

# INSTITUTE FOR PLASMA RESEARCH

An Aided institute of department of Atomic Energy, Govt. of India)  
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## MINOR FABRICATION WORKS ENQUIRY

Office Copy

ENQUIRY NO :IPR/MFW/21-22/107

Date : 18-08-2021

**Due Date : 29-09-2021 13:00 IST**

Please send your offer in sealed envelope specifying Inquiry 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 **rajendra@ipr.res.in**

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

Kindly go through the following document properly before Quoting which are available on the IPR web portal i.e., <http://www.ipr.res.in/documents/tenders.html/> attached here with.

1. Technical specification as enclosed.
2. Instruction to the bidders & terms and Condition (refer Form NO:IPR-MFW-01-V1)
3. Bidding format(refer Biddingformat MFW-Bid.pdf)

GST fro Goods and Services (IGST/CGST/SGST TAX BENEFITS): PLEASE REFER clause no:8 of Form No:IPR-MFW-01-V1

QUOTATION SHOULD BE ADDRESSED TO **E. RAJENDRA KUMAR** ONLY.

Sr.No.	Description	Quantity	Rate
1	Fabrication and Supply of Central Solenoid Coil	2	No.

### Free Issue Material

Sr.No.	Description	Quantity	Unit	Value
1	NIL	0.00		0.00

Note : Please quote with complete technical details (Technical Compliance sheet and product data sheet)

*E. Rajendra*

## **TECHNICAL SPECIFICATIONS FOR FABRICATION AND SUPPLY OF “CENTRAL SOLENOID COIL”**

### **1. DESCRIPTION:**

Two unit of Central Solenoid (CS) coil with its former is to be fabricated and supplied by the vendor to IPR, Gandhinagar. The coils have two layers and are separated by an interlayer insulation. The coil shall be wound with single continuous length (without any joint) of enamelled Electrolytic Tough Pitch (ETP) copper with square cross section. The enamelled copper conductor is wrapped with insulation tape (with 50% overlap) prior to winding of the coil. Interlayer insulation of 1 mm thick is placed over first layer of winding. After winding is completed, outer insulation is wrapped covering all the turns of coil (with 50% overlap in every layer) and the coil has to be vacuum impregnated further. The outer insulation wrapping and vacuum impregnation is meant for ground insulation and to provide mechanical stability to the coil during handling.

This specification document describes the details of coil, procedure for winding & vacuum pressure impregnation of coil, its acceptance criteria, deliverables etc.

### **2. ELIGIBLE VENDORS:**

The vendor should have the expertise in fabrication of similar type of electro-magnet coils. The vendor should have sufficient in-house coil fabrication, insulation wrapping, and inspection facilities sufficient to carry out this entire work.

### **3. SCOPE OF WORK:**

3.1 The vendor has to submit an offer for fabrication and supply of coils (2 nos.) to IPR, Gandhinagar in accordance with the specifications and drawings as mentioned below.

3.2 Engineering drawings of the coil are provided by IPR as attached with this document. Based on the technical specifications and engineering drawings provided, the vendor has to prepare and submit a working document (a hard copy and/or a soft copy in electronic media) to obtain approval from IPR. The working document should contain fabrication drawings, plan of material procurement, details of fabrication plan, VPI procedure and fabrication schedule. The fabrication work shall start only after the working document prepared by the vendor is approved by IPR.

**3.3 CS coil details:** Qty: 2Nos. as per drawing No.: IPR/ATD/MDS/OT/R1.0

3.4 Vendor shall procure all the raw material required for completing the job specified in this tender. Raw materials such as enamelled ETP copper, fiber reinforced plastic (FRP), Polyester film insulation tape, consumable materials (cleaning tapes/agents, terminal lugs etc.) and accessories required during execution of this entire work shall be in the scope of vendor. Vendor shall ensure the quality of the materials procured as per the material specifications provided by IPR. Vendor shall submit the material test

certificates for ETP copper and Polyester insulation tape obtained from government authorized labs to IPR for approval.

- 3.5 The manufacturer shall be required to accept minor modifications/deviations in the above mentioned coil drawings at the time of actual fabrication without any additional cost. The vendor shall not do any modifications in the drawings and fabrication plans without prior approval of IPR.
- 3.6 The vendor has to fabricate a FRP former over which conductor has to be wind. During fabrication, few small metallic nuts have to be placed at some specified locations as shown in sheet-02 of the engineering drawings.
- 3.7 The total no. of turns in two layers is 313, which may vary by few turns (4 to 5 turns) only considering the tolerance in conductor diameter and enamel coating thickness.
- 3.8 Winding Sequence: In addition to the generic points regarding the winding of coils mentioned herein, following winding sequence has to be followed, keeping in view the strict dimensional requirements of the coils to be fabricated,
  - The FRP formers will be fabricated first and subjected to dimensional checks.
  - The winding has to be carried out over the FRP former only after the fabricated FRP former is dimensionally checked and accepted by IPR.
  - The enamelled copper conductor is wrapped with insulation tape (with 50% overlap) prior to winding of the coil.
  - The conductor with insulation wrapped shall be visually inspected to make sure that the insulation wrapping is uniform.
  - The first layer of winding is carried out with suitable pre-tension in order to avoid waviness, bulging & large gaps in the adjacent turns.
  - After the first layer winding is completed the dimensional checks shall be carried out in order to make sure that the dimensions are within the tolerances specified in the respective drawings.
  - Interlayer insulation of 1 mm thick is placed over first layer of winding. The dimensional checks are carried out to ensure 1 mm thickness of interlayer insulation before winding the second layer.
  - After the second layer of winding is carried out, dimensional checks shall be carried out in order to make sure that the dimensions are within the tolerances specified in the respective drawings.

