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# INSTITUTE FOR PLASMA RESEARCH

An Aided institute of department of Atomic Energy, Govt. of India)  
Near Indira Bridge, Bhat. DIST.GANDHINAGAR - 382 428 (INDIA)  
PHONE :(079-2396 2000),FAX :91-079-23962277  
Web : www.ipr.res.in

## MINOR FABRICATION WORKS ENQUIRY

Office Copy

ENQUIRY NO :IPR/MFW/20-21/76

Date : 29-10-2020

**Due Date : 18-11-2020 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 **rkumar@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 **RAJESH KUMAR** ONLY.

Sr.No.	Description	Quantity	Rate
1	Fabrication, Supply and Commissioning of Motor Operated Assembly for Radiation Shielding Door	1	No.

### Free Issue Material

Sr.No.	Description	Quantity	Unit	Value
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Note : Please quote with complete technical details (Technical Compliance sheet and product data sheet)

Encl:As per attachment

Sd/-  
RAJESH KUMAR  
Scientific Officer-G

# Specification for Fabrication, Supply and Commissioning of Motor Operated Assembly for Radiation Shielding Door

Introduction: Neutron generator hall at IPR has a radiation shielding door of dimension 2500 mm (H) X 2000 mm (W) X 108 mm (thick) and approximate weight 750 kg. The opening and closing of this door is being carried out manually.

## 1. Technical Specifications

<b>Technical Specifications</b>		
<b>Sr. No</b>	<b>Particulars</b>	<b>IPR Specification</b>
	<b>Scope of the work</b>	<ol style="list-style-type: none"> <li>1. Fabrication, Supply and Commissioning of a Motor operated assembly for existing horizontal sliding radiation shielding door.</li> <li>2. Supply and fitting of powder coated MS sheet as per Sr. 09 of technical specifications</li> <li>3. Removing the existing rolling wheels assembly and providing sliding support channel</li> </ol>
01	Motor	Standard make (Bharat Bijlee/ABB/Crompton-Greaves or equivalent brand) of appropriate capacity for smooth operation of door of weight 750 kg
02	Time for opening or closing door	between 50 to 100 sec
03	Limit switches	Shall be fitted
04	Gears/Chain drive/Rack/ Worm gear reducer	Standard make
05	Motor mounting	Motor mounting support shall be provided if required.
06	Paneling	Powder coated MS Paneling for fully covering of motor drive assembly and for sliding guide shall be provided.
07	Both side operation	The switches for operation of door shall be provided both inside and outside.
08	Emergency opening	In case of power/motor failure, mechanism for manual opening of the door shall be provided.
09	MS Sheet	Powder coated MS sheet of thickness at least 3 mm or more to cover entire shielding door.
10	Door movement	The door movement (opening/closing) shall be jerk free.
11	Commissioning and erection	Commissioning and erection shall be carried out by vendor at site.
12	Warranty	Warranty of 1 year from the date of satisfactory commissioning and erection shall be provided.

## 2. Materials Specifications

Following standards shall be followed during the fabrication of Motor Operated Assembly and also for materials which are going to be used.

Sr. No	Items/Parts	Material of construction/Make
1	Side covering sheet, angles	MS (IS:2062 : 1999)
2	Supports structure plates	MS (IS:2062 : 1999)
3	Bolts, nuts, washers	Alloy steel, class 10.9
4	Gear/rack	BS970: 1955 EN 30A, IS 30Ni4Cr1
5	Electric motor	0.55 KW (0.75 HP), 8 pole motor, 690 rpm, hazard area motor /standard make, testing standard IS 4029, shaft diameter ~24 mm
6	Worm gear reducer	Reduction Ratio 70: 1, Input power ~0.75HP/standard make As per IS 3734:1983, shaft diameter ~32 mm
7	Couplings	Standard pin/bush type flexible couplings, IS 2693:1989
8	Arc welding	IS 816:1969 Code of Practice for use of Metal Arc Welding for General Construction in Mild Steel

