

**Institute for Plasma Research**  
**(An Autonomous Institute of Dept. of Atomic Energy)**  
**Bhat, Gandhinagar**

Eligibility Criteria (Part-1 (A) )

ITEM DESCRIPTION	Fabrication, assembly, testing and supply of Corrugated bend and Converter		
SI. No.	PARTICULARS	REMARKS	
I	Name of the Vendor		
II	IPR Enquiry NO & Date	IPR/TN/PUR/ET/8/15-16 Dated 18/03/2016	
III	Vendor Offer No & Date		
Si. No.	Criteria	Documents required to upload	Status of Documents (Uploaded/ Not-Uploaded in e-Tender Portal)
1	Vendors registered in India for last five years with full company profile and a fabricator or manufacturer	Company profile and other supporting documents like copy of Registration Certificate	
2	The vendor must have past experience in precise profile machining and fabrication of component for specialised applications	Copy of relevant Purchase Order received and executed along with its technical details	
3	Past performance of precise component fabrication job executed having single valued order of more than 30Lacs	Copy of relevant Purchase Order received and executed along with its technical details. Completion/Installation certificate to be provided	
4	Vendor must have facilities or access to test facilities for profile measurement, dimensional, pneumatic and hydro test of component	Relevant documents to be uploaded	
5	Vendor must have manufacturing facilities or access to manufacturing facility to carry out highly precise profile machining of the components	Relevant documents to be uploaded	
6	Average Annual turnover of the vendor for the last three years should be at least Rs.1.2 Crore and above	The copies of Audited Annual Accounts/Balance Sheet along with Profit and Loss Account or CA Certified Statement for last three financial years	

**Note:**

- 1) No Consortium will be allowed. The bidder must meet all the eligibility criteria by itself.
- 2) The response to tender without submission of proof of above points will summarily be rejected without further communication.

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**TECHNICAL SPECIFICATIONS (Part-1 (B) )**

ITEM DESCRIPTION	<b>Fabrication, assembly, testing and supply of Corrugated bend and Converter</b>			
<b>Name of Vendor</b>				
<b>IPR Enquiry No and Date</b>			IPR/TN/PUR/ET/8/15-16 Dated 18/03/2016	
<b>Vendors Offer No and date</b>				
Sr.No	Particulars	IPR Requirement	Vendor's specification	Remarks
<b>1 Component Requirement</b>				
1.1	Assembly of Corrugated Bend	01No.		
1.2	Assembly of Converter	04Nos.		
1.3	Prototype for Corrugated bend	01No.		
<b>2 Spares</b>				
<b>2.1 For Corrugated Bend</b>				
2.1.a	Gaskets	02 set		
2.1.b	Set of Hardwares including nut bolts, Heli coil inserts, washers and dowel pins	01 set		
<b>2.2 For Converter</b>				
2.2.a	Gaskets	02 set		
2.2.b	Set of Hardwares including nut bolts, Heli coil inserts, washers and dowel pins	01 set		
<b>3 Material</b>				
3.1	Bend and Converter	Aluminium as per ASME 6061-T6 Grade or Equivalent		
3.2	Fastners or Hardware	Non Magnetic SS 304L		
3.3	Gasket Material	Viton + BeCu		
3.4	Cooling tubes for Converter	Copper		
<b>4 Dimensional Tolerances</b>				
4.1	Inner Profile Accuracy	±50 Micron		
4.2	Inside Surface Finish	3Delta or Better		
4.3	Component Matching Surface Finish	≤ 0.06Micron		
<b>5 Drawings</b>				
5.1	Main Component Assembly	STC/IPR/CEA/DEV_OWGC_LH_1.A3. Sheet 01 of 07		
5.2	Corrugated Bend Assembly	STC/IPR/CEA/DEV_OWGC_LH_1.A3. Sheet 02 of 07		
5.3	Component Details	STC/IPR/CEA/DEV_OWGC_LH_1.A3. Sheet 03 of 07		
5.4	Component Details	STC/IPR/CEA/DEV_OWGC_LH_1.A3. Sheet 04 of 07		
5.5	Converter Assembly	STC/IPR/CEA/DEV_OWGC_LH_1.A3. Sheet 05 of 07		
5.6	Component Details	STC/IPR/CEA/DEV_OWGC_LH_1.A3. Sheet 06 of 07		
5.7	Component Details	STC/IPR/CEA/DEV_OWGC_LH_1.A3. Sheet 07 of 07		
<b>6 Acceptance Criteria</b>				
<b>6.1 Acceptance Test at Vendor Site</b>				
6.1.1	Raw material test	Raw material testing and its approval from IPR before start fabrication		
6.1.1.a	Raw material test	Visual inspection by IPR representative		
6.1.1.b	Raw material test	Ultrasonic test		
6.1.1.c	Raw material test	Mechanical Test- tensile, bending and hardness testing from Govt. Approved LAB.		
6.1.1.d	Raw material test	Chemical testing from Govt. Approved LAB.		
6.1.2	Prototype for Corrugated bend	Corrugated Bend Prototype Fabrication, Assembly, testing and its approval from IPR.		