- The outer insulation shall be wrapped after satisfactory completion of winding of the two layers. The outer insulation wrapping must adhere to the dimensional tolerances specified in the drawings.
- VPI of the coils shall be carried out as per the procedure mentioned in section 3.19.
- After VPI the final dimensional checks of the coils shall be carried out.

- 3.9 The vendor shall carry out the coil winding work in a clean environment to eliminate dust, oils etc., over the coil surfaces. Hammering on the coil layers shall be avoided. During winding, heating of the conductor shall be completely avoided.
- 3.10 The coil shall be wound with continuous length of enamelled ETP copper without any joints. Further, the vendor must ensure that the direction of winding throughout the coil must be same.
- 3.11 Winding of the conductor around the coil winding fixture shall be with suitable pre-tension in order to avoid waviness, bulging & large gaps in the adjacent turns/layers and complete the specified number of coil turns and layers as per the respective drawings.
- 3.12 At every turn change-over junction/bend, the bulging of the conductor shall be avoided and provide additional insulation to sufficient length to avoid any spring back.
- 3.13 Parallel clamps with soft pads shall be used to clamp progressively for every layer while winding of coil turns. Further, similar clamps at 3-4 places shall be used to hold all the turns together after winding and outer insulation completion.
- 3.14 The coil end terminal conductor should be bent properly with suitable radius.
- 3.15 Any item/service, which may not have been specifically mentioned herein but are needed for completion of the fabrication work, shall also be treated as included and the same shall also form part of supply, unless otherwise specifically excluded.
- 3.16 The vendor shall perform the acceptance tests as mentioned below section 5.1, for the fabricated coil along with the IPR representatives. Dispatch clearance will be provided by the IPR purchase officer only after successful testing and acceptance of IPR.
- 3.17 The vendor shall deliver the coil only after the receipt of dispatch clearance from IPR.

3.18 The vendor has to arrange to deliver the coil to IPR with suitable packaging to ensure no damage occurs to the coil during transport.

3.19 IPR will perform the site acceptance tests as mentioned below section 5.2. The coil will be accepted only after the successful site acceptance tests at IPR.

3.20 The details of applicable drawings, materials specification, inspection, acceptance tests are given below.

3.21 **Vacuum Pressure Impregnation (VPI) of Coil:** The vendor shall develop the procedure for the Vacuum Pressure Impregnation (VPI) of the insulated coil assemblies considering the insulation used for the coil. Following requirements are to be considered for the VPI process:

- a) The vendor shall provide details of the resin solvent used for the VPI process to IPR before start of the fabrication. Appropriate resin solvent shall be selected by the vendor considering the insulation used and its needed properties.
- b) The VPI procedure should be carried out ensuring that there is no short circuiting between the conducting components of the coil that are already insulated.
- c) Necessary cut-outs/removable inserts shall be used in those locations wherever it is required, so that the resin does not flow to the unwanted area.
- d) During the VPI process, the temperature of the coil should not be raised above 90°C.
- e) Extreme care should be taken to ensure that the final dimensions of the coil assembly after VPI shall be as per the drawings.

#### 4. MATERIAL SPECIFICATION:

- a. **Enamelled ETP copper conductor:** Continuous enamelled ETP Copper conductor having square cross-section as specified in the drawings shall be procured by the vendor as per the below mentioned properties. The vendor should purchase excess length of conductor sufficiently more than the requirement of the coil.

Sr. No.	Parameter	Specifications
1	Material	Enamelled Electrolytic Tough Pitch High conductivity Copper (ETP)
2	Surface Finish	Bright, clean and smooth surface with free from any kind of surface defects. Free from sharp edge, blisters, cracks and die marks with buffed and mechanical polished.
3	Chemical Composition	Minimum 99.90 Cu% purity
4	Electrical Conductivity	Minimum 97% IACS at 20°C
6	Thermal Conductivity	394 (+/-5%) W/m°C
7	Density at 20 °C	8.89 (+/-5%) g/cm <sup>3</sup>
8	Tensile Strength	240 – 300 N/ mm <sup>2</sup>

\* Sample testing: Vendor has to provide the test certificates for copper composition and its electrical conductivity (from Government authorised labs) about the sample materials taken from the insulation bundles.

**b. Electrical insulation:**

For all the individual copper conductors, inter layer and turn-turn insulation should be Polyester film insulation tape (F class or above). The specified coil insulation thickness should be obtained by uniformly wrapping the insulation tape. At the ends of copper conductor to keep the Polyester film insulation tape integrity with the conductor a Kapton Polyimide Film tape should be wrapped (3 turns) upon the Polyester film insulation tape.

