

HLL LIFECARE LIMITED

HLL LIFECARE LIMITED
(A Government of India Enterprise)
P.B.NO.2, PEROORKADA.P.O,
THIRUVANANTHAPURAM - 695 005
KERALA, INDIA

TECHNICAL BID

**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING
OF
AUTOMATIC THREE LINE SQUARE PACKING MACHINES IN
PAIR FOR FOIL SEALING OF CONDOMS
AT
HLL LIFECARE LIMITED PEROORKADA
FACTORY, THIRUVANANTHAPURAM**

IFB No : HLL/CED/SITC/3LINE PACKING/MACHINE/2016

Date : 15-01-2016

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CERTIFICATE OF CONFIDENTIALITY

We understood that HLL Lifecare Limited is the sole owner of the technology and equipment specification & drawings given to us. We hereby certify that the details given to us will be kept confidential and will not be used for any other purpose or transferred to third party.

SIGNATURE (S) OF BIDDER

(To be submitted in the letter pad of the firm indicating full name and address, telephone & fax numbers etc.)

TECHNICAL BID

1. Bid Information

- 1.1 The Technical Bid must include the following information;
- a. Proposed period of Completion.
 - b. All information requested in the bidding document.
 - c. The details specified under Technical bid evaluation criteria.

2. TECHNICAL BID EVALUATION CRITERIA.

These sheets should be filled up after reading the complete bidding document and the relevant details asked for detailed as below should be enclosed with this bid.

- 2.1. Bidders should have minimum 5 years experience in the relevant field and should have executed successfully two fabrication works, each work costing not less than Rs.10lakhs during the last 5 years.
- 2.2. Average annual financial turn over of the bidder during the last 3 years, ending 31st March of the previous financial year, should be at least Rs.30Lakhs.
- 2.3. The contractor should have his own workshop facility for fabrication works.
- 2.4. The list of major similar jobs executed satisfactorily in last five years, giving details of type of work, name & address of client, value of job & duration including photos and copies of major orders with completion certificate from the client
- 2.5. Earnest Money Deposit in the manner specified.
- 2.6. Power of Attorney in case an authorized representative has signed the tender.
- 2.7. The duly signed acceptance form conforming that All terms & conditions, technical specifications, drawings & volume of job are understood by the bidder. Certificate that bid is in total conformity with the specifications and terms and conditions mentioned in the bid document and certificate on period of validity (sheet enclosed)
- 2.8. Deviation if any, giving reasons for the deviation.
- 2.9. List of Plant & Machinery, tools & tackles available with the contractor and intended to be used in the said job to be filled in the enclosed sheet.

- 2.10. Total list of technical staff, labour (skilled & unskilled) intended to be deployed in the said job to be filled in the enclosed sheet.
- 2.11. Information regarding projects in hand
- 2.12. Information regarding bidder such as Litigation, orders regarding expulsion or black listing, if any
- 2.13. Even though the bidder meet the above qualifying criteria, they are subject to be disqualified if they have a record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc...
- 2.14. Assurance that the Contractor shall take insurance policy as mentioned in the bid jointly in the name of HLL and the Contractor, valid till completion of the awarded work.
- 2.15. HLL Lifecare Limited is the sole owner of the technology and equipment specification & drawings given along with the bidding document and drawings to be given to the Contractor. The details given to bidders and Contractor should be kept confidential and should not be used for any other purpose or should not be transferred to third party. The bidders should certify that the information given to them will not be used for any other purpose.
- 2.16. In addition to the above, HLL will evaluate the technical knowledge, fabrication facility and the potential of the party to undertake the work. The decision of HLL will be final and binding.

Note: - HLL does not bind itself to accept the lowest or any tender, and reserves to itself the right to accept or reject any or all the tenders, either in whole or in part without assigning any reason for doing so.