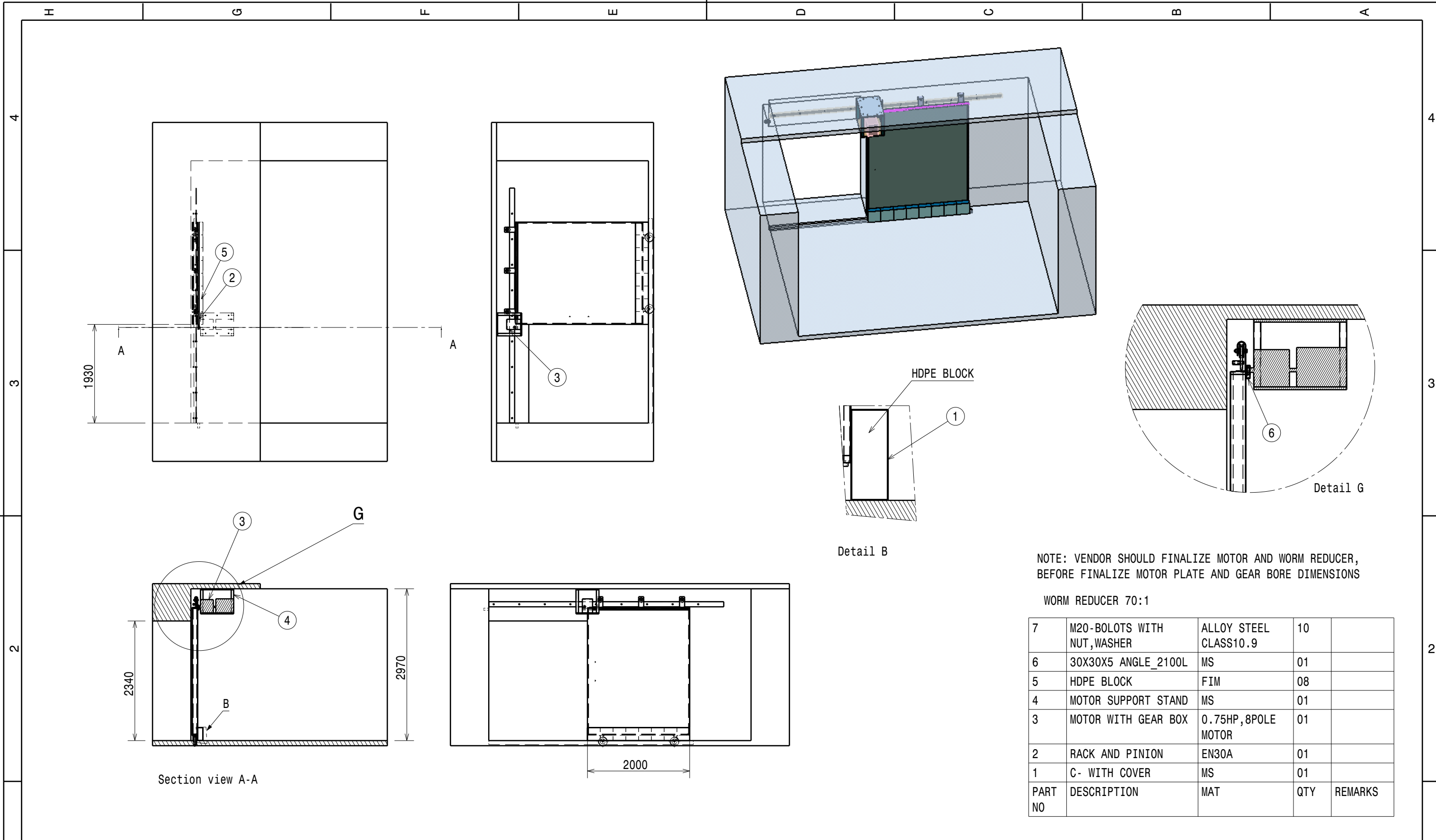
## 3. Acceptance criteria

Acceptance will be given after examination of followings

1. Jerk free operation of the door
2. Time taken for opening and closing the door
3. Manual opening of door in case of power failure condition

## 4. Terms and Conditions


1. Site Visit: Vendor may visit IPR side for better understanding of scope of the work.
2. Electrical connections: All the electrical connections and layout of the cables shall be carried out by the vendor.
3. Drawing approval: Vendor may modify the design of Motor Operated Assembly submitted by IPR if required without any major modification and submit the final fabrication drawing for the approval of IPR. Only after approval of IPR, fabrication shall be started by vendor.
4. Modification in existing shielding door: Modification in the existing door if any shall be carried out by the vendor with prior approval.