Sr. No.	Insulation material	Thickness in mm	Usage	Breakdown voltage (±10%)
1.	Polyester film insulation tape (F class or above)	0.25	All individual copper conductors, inter layer and turn-turn insulation, ground wrap insulation	≥ 25kV/mm
2.	Kapton Polyimide Film tape	0.07	At the ends of copper conductor to keep integrity of Polyester film insulation tape	≥ 25kV/mm

Sample testing: Vendor has to provide the test certificates for breakdown strength (from Government authorised labs) about the sample materials taken from the insulation bundles

**5. INSPECTION & TESTING**

**5.1 Factory Acceptance Test (FAT):**

The vendor should perform all the inspection and testing as mentioned below. All inspection and testing shall be carried out in presence of IPR representatives. Vendor should arrange all required testing equipment (eg. Digital Vernier Gauge or height gauge, Multi-meter, Megger etc.) to perform the tests at their site.

**a. Dimensional Inspection:**

The fabricated coil shall be subjected to dimensional checks. All dimensions should be within the tolerances as specified in the drawings. If the dimensions are not within the specified limits then the coil will not be acceptable.

Following procedure shall be adopted during dimensional checks mentioned in section 6;

- i. Inner and outer diameter of the former and winding will be checked by using long jaw digital Vernier caliper or height gauge.
- ii. Outer diameter of the coil before and after VPI will be checked by using long jaw digital Vernier caliper or height gauge.

**b. Straightness check:**

- i. Straightness of the former bore will be checked by using a plug gauge (Go gauge). For this, a plain cylindrical plug gauge has to be fabricated by the vendor as per engineering drawings provided by IPR. Length of the gauge shall be minimum of 180 mm and its diametric tolerance shall be within 20% of diametric tolerance of bore size i.e. ~0.1 mm.
- ii. Straightness of the coil will be checked by using a ring gauge (Go gauge). For this, a plain cylindrical ring gauge has to be fabricated by the vendor as per engineering drawings provided by IPR. Length of the gauge shall be minimum of 240 mm and its diametric tolerance shall be within 20% of outer diametric tolerance of the coil i.e. ~0.1 mm.

**c. Megger test:**

Short DC megger test will be performed to measure the Insulation resistance (IR) at different voltages (500V to 1kV). The IR should be  $> 20 \text{ M}\Omega$ . IR test will be done between coil and grounded aluminium foil.

**d. Hipot test:**

Hipot test will be carried out after VPI of the coil. The outer insulated part of the coil is wrapped with aluminium foil and is connected to the ground. High voltage is applied between any one of the terminal of coil and grounded aluminium foil. The voltage is raised from 0 to 10.0 kV DC. The maximum drainage current is to be set at  $\leq 2.0 \text{ mA/kV}$ . During testing there should not be any breakdown or tripping of the Hipot tester. If breakdown or tripping occurs, then the coil will not be acceptable to IPR.

**5.2 Site acceptance tests:**

Following inspection/tests for received coil will be carried out at IPR.

- a) Visual inspection for structural integrity of the coil and overall dimensional checks. If there is any damage is observed in the coil due to improper packing and transport, then the coil will not be acceptable.
- b) Short DC megger test will be performed to measure the Insulation resistance (IR) at different voltages (500V to 1kV). The IR should be  $> 20 \text{ M}\Omega$ . IR test will be done between coil and grounded aluminium foil.

**6. CHECK POINTS (CP):**

For ensuring timely execution of the job as per technical specifications checkpoint at various stages are proposed as follows.

CP-01: Approval of the engineering drawings and working document by IPR.

CP-02: Approval of material test certificates

CP-03: Approval of Go gauges fabricated for straightness checks

CP-04: Approval of winding and dimensional checks before and after VPI as follows

- Dimensional check of the fabricated FRP former
- Dimensional check after completion of first layer of winding
- Check for no. of turns in the first layer of winding
- Dimensional check after placing interlayer insulation
- Dimensional check after completion of second layer of winding
- Check for no. of turns in the first layer of winding
- Dimensional check after wrapping the outer insulation
- Dimensional check after completion of VPI

CP-05: FAT for the coil as mentioned in section 5.1

The sequence of the check points shall be strictly followed as above. Vendor shall ensure the written approval from IPR at every checkpoints.

#### **7. PACKING & SUPPLY:**

After successful performance of factory acceptance tests by IPR representatives and issuance of dispatch clearance by IPR, the fabricated and inspected components shall be suitably packed by vendor to avoid any damage during transportation.

The shipment shall be delivered to IPR, Gandhinagar at following address; Assistant Store Officer, Institute for Plasma Research, Nr. Indira Bridge, Bhat, Gandhinagar-382428, Gujarat.

#### **8. Delivery period:**

The coils and GO gauges, with proper packing shall be delivered within four months from the date of release of work order.