APPLICATION FOR PREQUALIFICATION

**Name of Work: Supply, Installation, Testing and Commissioning of Automatic
Three Line Square Packing Machines in pair for foil sealing of
Condoms at HLL Lifecare Limited Peroorkada Factory, Thiruvananthapuram**

- A. Name of Contractor/Firm/Company :
1. Postal address :
2. Telephone No.: FAX : E-Mail :
3. Year of commencement of Contract/Year of establishment of firm/Company :

B. In the case of Firm

1. Whether proprietary or partnership firm :
2. Name of Managing Partner :
3. Name of other partners :

Note: Attested copy of partnership deed to be enclosed

C. In the case of Company

1. Whether Private Limited or Public Limited
Company :
2. Name of Managing Director :
3. Names of other Directors :

Note: Attested copy of Company Registration deed to be enclosed.

- D. Bidder should have minimum 5 years experience in the relevant field and should have executed successfully two fabrication works, each work costing not less than Rs .30 lakhs/-, during the last 5 years

Enclose 2 completion certificates from the clients certified that similar fabrication works costing not less than Rs.10 lakhs are completed satisfactorily. The Client list shall also be enclosed.

The list of major similar jobs executed satisfactorily in last five years, giving details of type of work, name & address of client, value of job & duration including photos and copies of major orders with completion certificate from the client shall also be enclosed.

Note: Details to be furnished in **Annexure I**

E. Information regarding projects in hand

Note: Details to be furnished in **Annexure II**

F. Average annual financial turn over of the bidder during the last 3 years, ending 31st March of the previous financial year, should be at least Rs.30Lakhs

a. Annualized turn over of the Contractor/Firm/Company in the last 3 years ending 31.03.2015

- | | |
|-----------------|------|
| 1. 2012 – 2013: | INR. |
| 2. 2013 – 2014: | INR. |
| 3. 2014 - 2015: | INR. |

Note: Details to be furnished in **Annexure III**

G. Has the Contractor/ Firm/Company ever been black listed by the Govt /or the registering authority.

i) If so, give the period and details.

H. The contractor should have his own workshop facility for fabrication works.

Give the address of workshop facility with details of equipments in **Annexure IV.**

I. Details of Organization :

1. Technical personnels	: i) No. of Graduate Engineers
	: ii) No. of Diploma holders :

2. Non Technical Management

(Details to be enclosed in **Annexure V- A & B**)

- J. Completion Period: in **Annexure VI** (filled and enclosed)
- K. Acceptance Form in **Annexure VII**
- L. CERTIFICATE for authenticity of information provided with Offer as per **Annexure VIII**

I/We hereby certify that the details given in the application form and Annexure I to Annexure VIII are correct to the best of my/our knowledge. I /We have no objection, in Owner (HLL Lifecare Limited) contacting any of our clients for reference.

Signature

Name and address of the Party

Place:

Date:

ANNEXURE - I**LIST OF MAJOR JOBS EXECUTED DURING THE LAST FIVE YEARS**

SL.NO	DETAILS OF WORK	CONTRACT VALUE (In Lakhs)	NAME & ADDRESS OF CLIENT	COMPLETION TIME AS PER ORDER (In months)	ACTUAL TIME TAKEN
1					
2					
3					
4					
...					

SIGNATURE OF BIDDER

Note:- Bidders should have executed successfully two fabrication works, each work costing not less than Rs.15lakhs, during the last 5 years. Enclose 2 completion certificates from the clients certified that similar fabrication works costing not less than Rs.15 lakhs are completed satisfactorily

ANNEXURE-II

DETAILS OF ONGOING PROJECTS			
Sl. No.	Name of Client with full address, telephone numbers and nature of work	Order details such as quantity, completion time etc.	Value of works
1			
2			
3			
4			
5			

ANNEXURE III

(ENCLOSE DETAILS OF ANNUALISED TURN OVER OF THE CONTRACTOR/FIRM/COMPANY IN THE LAST 3 YEARS ENDING 31-03-2015)

2012- 2013: INR.

2013 – 2014: INR.

2014 - 2015: INR.

