standard format is not fully accommodating the required details.

2.0 PERIOD OF CONTRACT:

Period of contract will be one year from the date of issue of work order.

3.0 PAYMENT:

100% payment shall be released after calibration of test Instruments by effecting statutory deductions. Payment shall be released through e-banking mode only. Please furnish your following details to facilitate e-payment.

- i) Bank Account No.
- ii) Bank Name

- iii) Branch Code
- iv) Address of the Branch

4.0 TAXES:

Service Tax at the prevailing rate shall be paid against the submission of proof of service tax registration no. of the agency.

5.0 SPECIAL CONDITIONS:

- i) The tentative calibration schedule of the instruments to be calibrated is indicated as given under.
- ii) The instrument will be dispatched to the lab before the due date of calibration on through courier or in person
- iii) After calibration dispatch of the instrument is under the scope of vendor, if the instrument is dispatched through courier then packing and handling should be through a reputed agency with wooden crate packing.
- iv) In case of any deviation in the instrument the same should be adjusted to bring it within the allowable limit.
- v) The instruments need to be calibrated in all aspects and to be handed back to GAIL along with calibration certificate within 1 week on receipt of the Instruments at agency's laboratory

6.0 OTHER CONDITIONS:

1. The Agency has strictly to be a certified testing laboratory.
2. The agency's testing laboratory shall hold a valid NABL accredited certificate for the instruments under test.
3. The testing should be done strictly as per the relevant National standards confirming to the vendors document for the particular instrument under test and the uncertainty calculations should be as per relevant ISO standards and the same should be mentioned in the calibration certificate provided after the calibration.

However calibration agency can submit separate additional sheet for TUR, uncertainty value and other calibration parameter if their standard format is not fully accommodating the required details.

4. The agency should ensure that their master Reference Calibrators should have the calibration validity as on the date of calibration traceable to National and international primary Laboratory.

5. Agency shall provide a sticker indicating the status of calibration with validity to each instrument.
6. The instrument should be handled properly during the calibration. The agency will be responsible for any problem created out of negligent handling of calibrating instruments. The agency is required to report the same to GAIL immediately in such cases.
7. During the course of calibration if any damage or theft occurred to the instrument, appropriate recovery shall be made from the agency at the sole discretion M/s GAIL.
8. Transit insurance is in the scope of M/s GAIL.
9. Documentary proof should be submitted for the following:
 - i. SCOPE OF ACCREDITATION BY NABL
 - ii. TRACEABILITY OF CALIBRATION TO NATIONAL, INTERNATIONAL STANDARDS.
 - iii. TRACEABILITY CERTIFICATES OF MASTERS USED FOR CALIBRATION SHOULD BE SUBMITTED ALONG WITH CALIBRATION CERTIFICATES AFTER COMPLETION OF CALIBRATION.

Enclosures:

1. Data Sheet for Accuracy Ranges,
2. GCC,
3. Health Safety and Management Conditions,

Agreed upon Terms & Conditions:

As per tender terms and conditions.

Calibration schedule

S.No	INSTRUMENT NAME	S.NO. OF INSTRUMENT	Make
01	MULTIFUNCTION CALIBRATOR Generation Function:18 ranges Measurement function:8 ranges	2557AGA733H	Yokogawa CA-100
02	TEMPERATURE BATH (-40 ~123) °C	MP060211562	NAGMAN MP-40R
03	RTD TEMPERATURE CALIBRATOR 0~100 °C	0495801	(ALTOP)
04	RTD TEMPERATURE CALIBRATOR 0~300 °C	00000	(ALTOP)
05	BORE GAUGE (35~60)mm, with 7 pin and 4 washer	573778	Mitutoyo
06	BORE GAUGE (50~150)mm, with 10 pin and 4 washer	591580	Mitutoyo
07	BORE GAUGE (160~250)mm, with 7 pin and 7 washer	620199	Mitutoyo
08	BORE GAUGE (250~400)mm, with 5 pin and 4 washer	602136	Mitutoyo
09	DIGIMATIC DIGITAL INDICATOR 0~12.7mm	44408	Mitutoyo
10	VERNIER CALIPER 12 INCH for (3 ranges)	069167	Mitutoyo
11	VERNIER CALIPER 06 INCH for (3 ranges)	04034952	Mitutoyo
12	Multifunction calibrator with pressure module, External Sensor High Pressure 0~160 bar Low Pressure -1~2 bar	S/N: 72334	Eurotran, 20 DPC

Multifunction calibrator :

Make: Druck, Unomat

Model: TRX-II

Serial Number: T3286

a) Pressure Module:

Sr no	Item to be calibrated	Calibration Range	Max. Allowable deviation
1)	Pressure Module P1	-1 ~ 2 bar g	± 0.05% fs
2)	Pressure Module P2	0 ~ 160 bar g	± 0.05% fs

b) Generation Function (Source):

Srno	Item to be calibrated	Calibration Range	Max. Allowable deviation
1)	DC mV	-10~ 100 mv	± 0.01%
	DC V	0 ~ 12V	± 0.01%
2)	DC mA	0 ~ 24mA	± 0.02%
3)	Ω	0 ~ 400Ω	± 0.005%
		400 – 2000Ω	± 0.005%
4)	RTD (PT 100,IEC)	-200 ~ 850	± 0.3

c) Measurement Function:

Sr no	Item to be calibrated	Calibration Range	Max. Allowable deviation
1)	DC mV	0 – 600 mv	± 0.02%
	DC V	0 – 6V	± 0.025%
	DC V	6 – 60V	± 0.05%
2)	DCmA	0 – 52mA	± 0.02%
3)	Resistance Ω	0 – 400Ω	± 0.005%
		400 – 2000Ω	± 0.005%
4)	RTD (PT 100,IEC)	-200 to 850	±0.25

Multifunction calibrator:

Make: Yokogawa
 Model: CA-100-255701
 Serial Number: 2557GA733H

a) Generation Function:

Sr.no	Item to be calibrated	Calibration Range	Max. Allowable deviation
1)	DC mV	0 – 100 mv	± 0.02%
	DC V	0 – 1V	± 0.02%
	DC V	0 – 10V	± 0.02%
2)	DC A	0 – 20mA	± 0.025%
3)	RTD (PT 100,IEC)	-200 to 850	(-200 – 0) 0.3 (0 – 400) 0.5 (400 – 850) 0.8
4)	Ω	0 – 500Ω	± 0.02%
	Ω	0 – 5kΩ	± 0.05%
	Ω	0 – 50kΩ	± 0.1%
5)	Frequency	1 -100 HZ	1 digit
		100- 1000 HZ	1 digit
		1 -10 KHZ	1 digit
		10 – 50 KHZ	1 digit
6)	Thermocouple Type K	-210 – 1372	(-200 – 100) 0.6 (-100 – 400) 0.5 (400 – 1200) 0.7 (1200 – 1372) 0.9
	Thermocouple Type F	-250 – 1000	(-250 – 200) 1.2 (-200 – 100) 0.6 (-100 – 600) 0.5 (600 – 1000) 0.6
	Thermocouple Type J	-210 – 1200	(-210 – 100) 0.6 (-100 – 800) 0.5 (800 – 1200) 0.7 (600 – 1000) 0.6
	Thermocouple Type T	-250 – 400	(-250 – -200) 1.5 (-200 – 400) 0.5
	Thermocouple Type N	-200 – 1300	(-200 – 100) 1.0 (-100 – 900) 0.7 (900 – 1300) 0.8
	Thermocouple Type R	-40 – 1767	(-40 – 100) 1.5 (-100 – 1767) 1.2
	Thermocouple Type B	-400 – 1820	(400 – 600) 2.0 (600 – 800) 1.5 (800 – 1820) 1.1

b) Measurement Function:

Sr no	Item to be	Calibration	Max. Allowable deviation
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	calibrated	Range	
1)	DC mV	-500 – 500 mv	± 0.02%
	DC V	-5 – 5V	± 0.02%
	DC V	-35 – 35V	± 0.02%
2)	DCmA	-20 – 20mA	± 0.025%
	DCmA	0 – 100mA	± 0.04%
3)	RTD (PT 100,IEC)	-200 to 850	0.3
	Resistance Ω	0 – 500 Ω	± 0.05%
	Resistance Ω	0 – 5k Ω	± 0.05%

DIGITAL VERNIER CALIPER

Make: Mitutoyo

Size: 12"

S.L No	Calibration Parameters	Range	Max. Allowable deviation
1	Internal Dia Measurement	0 ~ 300 mm	±(0.03mm)
2	External Dia Measurement	0 ~ 300 mm	±(0.03mm)
3	Depth Measurement	0 ~ 300 mm	±(0.03mm)

DIGITAL VERNIER CALIPER

Make: Mitutoyo

Size: 6"

S.L No	Calibration Parameters	Range	Max. Allowable deviation
1	Internal Dia Measurement	0 ~ 150 mm	+/- 0.021 mm
2	External Dia Measurement	0 ~ 150 mm	+/- 0.021 mm
3	Depth Measurement	0 ~ 150 mm	+/- 0.021 mm