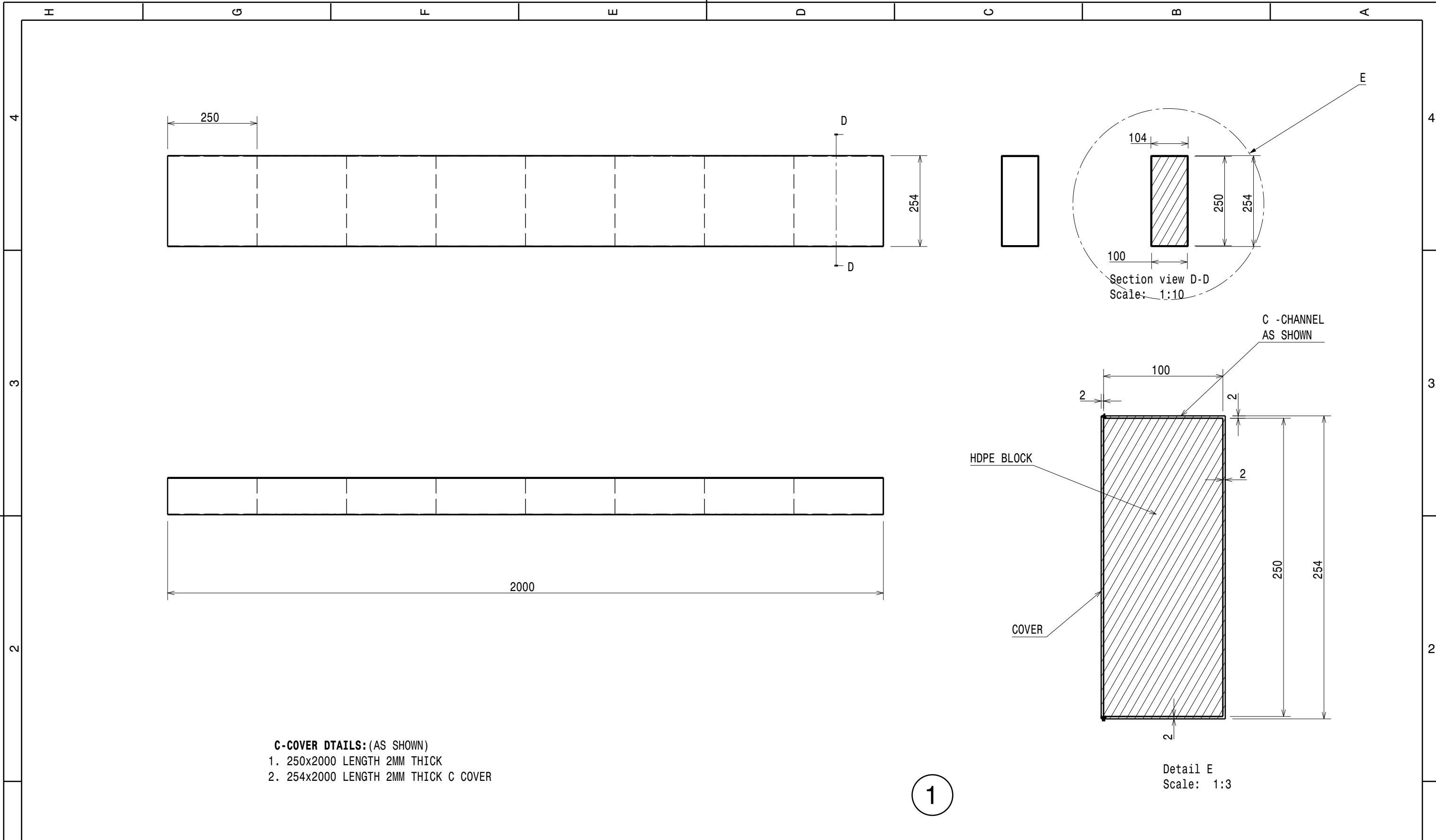


NOTE: VENDOR SHOULD FINALIZE MOTOR AND WORM REDUCER, BEFORE FINALIZE MOTOR PLATE AND GEAR BORE DIMENSIONS


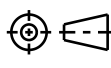
WORM REDUCER 70:1

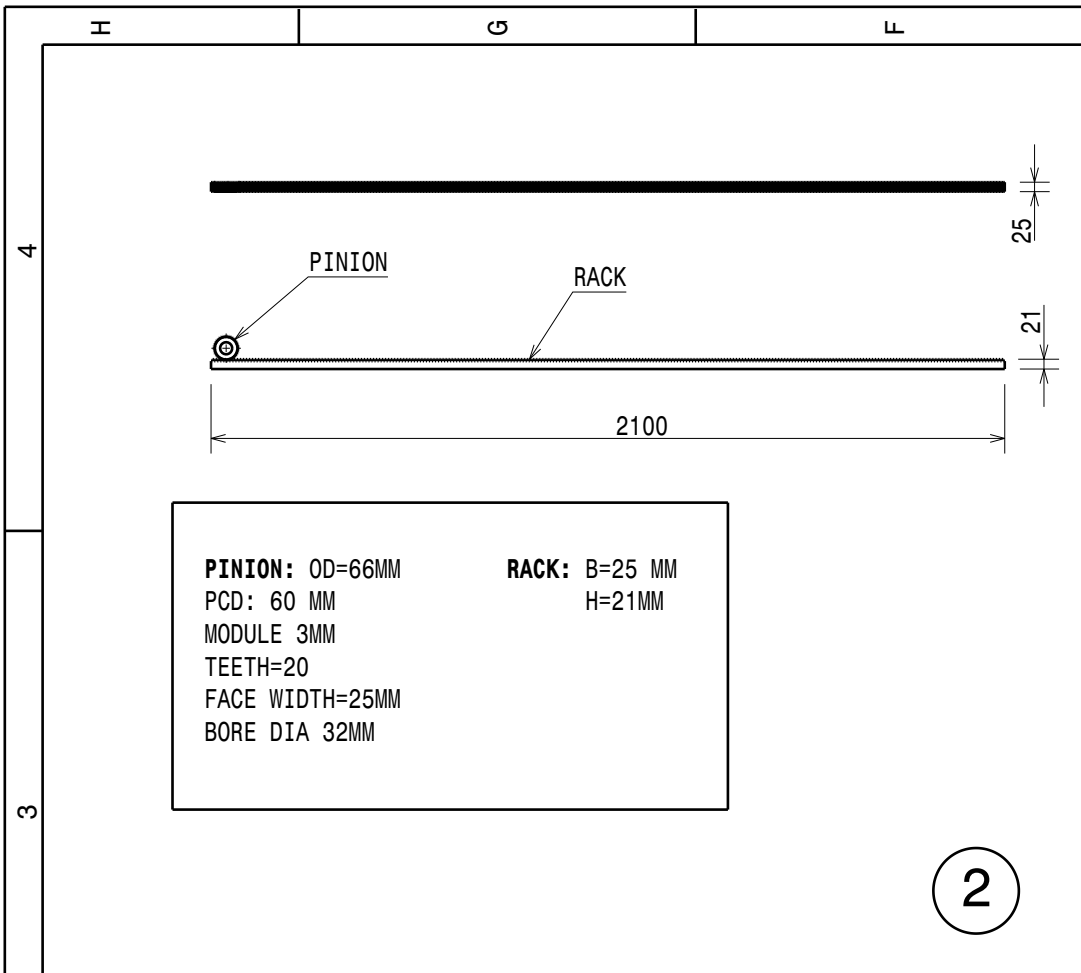
PART NO	DESCRIPTION	MAT	QTY	REMARKS
7	M20-BOLTS WITH NUT, WASHER	ALLOY STEEL CLASS10.9	10	
6	30X30X5 ANGLE_2100L	MS	01	
5	HDPE BLOCK	FIM	08	
4	MOTOR SUPPORT STAND	MS	01	
3	MOTOR WITH GEAR BOX	0.75HP, 8POLE MOTOR	01	
2	RACK AND PINION	EN30A	01	
1	C- WITH COVER	MS	01	

DRG.NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				ASS'Y GROUP:			 <b>Institute for Plasma Research</b> प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)				
CO-ORDINATED BY					REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED	ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED					
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS											SCALE	1:1	DATE	TITLE		
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	12/10/20	<b>AUTOMATION FOR SLIDING DOOR</b>	
UPTO 10	10-50	50-120	OVER 120-400									CHECKED	P SANTRA			REF DRG NO:
+1°	+0°-30'	+0°-20'	+0°-10'		+0.1	+0.2	+0.3	+0.5				APPROVED		DRG.NO	IPR/20/A3/IQS_DOOR/8901	REV 0
														SHEET 1 OF 3		