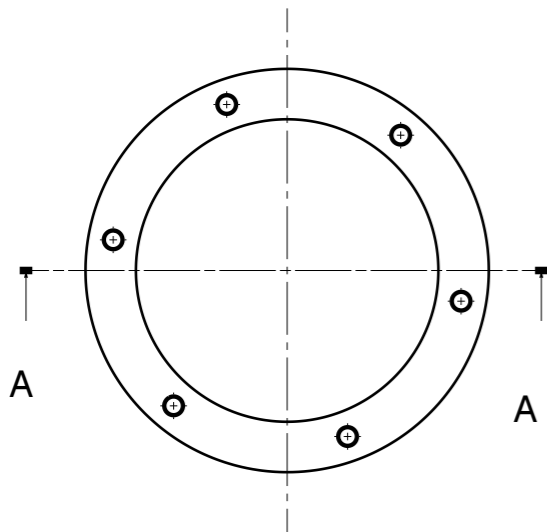


## Technical Compliance Sheet for Central Solenoid Coil

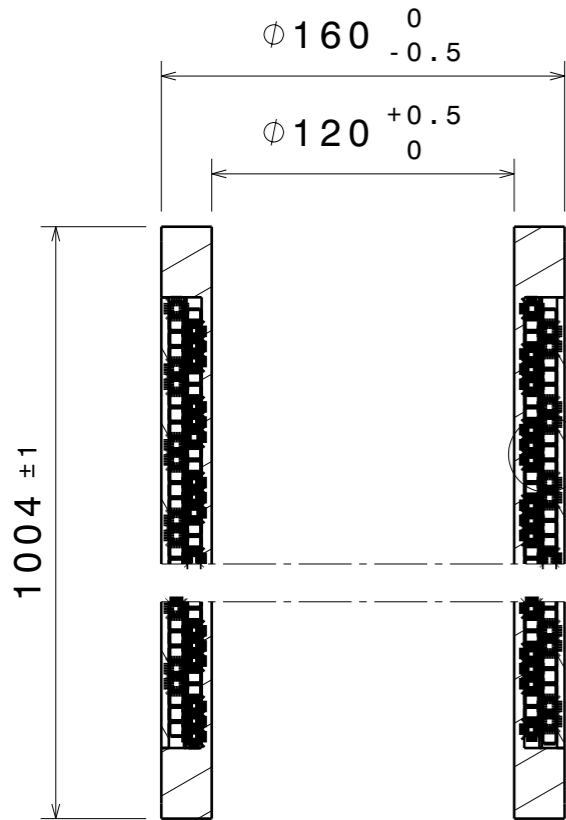
Sr No.	IPR specifications	Vendor specifications
1.	<p><b>Scope of supply:</b> Two nos. of central solenoid coils have to be fabricated and supply to IPR. The vendor has to confirm that enameled ETP copper conductor will be used for the coil and dimensions will be achieved as per the tolerances mentioned in its engineering drawings. Fabricated GO gauges shall also be supply along with the coils.</p>	
2.	<p><b>Joint less winding:</b> Each of the coil must be wound with single, continuous and joint less ETP copper conductor only.</p>	
3.	<p><b>Fabrication and inspection facilities at vendor site:</b> The details of fabrication and inspection facilities presently available with the bidder shall be submitted along with the quotation. Further, vendor shall have all the related test equipments like long jaw digital Vernier caliper or height gauge, Megger, Multi-meter etc. to be used during factory acceptance tests.</p> <p>The vendor shall fabricate “Go gauges” as specified in technical specifications and engineering drawings.</p>	
4.	<p>The vendor shall carry out <b>Vacuum Pressure Impregnation</b> as per procedure mentioned in technical specifications</p>	
5.	<p><b>Material specifications:</b> Enameled Electrolytic Tough Pitch (ETP) copper of size as specified in engineering drawings.</p>	
	<p>Inter-turn, interlayer and outer layer insulation material is polyester film tape.</p>	
	<p>Kapton tape shall be used at end terminals of the coils.</p>	
6.	<p><b>Factory Acceptance Tests (FAT) at vendor’s site</b> (please follow technical specification document for details):</p> <p>i. <b>Dimensional checks</b> as per fabrication drawings of former, Pre &amp; post winding and after vacuum impregnation of coils.</p>	

	<b>ii. Straightness</b> of bore and outer diameter of the coils have to be check by using Go gauges (plug and ring gauges).	
	<b>iii. Megger test:</b> Short DC megger test shall be carried as mentioned in technical specification.	
	<b>iv. Hipot test</b> shall be carried out after vacuum pressure impregnation of the coil	
7.	<b>Delivery period of the coils:</b> The coils must be delivered to IPR within four months from the date of release of the work order.	

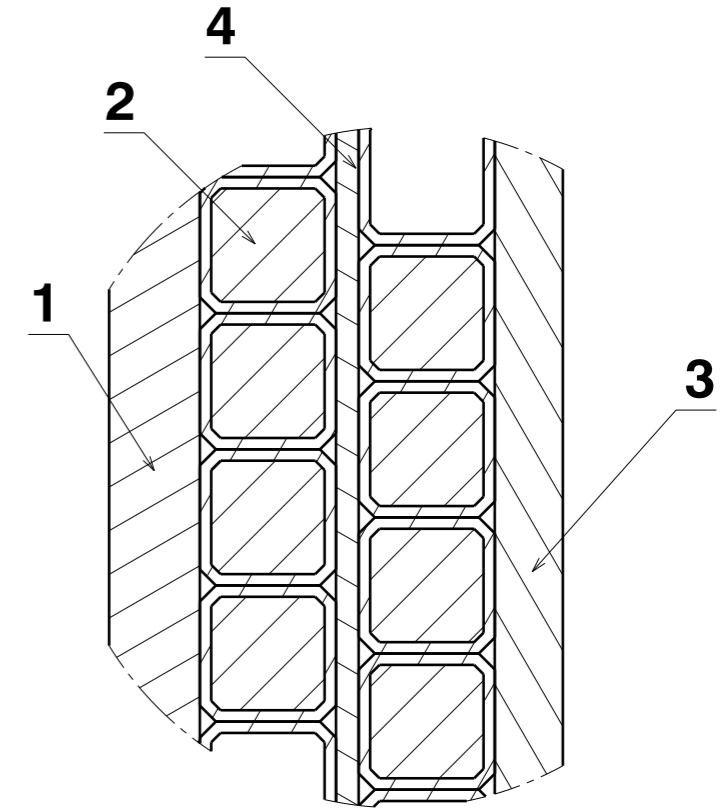
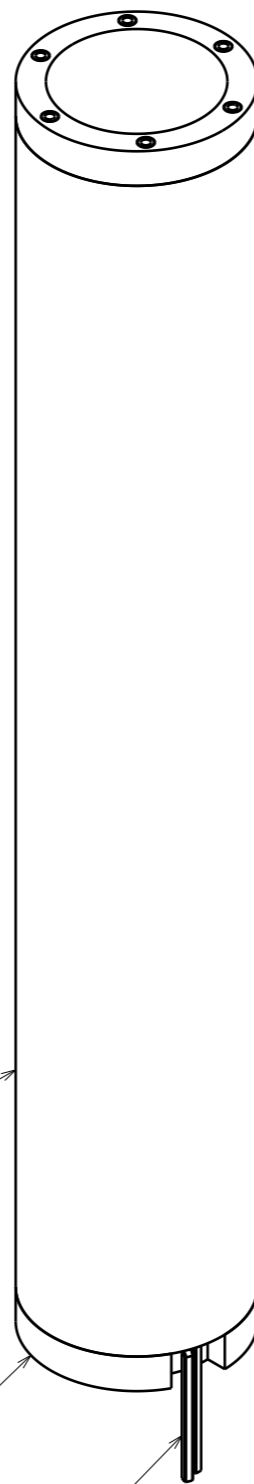
# Central Solenoid Coil