6.1.2.a	Prototype for Corrugated bend Test-1	Visual test		
6.1.2.b	Prototype for Corrugated bend Test-2	Dimensional test		
6.1.2.c	Prototype for Corrugated bend Test-3	Inner Profile measurement test		
6.1.2.d	Prototype for Corrugated bend Test-4	Pressurisation test		
<b>6.1.3 Test Before Assembly</b>				
6.1.3.a	Test-1	I. Component Inner profile testing: Before assembling of the component, inner profile of each section of the component will be checked using CMM or VMM and the actual profile should be within the acceptable limit.		
6.1.3.b	Test-2	II. Dimensional Test		
6.1.3.c	Test-3	III. Surface finish: Inner profile surface finish and matching surface finish		
6.1.3.d	Test-4	IV. Visual Test		
<b>6.1.4 Test after assembly</b>				
6.1.4.a	Test-1	I. Visual Test		
6.1.4.b	Test-2	II. Dimensional Test		
6.1.4.c	Test-3	III. Pneumatic Test : All component assembly have to be tested at a test pressure of 4Bar gauge using dry air or Nitrogen gas and partially filled with helium gas. Leak will be checked through HLD sniffing technique and measuring pressure drop over a period of 24hours. The allowable leak rate in sniffing mode is 1x10-5mbar litre per second. The pressure drop should not exceed the limit of 0.1bar over a period of 24hour. There should not be any visible leak while testing.		
6.1.4.d	Test-4	IV. Hydro-test of cooling lines (For Converter Cooling Channel only):Cooling lines of convertor parts will be tested for hydro test at 13Bar Gauge pressure. All joints must be water tight; there should not be any visible leak during the test period of around 2hours. After hydro test cooling lines must be dried off and plugged		
6.2	Acceptance Test at IPR	Final Acceptance Test will be carried out at IPR as per Sr. No. 6.1.4 section for Test after assembly		
6.3	Gasket Material	Vendor should provide test certificates for Genuine Viton and chemical composition for BeCu material		
6.4	Fastners or Hardware	Vendor should provide test certificate for chemical composition		
7	Surface Treatment	Components outer surface to be black anodized		
<b>8 Scope of Works</b>				
8.1		(1) Material Procurement		
8.2		(2) Raw Material inspection		
8.3		(3) Materials Approval from IPR.		
8.4		(4) Generation of Fabrication drawing and its approval from IPR.		
8.5		(5) Components and prototype Fabrication		

8.6		(6) Component and prototype Assembly and testing		
8.7		(7) Inspection at vendor site as mentioned in Sr. No. 6.1 Acceptance test at vendor site		
9	Fabrication Procedure	As mentioned in annexure-1 section 2		
10	<b>General Terms and Condition</b>			
10.1		(a). Vendor has to submit the raw material test certificates at IPR before starting fabrication works for its approval		
10.2		(b). All the materials to be used should be of good quality and free from any defects.		
10.3		(c) Vendor is solely responsible for Material test and component fabrication		
10.4		(d). Vendor has to give the inspection call for stage wise inspection of the job by IPR representatives as outlined in time schedule		
10.5		(e). The vendor has to arrange for the entire required test		
10.6		(f). A prototype for bend has to be first checked at vendor site and further sent to IPR for its dimensional, profile measurement and visual check for approval for component fabrication.		
10.7		(g). Components assembly with all accessories have to be delivered to IPR only after receiving the pre-dispatch clearance from IPR		
10.8		(h) IPR representative will give final acceptance only after successful completion of all measurements and inspection at IPR site		
10.9		(i) Final Component assembly has to be suitably tag marked as per the information provided by IPR		
11	Packing and Supply at IPR	As per the procedure mentioned in annexure-1		
12	<b>Essential Requirements and Other Criteria</b>			
	Criteria 1	The Pre Dispatch Inspection to witness test mentioned in section (6.1) will be carried out at Vendor site before delivery at IPR.		
	Criteria 2	Reports for all tests mentioned in Sr.No. (6.1) should be sent to IPR for approval and dispatch clearance.		
13	Rejection	The material or component which will not conform to the above requirement will be rejected.		

