



प्लाज़्मा अनुसंधान संस्थान
INSTITUTE FOR PLASMA RESEARCH
परमाणु ऊर्जा विभाग, भारत सरकार का एक सहायता प्राप्त
संस्थान



An Aided Institute of Department of Atomic Energy,
Government of India

इन्दिरा पुल के पास, भाट, गांधीनगर - 382

428 भारत

दूरभाष: (079) 2396 2020/2021/2028

फैक्स: 91-079-23962277

वेब: www.ipr.res.in

NEAR INDIRA BRIDGE, BHAT
DIST. GANDHINAGAR - 382 428 (INDIA)
Phone: (079) 2396 2020/2021/2028
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ENQUIRY

ENQUIRY NO : IPR/EQL/19-20/434
Date : 11-03-2020

Due on : 25-06-2020 by 1:00 PM IST

Reminder-1 Dt: 20-04-2020

Reminder-2 Dt: 19-05-2020

Please send your offer in sealed envelope specifying Enquiry No, Date & Due Date, ALONG WITH your credentials for the following items:

Important Note:

Please note that e-mail quotations are not acceptable however you may send your queries (if any) to localpurchase@ipr.res.in

Please ensure your sealed quotation reaches this office not later than above mentioned due date and time.

Kindly go through the following documents properly before quoting which are available on the IPR web portal i.e., http://www.ipr.res.in/documents/tender_terms.html / attached herewith.

- 1) Instructions to the bidders & Terms and conditions (refer Form No: IPR-LP-01.V4)
- 2) Bidding format

GST for Goods and Services (IGST/CGST/SGST TAX BENEFITS): Please refer **clause no: 8** of Form No: IPR-LP-01.V4

QUOTATION SHOULD BE ADDRESSED TO PURCHASE OFFICER ONLY

Sr No	Description	Quantity
1	Fabrication of Stub Tuner as per attached drawings	4.0 Nos.

Note: Note : (1) Unsigned quotations are not acceptable.
Quotation should be submitted duly signed on ALL PAGES invariably
(2) TDS as per CGST Act : As per provisions of

section No. 51 of the CGST Act 2017, TDS @ 2% (IGST 2% or CGST 1% and SGST 1%) will be deducted while making payment to the suppliers where total value of orders/contracts/work orders exceeds Rs. 2.5 Lakhs, in the event of order in Indian Rupees
Delivery Time:- 04 months

Encl: Refer attached sheets for detailed technical specifications.

Information to Vendors: We are working towards a single platform for our future requirement. Hence, please refer IPR website i.e, <http://www.ipr.res.in/documents/tendersenq.html> for our future requirement.

Technical Specification of Stub Tuner for Transmission Line

The detailed specifications and engineering drawing of the Stub Tuner are provided. The vendors are requested to study it in detail and offer best of their quotation. Stub Tuner specifications are given below.

SI. No	IPR Specifications	Values
1	Stub Tuner Assembly	As per attached drawing
2	Quantity	04 Nos.

WORKS PROCEDURE AND GUIDELINES

1. System Description

Stub Tuner consists of two coaxial cylinders of different diameters, and one piston moving between the cylinders. Finger contacts are used in plunger for perfect contact between inner conductor and plunger and outer conductor and plunger. The motorised movement of the plunger would be in both forward and backward directions. The ball screw connected to the plunger has to be coupled to the motor shaft for transferring motion to the system. For a controlled motion of the stub tuner a complete system comprising of motor, compatible driver, Display position of stub, finger contacts(BeCu) for plunger and limit switches (upper limit and lower limit), pressure testing arrangement(Blanks and Viton Gaskets) is in vendor's domain.

2. Technical Specifications of Motor and Drive unit

Motor Specification: Type: Stepper with encoder, Dynamic Torque: ≥ 7.5 N-m

Drive unit: Compatible with motor and position indicator with Display (encoder), communication port and movement resolution 1 mm.

Ball screw: 40 mm x10 mm pitch

Direction of motion: Forward and backward (single axis). Plunger should move at 10/20 mm/second.

3. General Terms and conditions

All the sharp edges should be rounded off as per the drawing or R1.

IPR reserves the right to modify dimensions given in the drawing to the extent of < 0.5 % of the nominal before issuing purchase order.

4. Free Issue Material

Aluminium outer pipe 4 meter (Rs.3000/mtr.), copper inner conductor tube 1.6 meter (Rs.2000/mtr.), Flanges 5 (Rs.1000/piece) Nos are provided by IPR as FIM for one stub.

5. Inspection at Vendor site and supply

A pre-dispatch inspection (PDI) at factory shall be carried out by the IPR representatives before shipping.

The PDI will include the following,

(i) Dimensional checks as per drawing.

(ii) Motorised movement of the system to be checked.

(iii) Complete assembly to be tested up to 5 bar pneumatic pressure.

(iv) Visual checking of the surface finish like scratch/dents and material defects like cracks etc.

6. Post Delivery checking at IPR

All the tests done at factory stated in section 5 shall be tested at IPR by IPR personnel at no cost to vendor.

7. Performance Guaranty

The vendor shall guarantee the quality of material, workmanship and the assembly for a period of one year from the date of acceptance at site.

8. Delivery Period

The vendor shall supply the fabricated items to the IPR within 120 days from PO date.