**Top View**



**Section cut A-A**



**Detail - B**

Sr No	Description	Qty (Nos)	Material	Remarks
1	Former	02	Fibre-reinforced Plastic (FRP)	Refer sheet 2 for details
2	Coil	02	Enamelled ETP Copper	Refer Sheet 3 For details
3	Outer Insulation	02	Polyester Film	Thickness 3 mm
4	Inter Layer Insulation	02	Polyester Film	Thickness 1 mm

DRG.NO	▽ 8-25	▽ 1.6-8	▽ 0.025-1.6	▽ < 0.025
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CO-ORDINATED BY				
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MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS				
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LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5
+1'	+0'-30'	+0'-20'	+0'-10'					

REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY
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ASS'Y GROUP / DIVISION:	SIZE A3
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ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED		
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SCALE	NTS	DATE
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DRAWN	Ankur	09-08-21
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CHECKED		
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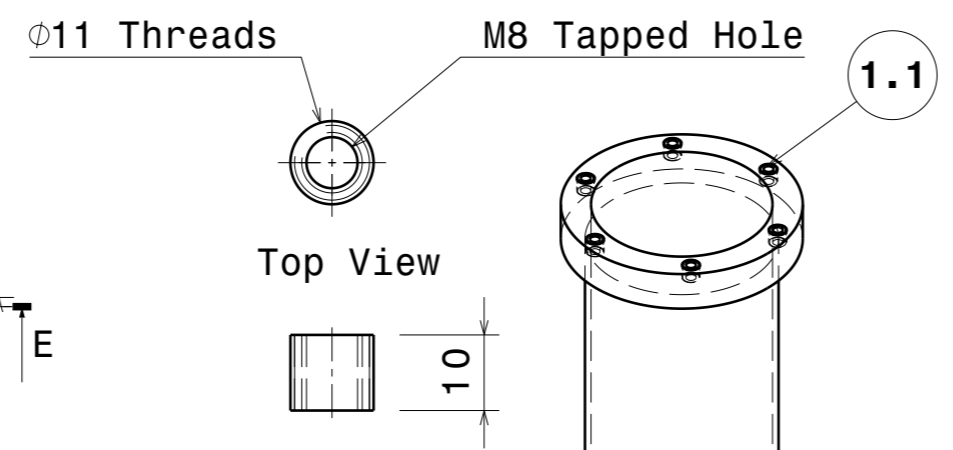
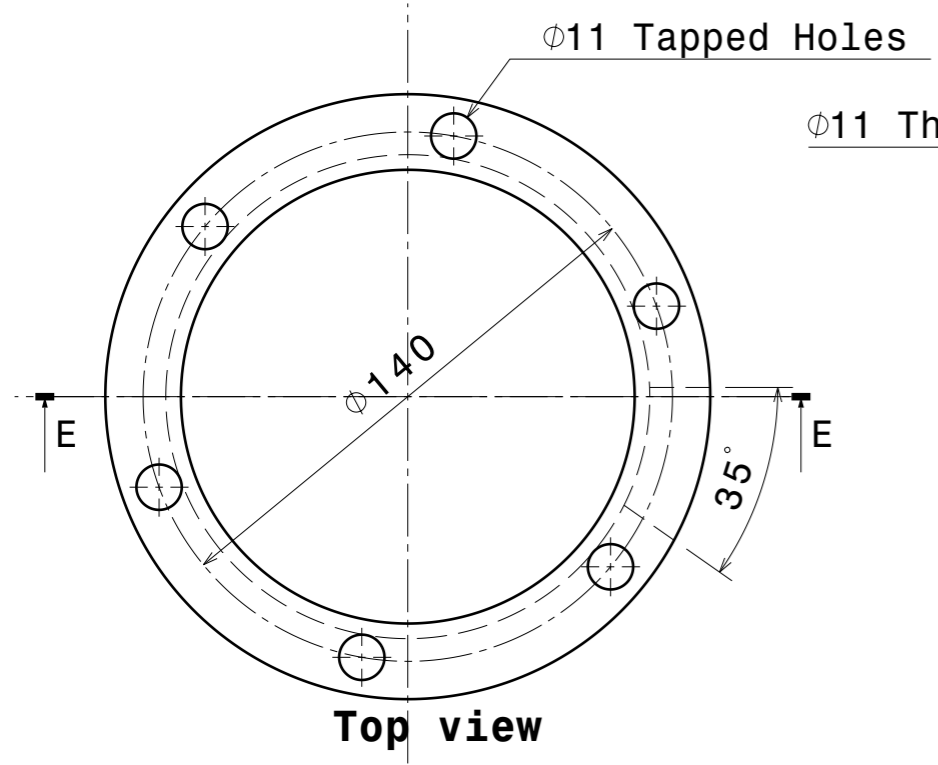
APPROVED		
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**INSTITUTE FOR PLASMA RESEARCH**  
 BHAT, GANDHINAGAR-382 428.  
 INDIA