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**TERMS & CONDITIONS (Part-1 (C))**

ITEM DESCRIPTION	Fabrication, assembly, testing and supply of Corrugated bend and Converter	
Sl. No.	PARTICULARS	REMARKS
I	<b>Name of the Supplier</b>	
II	<b>IPR Enquiry NO &amp; Date</b>	IPR/TN/PUR/ET/8/15-16 Dated 18/03/2016
III	<b>Vendor Offer No &amp; Date</b>	
IV	Postal address	
V	Contact with STD code	
VI	Fax with STD code	
VII	Name of Contact person	
VIII	Mobile No.	
IX	e-mail ID	
X	<b>Currency of offer/quotation</b>	
	<b>SCANNED COPY OF THE BELOW MENTIONED DOCUMENTS NEED TO UPLOAD AT <a href="http://www.tenderwizard.com/DAE">www.tenderwizard.com/DAE</a> AT THE TIME OF PARTICIPATION OF TENDER WITHIN THE PERIOD OF SUBMISSION.</b>	<b>"YES" OR "NO"</b>
1	<b>Certificates:</b> i) Registration Certificate if Any, with DGS&D/NSIC/MSME ii) PAN (Permanent Account Number) Registration iii) Certificates of Registration for Sales Tax/ VAT/ WCT or Service Tax iv) Authorization certificate/ Agency Agreement from Manufacturer (if not manufacturer)	
	<b>Commercial Terms for Quoted items (Please Provide Commercial terms and conditions in the below form)</b>	
2	Price Shall be firm and fixed through out the currency of contract, in the event of placement of purchase order.	
3	Please select the CURRENCY OF OFFER / QUOTATION first	
4	Packing & Forwarding	
5	Excise duty applicable (IPR is exempted payment of Excise Duty for items mentioned in the notification (wherever applicable) as per notification no. 10/97)	
6	Custom duty applicable (IPR is exempted payment of Custom Duty for items mentioned in the notification (wherever applicable) as per notification no. 51/96-Custom dated 23-7-1996 and can place order directly on foreign manufacturers)	
7	Sales Tax/ VAT/ CST	
8	Whether any transportation is involved, if so charges mentioned for the same?	
9	Insurance	
10	Service Tax	
11	Agency Commission (for Authorised agents of Foreign Supplier)?	
12	<b>Delivery, Installation and commissioning/ Completion period</b>	
13	Installation and commissioning charges (if applicable)	
14	Discount	
15	<b>Liquidated Damages:-</b> as per Sr. No. 9.2.1 of terms and conditions of Form No IPR-LP1 attached with the tender/enquiry	
16	<b>Terms of Payment:-</b> as per Sr. No.16 of Form No IPR-LP1 ( Terms and Conditions) attached with the tender/enquiry	
17	<b>Guaranty / Warranty:-</b> 1 year warranty with on site support will be effective from the date on which IPR accepts the system.	
18	<b>Validity of offer/quotation:-</b> 120 days from the date of opening of tender <b>QUESTIONNAIRE TO BE FILLED BY BIDDER IN AND SENT ALONG WITH OFFER DULY SIGNED</b>	
19	In the event of a purchase order, and if you are not registered with <b>DGS&amp;D, NSIC, MSME</b> , Security Deposit in the form of Bank Guarantee for 10% of contract/ order value from SBI/nationalized banks or any one of the scheduled banks mentioned in the bracket (Axis Bank, HDFC Bank, ICICI Bank and IDBI Bank) valid till final acceptance of the supplied goods at IPR, wherever applicable shall be submitted .	
20	In the event of a purchase order Performance Bank Gurantee for 10% of the contract/order value from SBI/nationalized banks or any one of the scheduled banks mentioned in the bracket (Axis Bank, HDFC Bank, ICICI Bank and IDBI Bank) valid throughout the guarantee period, wherever applicable shall be submitted.	