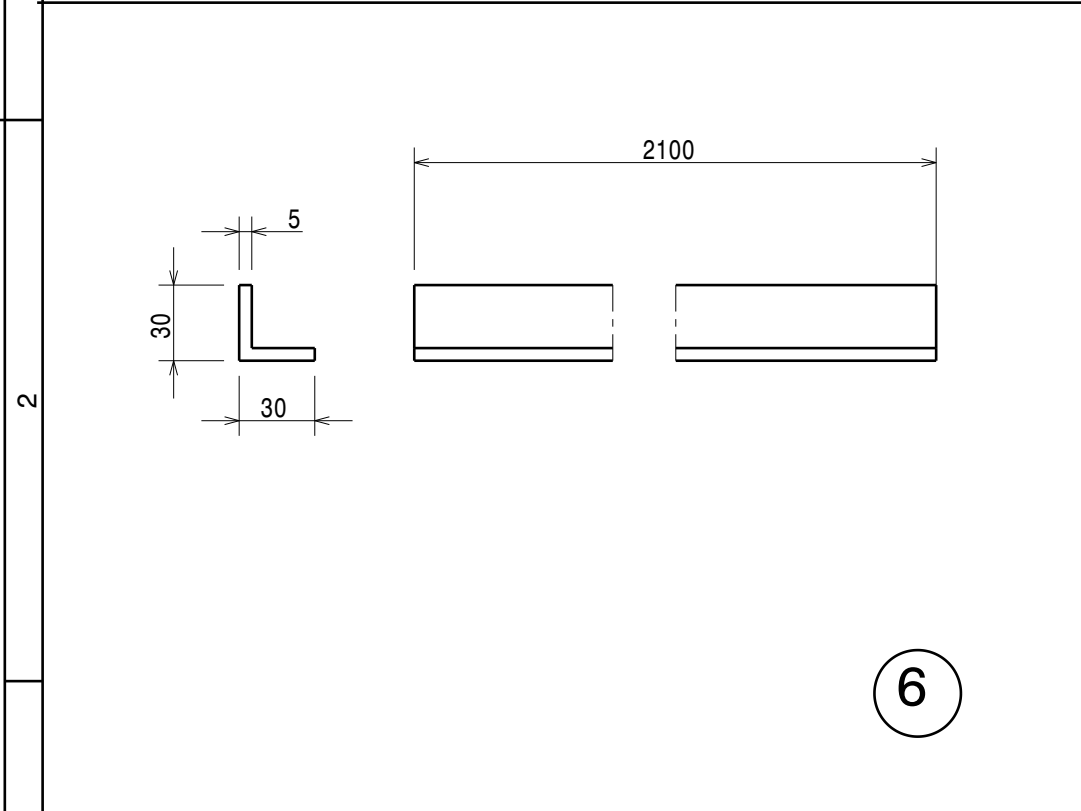


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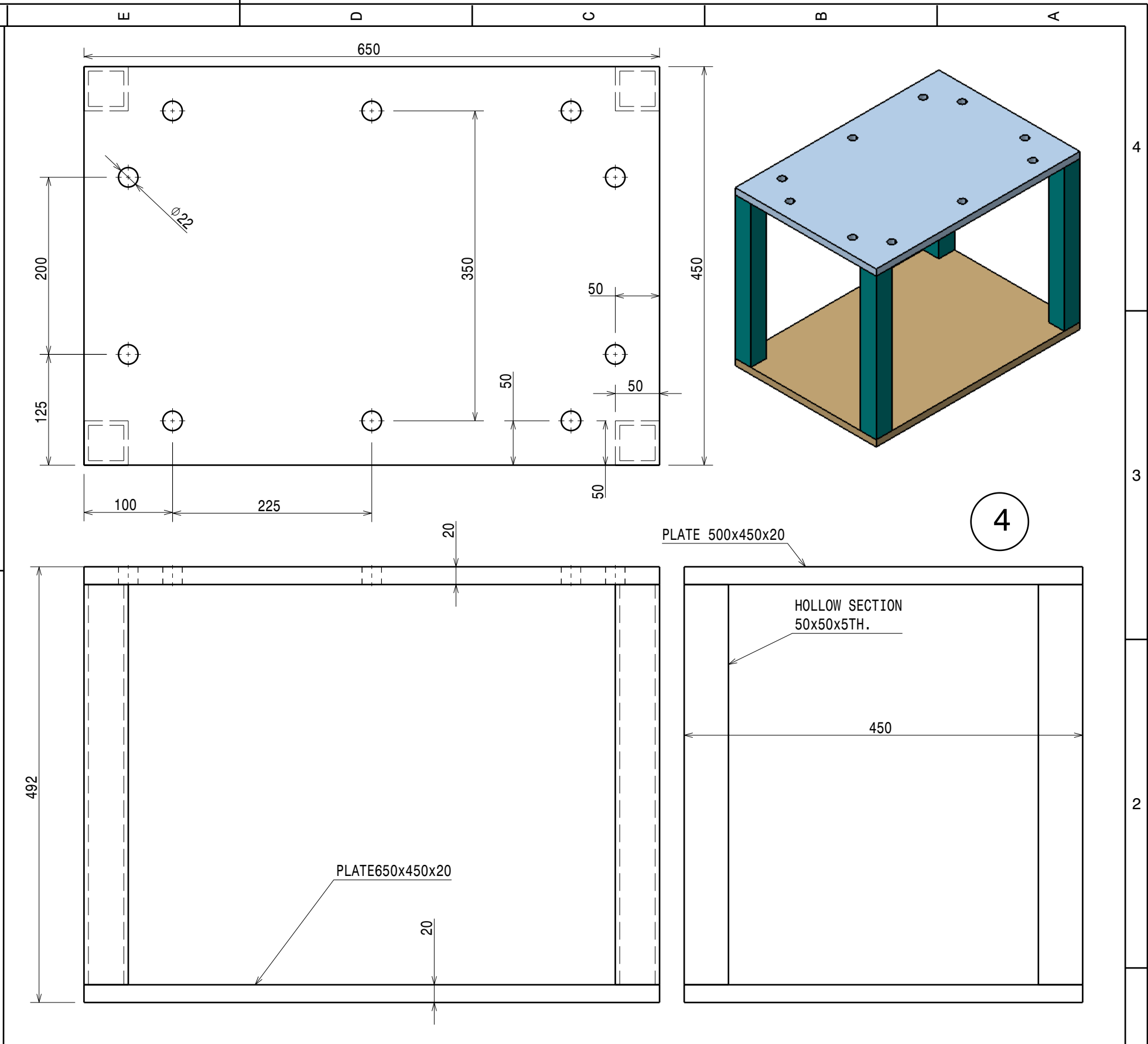
DRG.NO		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				ASS'Y GROUP:		 <b>Institute for Plasma Research</b> प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)			
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED		ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED		
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	1:1	DATE	 <b>TITLE</b> <b>AUTOMATION FOR SLIDING DOOR</b> <b>DETAILS</b>
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	12/10/20	
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5				CHECKED	P SANTRA	REF DRG NO:	REV 0
+1°	+0°-30'	+0°-20'	+0°-10'								APPROVED		DRG.NO	IPR/20/A3/IQS_DOOR/8901	SHEET 2 OF 3



2



6



4

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'	

REVISION COLUMN					
REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

ASS'Y GROUP:		
ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED		
SCALE	1:1	DATE
DRAWN	K.R.R.	12/10/20
CHECKED	P SANTRA	
APPROVED		

**Institute for Plasma Research**  
 प्लाज्मा अनुसंधान संस्थान  
 Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)

**TITLE**  
**AUTOMATION FOR SLIDING DOOR DETAILS**

REF DRG NO: \_\_\_\_\_ REV 0

DRG.NO: IPR/20/A3/IQS\_DOOR/8901 SHEET 3 OF 3