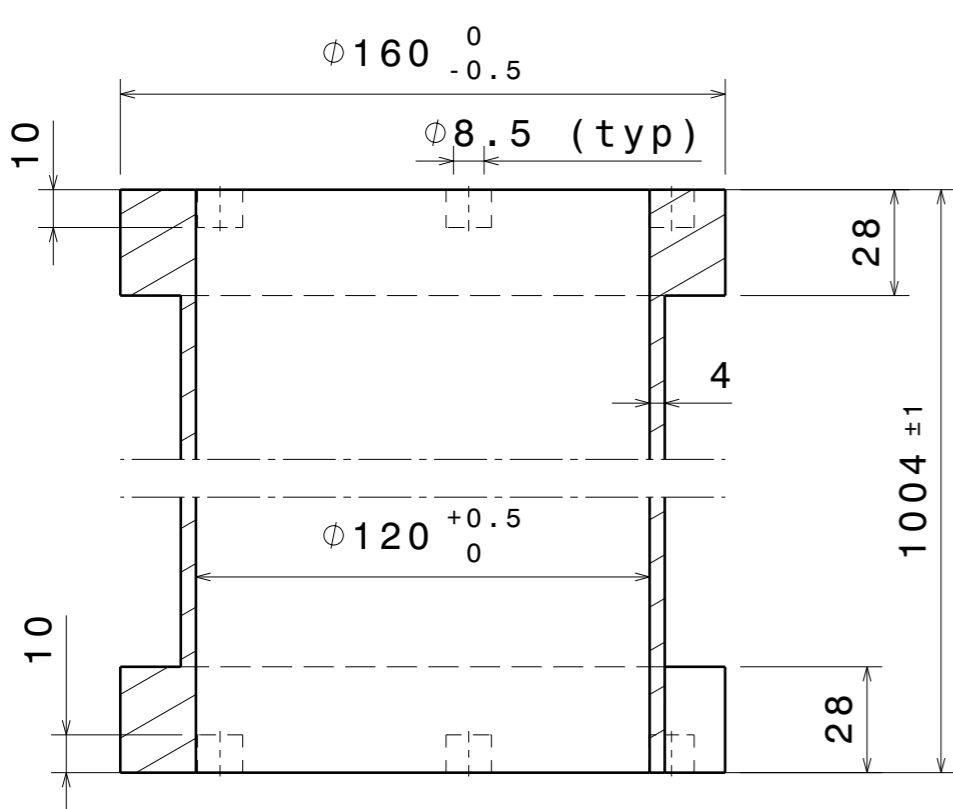
**Central Solenoid Coil**

REF DRG NO:	REV 01
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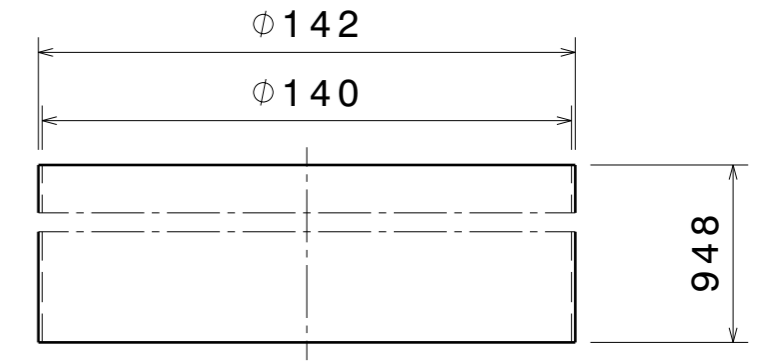
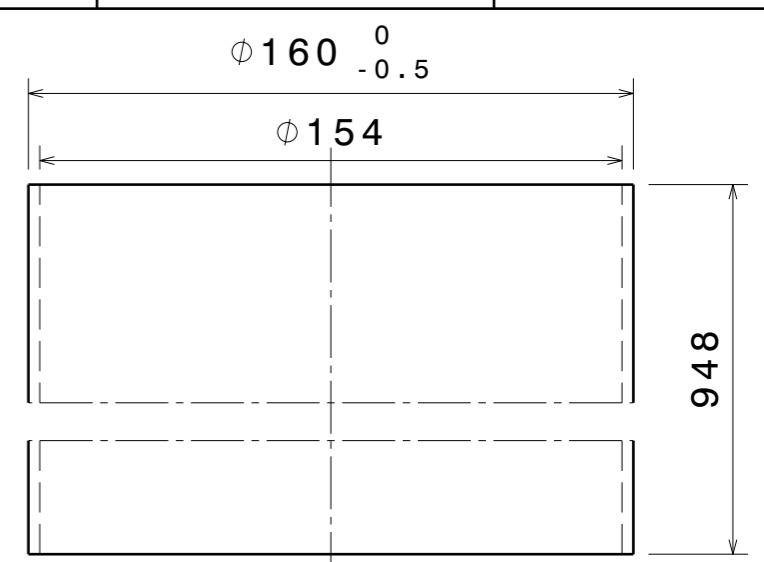
DRG.NO	IPR/ATD/MDS/OT/R1.0	SHEET 01 OF 04
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**Part -1.1  
Helical insert**