21	I/We hereby offer to supply the stores detailed in the schedule hereto at the price given in the said schedule and agree to hold this offer open till expiry of quotation. I/We shall be bound to supply the stores hereby offered upon issue of purchase order communicating the acceptance thereof on or before the expiry of the last mentioned date. You will be at liberty to accept any one or more of the items of stores tendered for or portion of any or more of the items of such stores and I/We notwithstanding that the offer in the tender has not been accepted in whole shall be bound to supply to you- such item or items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance.	
22	I/we have understood the General Conditions of all Contracts and special conditions of contract governing supplies of plant and machinery in the Form No. IPR-LP1, included in the General Conditions of all Contracts and special conditions of contract governing of plant and machinery applicable to contracts placed by the Institute for Plasma Research and the instructions to Tenderer annexed to the invitation to tender Form and have thoroughly examined the specification / drawing and / or pattern quoted or referred to in the Schedule hereto and am/are fully aware of the nature of the stores required any my/our offer is to supply stores strictly in accordance with subject tender to the terms and conditions stipulated in your above Form No. IPR-LP1 and also contained in the Purchase Order Communicating acceptance of this Tender.	
23	Whether All Documents Related to tender Viewed?	
24	In case of two part tender whether unpriced quotation has been uploaded (Failing which offer will not be considered for technical evaluation)	

PRICE SCHEDULE (Part - 2)

IPR Enquiry NO & Date : IPR/TN/PUR/ET/8/15-16 Dated 18/03/2016

From

NAME OF THE CONTRACTOR :  
 Offer no & date:

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Sl.No	Item Description	Tendered Quantity	Unit of Measure appropriate part no rement and accessories that (UOM ) are not listed for the configuration of the system	Type of Currency	Rate			Packing and Forwarding Charges (if applicable) Per Unit		Customs Duty/ Excise Duty Per Unit**		VAT / CST		Per Unit	Total Unit Cost	Freight Charges (if applicable) Per Unit				Installation / Commissioning Charges (if applicable)			Insurance (if applicable)		Total Unit Cost	Total Landed Value (Total Unit Cost x Quantity)	Remarks
					Basic Rate	Discount (in amount)	Amount	(in %) Only	Amount	(in %) Only	Amount	(in %) Only	Amount			(in %) Only	Amount	Service Tax on Freight charges (in %) only	Amount	Charges	Service Tax on Freight charges (in % )	Amount	Charges	Amount			
1	Fabrication,assembly, testing and supply of Corrugated bend as per ANNEXURE-1 and Drawings.....	1	Nos				0.00		0.00		0.00		0.00	0.00	0.00	0.00		0.00		0.00		0.00		0.00	0.00	0.00	
2	Fabrication,assembly, testing and supply of Converter as per ANNEXURE-1 and Drawings.....	4	Nos				0.00		0.00		0.00		0.00	0.00	0.00	0.00		0.00		0.00		0.00		0.00	0.00	0.00	
a	Optional Item/ Accessories						0.00		0.00		0.00		0.00	0.00	0.00	0.00		0.00		0.00		0.00		0.00	0.00	0.00	
b	Optional Item/ Accessories						0.00		0.00		0.00		0.00	0.00	0.00	0.00		0.00		0.00		0.00		0.00	0.00	0.00	
c	Optional Item/ Accessories						0.00		0.00		0.00		0.00	0.00	0.00	0.00		0.00		0.00		0.00		0.00	0.00	0.00	
d	Optional Item/ Accessories						0.00		0.00		0.00		0.00	0.00	0.00	0.00		0.00		0.00		0.00		0.00	0.00	0.00	
3	<b>GRAND TOTAL</b>			0			0.00		0.00		0.00		0.00	0.00	0.00	0.00		0.00		0.00		0.00		0.00	0.00	0.00	

Place of Delivery: IPR Gandhinagar

NOTES:

- 1) If freight is not shown separately it will be treated as "FREE DELIVERY"
- 2) Details specifications and scope of work are as per Attached Annexure
- 3) If the rate cells left blank, it will be treated as "0" (ZERO)
- 4) Vendor has to select "Type of currency", its mandatory
- 5) \*\*As per notification No. 10/97 - Central Excise, Dated 01/03/1997, IPR is entitled to avail Excise exemption wherever applicable, so please do not include Excise Duty in your offer.
- 6) \*\*IPR is exempted payment of Custom Duty as per notification no. 51/96-Custom dated 23-7-1996
- 7) Kindly enable the Macros if you receive the "Security Warning" message. (Click on options in "Security Warning" and select "Enable this content"