**Technical Compliance Sheet**  
**Fabrication, Supply and Commissioning of Motor Operated Assembly**  
**for Radiation Shielding Door**

**1. Technical Specifications**

Sr. No	Particulars	IPR Specification	Vendor's Specification/Comments (Please mention specific values wherever required)
	<b>Scope of the work</b>	1. Fabrication, Supply and Commissioning of a Motor operated assembly for existing horizontal sliding radiation shielding door. 2. Supply and fitting of powder coated MS sheet as per Sr. 09 of technical specifications 3. Removing the existing rolling wheels assembly and providing sliding support channel	
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03	Bolts, nuts, washers	Alloy steel, class 10.9	
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		shaft diameter ~24 mm	
06	Worm gear reducer	Reduction Ratio 70: 1, Input power ~0.75HP/standard make As per IS 3734:1983, shaft diameter ~32 mm	
07	Couplings	Standard pin/bush type flexible couplings, IS 2693:1989	
08	Arc welding	IS 816:1969 Code of Practice for use of Metal Arc Welding for General Construction in Mild Steel	

Vendor's sign with seal



**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 confirming 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.



# प्लाज्मा अनुसंधान संस्थान

(भाट, इन्दौरा पल के पास, गांधीनगर 382428 - , गजरात) भारत

## Institute for Plasma Research

Bhat, Near Indira Bridge, Gandhinagar – 382428, Gujarat (INDIA)

Phone: +91-79-23962000 Fax: +91-79-23962277 Website: www.ipr.res.in



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