RTD Temperature Test Kit

I	
Make	APEX
Model	18591 PDG
Range	-50 ~ 225 Deg C
Working Range	0 ~ 100 Deg C
Max. Allowable deviation	± 0.1 Deg c
II	
Make	APEX
Model	18591 PDG
Range	-50 ~ 600 Deg C
Working Range	0 ~ 300 Deg C
Max. Allowable deviation	± 0.1 Deg c

BORE GAUGE

Make: Mitutoyo

Repeatability: 0.002 mm

S.L No	Range	S.L NO	Max. Allowable deviation
1	35 ~ 60 mm	573778	± 2 micro meter
2	50 ~ 150 mm	591580	± 2 micro meter
3	160 ~ 250 mm	620199	± 2 micro meter
4	250 ~ 400 mm	602136	± 2 micro meter

DIGIMATIC DIGITAL BORE DIAL INDICATOR

Make: Mitutoyo

S.L.No: 44408

Range: 0 ~ 12.7 mm

Max. Allowable deviation: ± 1 micro meter

Repeatability: 0.5 micro meters

Least Count: 0.001 mm

Technical specifications for Temperature Bath:

Type	Dry block portable microprocessor based temperature bath		
Make	Nagman		
Model	MP 40 R		
S.L NO	MP 060211562		
Range	-40 °C about ambient to +123 °C		
Max. Allowable deviation	+/- 0.3 °C		
Stability	+/- 0.05 °C		
Display type	Digital		
Display resolution	0.1 °C		
Heating slope rate	Programmable rate of 10-15 °C / min		
Cooling slope rate	Programmable rate of 5-10 °C / min		
Temperature stability time	7 min		
Well diameter	inserts of 4 mm to 12 mm dia		
Tester depth	100 mm depth		
Analog O/P Volt	10 mv DC / °C	Accuracy	+/- (0.03% fs) 0.003 V
Measure DC Current	0 ~ 25 ma	Accuracy	+/- (0.05% fs) 0.01 ma
Supply Volt to TX	24 V Dc		
Power supply	230 V AC, 50 Hz,		

Multifunction calibrator :

Make : Eurotron

Model: Microcal 20 DPC
 Serial Number: 72334

a) Pressure Module:

Sr.no	Item to be calibrated	Calibration Range	Accuracy
1)	External Pressure Module	0 ~150 bar	± (0.025% range) Resolution 0.001 bar
2)	Internal Pressure module	-900~2000 mbar	± (0.025% range) Resolution 0.01mbar

b) Generation Function(Source):

Srno	Item to be calibrated	Calibration Range	Accuracy (% of Reading)
1)	DC mV	-20 ~200 mv	± (0.01% of Reading +3 μ Volt) Res: 1μ Volt
	DC V	-0.2 ~ 2V	± (0.01% of Reading +10 μ Volt) Res: 10μ Volt
	DC V	-2.0 ~ 20V	± (0.01% of Reading +0.1 m Volt) Res: 100μ Volt
2)	DC mA	0 ~ 50mA	± (0.01% of Reading +0.4 μ A) Res: 0.1μ Amp
3)	Ω	0 – 500Ω	± (0.02%of Reading +20mΩ) Res: 1 mΩ
	Ω	0 – 5kΩ	± (0.02%of Reading +200mΩ) Res: 10 mΩ
4)	RTD (PT 100,IEC)	-200 ~ 850	± (0.01% +0.05) Res: 0.01

c)Measurement Function:

Srno	Item to be calibrated	Calibration Range	Accuracy (% of Reading)
1)	DC mV	-20 ~200 mv	± (0.02% of Reading +3 μ Volt) Res: 1μ Volt
	DC V	-0.2 ~ 2V	± (0.02% of Reading +10 μ Volt) Res: 10μ Volt
	DC V	-2.0 ~ 20V	± (0.02% of Reading +0.1 m Volt) Res: 100μ Volt
2)	DCmA	-5.0 ~ 50mA	± (0.01% of Reading +0.4 μ A) Res: 0.1μ Amp
3)	Ω	0 – 500Ω	± (0.02%of Reading +12mΩ) Res: 1 mΩ

	Ω	0 – 5k Ω	$\pm (0.02\% \text{ of Reading} + 120\text{m}\Omega)$ Res: 10 m Ω
4)	RTD (PT 100,IEC)	-200 ~ 850	$\pm (0.01\% + 0.05 \text{)}$ Res: 0.01