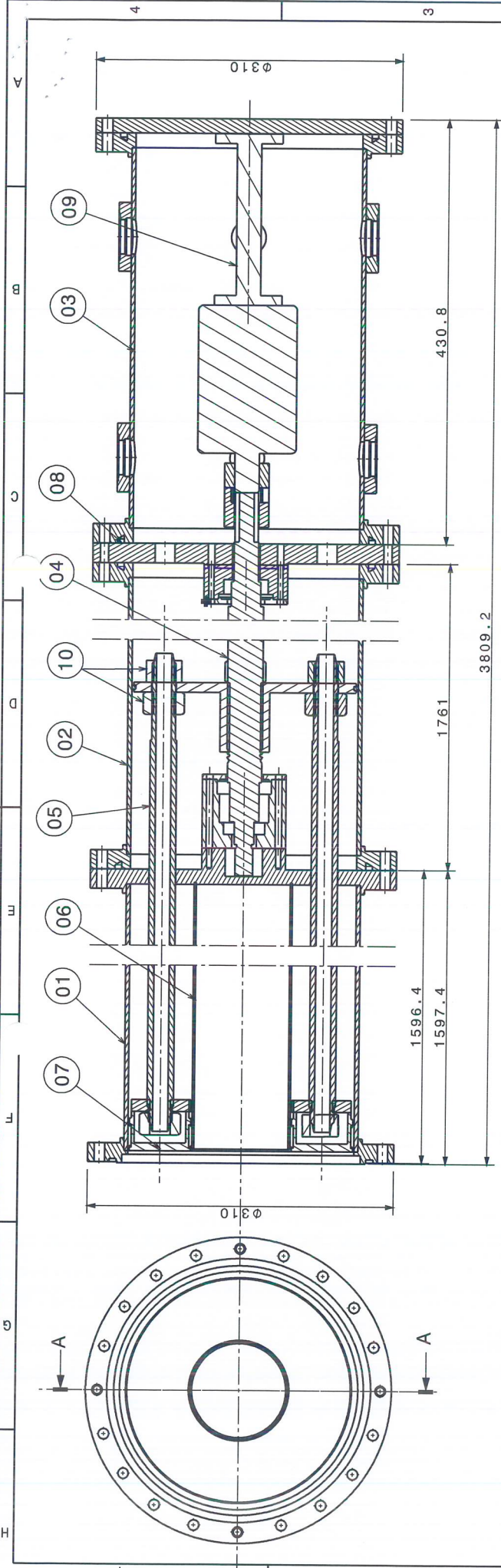
✓

Compliance Sheet: Stub Tuner for Transmission Line

NOTE:

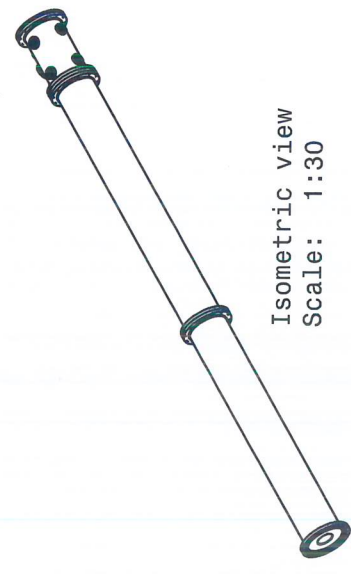
1. Any deviation/ disagreement / suggestion **MUST clearly be mentioned** here vis-à-vis our specifications. Extra sheet may be used if required.
2. Please **do not casually / insincerely mention 'Yes'** for all the specifications without studying the documents / our specifications in detail.
3. Without this compliance sheet quotation **WILL NOT be evaluated**.

IPR Specifications			Vendor's Specification	Comply (Y/N)
1	Stub Tuner Assembly	As per attached drawing		
2	Stepper Motor with encoder	Dynamic Torque: ≥ 7.5 N-m		
3	Ball screw	40 mm x10 mm pitch		
4	Quantity	04 Nos.		




COAXIAL MOTORISED STUB TUNER ASSY

Section view A-A



Isometric view
Scale: 1:30

SR. NO	PART NO	REF. DRG. NO.	DESCRIPTION	MATERIAL	QTY.	REMARK
10	---	M24 NUT		SS 304	08	
09	---	MOTOR SUPPORT		SS 304	01	
08	----	'O'RING(252.8x7.5)		VITON	04	
07	SHEET-6	SHORTING PISTON ASSY		---	01	
06	SHEET-5	INNER CONDUCTOR		---	04	
05	SHEET-5	SPIRAL COOLING TUBE		---	01	
04	SHEET-5	DRIVING MECHANISAM SYSTEM		---	01	
03	SHEET-4	MOTOR BOX ENCLOSURE ASSY		---	01	
02	SHEET-3	DRIVING SYSTEM ENCLOSURE ASSY		---	01	
01	SHEET-2	OUTER CONDUCTOR ASSY		---	01	

DRG. NO	CO-ORDINATED BY	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN	ASS'Y GROUP:	Institute for Plasma Research	
						REV ZONE	ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED	 Institute for Plasma Research ભાવનગર યુનિવર્સિટી સંસ્થા Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)	
						DESCRIPTION	SCALE 1:1	DATE	TITLE
						REMARKS	DRAWN	PINAKIN 05/08/19	COAXIAL MOTORISED STUB TUNER ASSY
						DATE	CHECKED		REF DRG NO:
						REV ZONE	APPROVED		DRG. NO
						REVISION COLUMN			IPR/19/A3/CMST_ASSY/8637
						REVISION COLUMN			REV 0
						REVISION COLUMN			SHEET 1 OF 6

This drawing is our property; it can't be reproduced or communicated without our written agreement.