**Part -1 Former**



Sr No	Part No	Description	Qty	Material
1	1	Former	02	FRP
2	1.1	Helical insert	24	Stainless Steel
3	3	Outer Insulation	2	Polyester Film
4	4	Interlayer Insulation	2	Polyester Film

DRG.NO	▽ 8-25	▽ 1.6-8	▽ 0.025-1.6	▽ < 0.025
CO-ORDINATED BY				
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS				
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA
UPTO 10	10-50	50-120	OVER 120-400	
+1°	+0°-30'	+0°-20'	+0°-10'	

REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY

ASS'Y GROUP/ DIVISION:	SIZE A3	<b>INSTITUTE FOR PLASMA RESEARCH</b> BHAT, GANDHINAGAR-382 428. INDIA
ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED		
SCALE	NTS	DATE
DRAWN	Ankur	09-08-21
CHECKED		
APPROVED		
REF DRG NO:		REV <b>01</b>
DRG.NO	IPR/ATD/MDS/OT/R1.0	SHEET 02 OF 04



**Central Solenoid Coil**







Form No: IPR-MFW-01.V1

### INSTRUCTIONS TO BIDDERS AND TERMS AND CONDITIONS

1. The Quotation and any order resulting from this enquiry shall be governed by our Conditions of Work Order and Contractor quoting this enquiry shall be deemed to have read and understood the same completely.
  2. Where counter terms and conditions have been offered by the Tenderer, the same shall not be deemed to have been accepted by IPR unless our specific written acceptance thereof is obtained.
  3. **Quotation:** Quotation should be submitted in the prescribed QUOTATION FORMAT attached with this Enquiry and the same should be submitted in a sealed envelope super-scribing the same with our enquiry No., date, due date and brief description of item on or before the due date. Late/delayed/incomplete/unsigned quotations will not be considered. Envelopes received without Enquiry number, date, due date and brief description of item may be rejected. The quoted prices should be firm for a period of 90 days from due date for placing order. IPR is not bound to accept lowest rate/s. IPR reserves the right to place on one or more parties. The scope of supply includes insurance by the Contractor.
  4. **Specifications:** Goods should be offered strictly conforming to our specifications/drawings. Deviation, if any, should be clearly indicated by the contractor in their quotation. The Tenderer should also indicate the Make/Type number of the goods offered and catalogues, technical literature and samples, wherever necessary should accompany the quotation. Clarification/s on drawings should be obtained before submitting quotation.
  5. **Terms of Prices:** Quotation should be submitted on door delivery basis without extra charge wherever possible. For quotations on Ex-Works, Ex-godown basis the approximate packing and forwarding charges should be indicated by the contractor. In the case of local contractors, the goods are to be delivered at our stores free of charge.
  - 5.1 In respect of tenders on Ex-works basis, in case the tenderer has not mentioned in the offer packing, forwarding and transportation charges for safe delivery up to Purchaser's site, 2% of the price quoted towards packing (in respect of both local and outstation firms), 1% of the basic price quoted towards safe delivery charges in respect of local tenderer and 3% of the basic price quoted towards safe delivery charges in respect of outstation firm will be added for comparison of offers on safe door delivery at Purchaser's site.
  - 5.2 Prices are required to be quoted according to the units indicated in the tender form/Enquiry. When Quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished
  6. Tender should be free from Correction and Erasures. Corrections, if any, must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amounts quoted in words and figures, amount quoted in words shall prevail. Unsigned quotations will summarily be rejected. If there is a discrepancy between the unit price and total price, unit price shall prevail.
  7. IPR shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portion of the quantity offered and the tenderers shall supply the same at the rate quoted.
  8. **Goods & Services Tax (GST):** The details of Taxes/GST and other levies legally applicable and intended to be claimed should be clearly indicated in the tender. Where this is not done, no claim on these accounts would be admissible later.
    - a) **GST for Goods (IGST/CGST/SGST TAX BENEFITS):**  
IPR is entitled to avail tax benefit as per the following notifications issued by Ministry of Finance, Department of Revenue, Government of India:  
(1) No: 47/2017-INTEGRATED TAX (RATE) DATED 14/11/17 for IGST  
(2) No: 45/2017-CENTRAL TAX (RATE) DATED 14/11/17 for CGST  
And,  
IPR is entitled to avail tax benefit as per the following notifications issued by Finance Department, Government of Gujarat:  
(1) No. 45/2017-STATE TAX (RATE) DATED 15/11/17 for SGST  
As per above notifications IPR will bear only 5% IGST for procurement of goods from outside Gujarat & 2.5% CGST and 2.5% SGST (total 5%) for procurement of goods within Gujarat. Vendors are required to charge tax as per these notifications while quoting/supplying the goods. Deviations, (if any) should be clearly mentioned in the quotation/offer.
- Please specify the HSN codes while quoting.**
- b) **GST for Services:**  
As applicable. **Specify the SAC codes wherever services are involved.**
9. **Delivery Date:** Delivery period is essence of the Contract. Contractor must indicate the firm delivery date by which the goods will be dispatched or delivered by them from the date of our order. Delivery period shall be clearly indicated against each item separately.
10. **Price/ Purchase Preference:** Purchase/Price preference to industries will be given as per the policy of the Government of India in force at the time of evaluation provided their offer is in compliance with the conditions of the policy.





11. **Liquidated Damages:** The successful Vendor/Bidder should pay liquidated damages @ ½% (half percent) of the total work order value for the delay of each week in the scheduled date of completion of the work envisaged in the Work Order subject to a maximum of 5% (Five percent) of the total Work Order value.
12. **Inspection:** Goods on its arrival at IPR will be inspected by Stores, and his decision in the matter will be final. However, where the items are required to be inspected at the Contractors Premises, Contractor has to give advance notice regarding readiness of the Goods to enable us to depute our representative for inspection.
13. **Payment:** Payment will be arranged for accepted goods only within 30 days from the date of receipt of goods at IPR and bills in our accounts section, completed in all respects.
14. No correspondence will be entertained within 30 days from the date of receipt of good and bills, whichever is later.
15. **Guarantee:** The Stores offered should be guaranteed for a minimum period of twelve months, from that date of acceptance, against defective Goods, design, workmanship, operation or manufacture. For defects noticed and communicated during the Guarantee period, replacement/rectification should be arranged free of cost within a reasonable period of such notifications. In case where our specifications call for a guarantee period more than 12 months specifically, then such a period shall apply.
16. **Performance Bank Guarantee:** If demanded by IPR, the successful bidder will have to furnish Performance Bank Guarantee for 10% of the order value (basic price) from a Nationalized/Scheduled Bank/State Bank of India, valid throughout the Guarantee/Warranty period. The scheduled banks approved by IPR are Axis Bank, HDFC Bank, ICICI Bank and IDBI Bank. Bank Guarantees submitted other than from banks approved by IPR will not be accepted.
17. **Security Deposit:** If demanded the successful Bidder will have to furnish to the Purchaser an interest free security deposit for 10% (Ten percent) of the order value in the form of Bank Guarantee of an equivalent amount from a nationalized/ scheduled Bank/State Bank of India within 15 days from the date of work order and the said Guarantee should be valid till the goods are accepted by IPR. The scheduled banks approved by IPR are Axis Bank, HDFC Bank, ICICI Bank and IDBI Bank. Bank Guarantees submitted other than from banks approved by IPR will not be accepted. The Security deposit shall be forfeited in case the selected Bidder does not start the work within the time limit specified or fail to complete the work within the stipulated delivery period or fail to comply with any of the terms and conditions in the work order. On successful completion of scope of work and its acceptance by IPR, Contractor should send a letter requesting return of the original BG.
18. The Contractor shall at all times indemnify the purchase against all claims which may be made in respect of the stores for infringement of any right protected by Patent Registration of design or Trade Mark and shall take all risk of accidents or damage, which may cause failure of supply from whatever cause arising and the entire responsibility for sufficiency of all means used by him for the fulfilment of the contract.
19. **Free Issue Material (FIM):** Successful tenderer will have to arrange insurance showing beneficiary as "Institute for Plasma Research" at their risk and cost towards adequate security for the materials/property provided/issued by the Purchaser as Free Issue Material for the due execution of the contract.
20. The Director, IPR reserves the right to accept or reject any quotations fully or partly or to cancel the enquiry without assigning any reason.
21. **Jurisdiction:** The contract shall be governed by the Laws of India for the time being in force. The Courts of Gandhinagar only shall have jurisdiction to deal with and decide any legal or dispute arising out of this Contract.



(This need to be printed in Bidders letter head)

1. Please quote with complete technical details along with technical compliance sheet.
2. Quotation should be submitted in the format given below, else IPR shall not consider the offer by the vendor.

**NAME OF PARTY :** \_\_\_\_\_

**ENQUIRY NO:** \_\_\_\_\_

**QUOTATION No. & DATE :** \_\_\_\_\_

Currency of Quotation: **Indian Rupees**

Sr. No.	Item Description	HSN/SAC Code	Quantity	Unit Rate (Basic)	Packaging & forwarding (P&F)	Applicable GST	Rate (incl P&F and GST)	Total Value
			a	b	c	d	e = b + c + d	f = a * e
1								
2								
3								
4								
5								
6								

Sr. No.	Particular	Remarks
I.	Ex-works / FOR Destination	
II.	Freight	
III.	Insurance	
IV.	Delivery Period	
V.	Payment (IPR terms will apply)	
VI.	Guarantee / Warrantee	
VII.	Validity Period	
VIII.	Discount (if any)	
IX.	Remarks	

Place: Authority Signatory

Date: Company Seal

**Note:**

1. Bidder should submit the copy of GSTIN / ARN Certificate along with the offer
2. Bidder should specify the SUPPLY and SERVICE rates/ charges separately wherever applicable