(Enclose audited Balance sheets in proof for the above period)

Note: Average annual financial turn over of the bidder during the last 3 years, ending 31st March of the previous financial year, should be at least INR 30Lakhs.

ANNEXURE IV

DETAILS OF BIDDER'S WORKSHOP FACILITY

ADDRESS:

LIST OF EQUIPMENTS

SL.NO	EQUIPMENTS	YEAR OF MANUFACTURE	NOS.AVAILABLE	NOS.PROPOSED TO BE DEPLOYED IN THIS PROJECT

SIGNATURE OF BIDDER

ANNEXURE- V - A

BIDDER'S TECHNICAL STAFF

1. NUMBER OF QUALIFIED GRADUATE ENGINEERS WITH DISCIPLINE.
2. NUMBER OF QUALIFIED GRADUATE ENGINEER INTENDED TO BE POSTED/DEPLOYED ON THIS PROJECT
3. NUMBER OF QUALIFIED DIPLOMA ENGINEERS WITH DISCIPLINE.
4. NUMBER OF QUALIFIED DIPLOMA ENGINEERS INTENDED TO BE POSTED ON THIS PROJECT
5. NUMBER OF EXPERIENCED SUPERVISORS
6. OTHER STAFF

SIGNATURE OF BIDDER

ANNEXURE- V - B

SKILLED, SEMI-SKILLED AND UNSKILLED LABOUR

SL.NO	CATEGORY	NOS.AVAILABLE WITH THE FIRM	NOS. INTENDED TO BE DEPLOYED IN THIS PROJECT
1.	SKILLED		
2.	SEMI-SKILLED		
3.	UNSKILLED		

SIGNATURE OF BIDDER

ANNEXURE-VI

COMPLETION PERIOD

SIGNATURE OF THE BIDDER WITH SEAL

Note: - The bidder should complete the subjected work within a period of 2 months from the date of receipt of confirmed order.

ANNEXURE-VII
ACCEPTANCE FORM

(To be submitted in the letter pad of the firm indicating full name and address, telephone & fax numbers etc.)

From

To

Associate Vice President,
Central Engineering Division,
HLL Lifecare Limited (A Government of India Enterprise),
PB No 2, Peroorkada, Thiruvananthapuram – 695005,
Kerala State, India
Ph: (++91 471) 2433374,2437270 – 501, 502
Tele Fax: (++ 91 471) 2432647
E-mail: srnair@lifecarehll.com ,rajeevrv@lifecarehll.com,
Website URL: www.lifecarehll.com

Dear Sir,

I / We, hereby offer to fabricate/assemble/lead/install/integrate/commission as detailed in schedule hereto or such portion thereof as you may specify in the acceptance of Bid at the price given in the price bid and agree to hold this offer open till 90 days after the date of bid opening prescribed by the Owner. I/We have understood the terms and conditions mentioned in the invitation for bid and Conditions of Contract furnished by you and have thoroughly examined the specifications quoted in the bid document hereto and are fully aware of the nature of the scope of work required and my/our offer is to comply strictly in accordance with the requirement and the terms and conditions mentioned above. I/We have understood that the OWNER is the sole owner of the technology, equipment, specification and drawings given along with the bidding documents. I/we here by assure that the above information will be kept confidential and will not be used for any other purpose or will not be transferred to third party.

Yours faithfully,

SIGNATURE OF THE BIDDER

ANNEXURE VIII

CERTIFICATE FOR AUTHENTICITY OF INFORMATION

I / we hereby certify that the information given with this bidding document is correct. If, at any stage, it is found to be incorrect, I / we understand that the contract will be liable to be terminated and action could be taken against me/us by the Company for damages.

SIGNATURE (S) OF BIDDER WITH SEAL

(To be submitted in the letter pad of the firm indicating full name and address, telephone & fax numbers etc.)

CHECKLIST FOR TECHNICAL BID

SI NO	PARTICULARS	ATTACHED (YES/NO)
1	Tender Cost as prescribed in the Tender	
2	EMD as prescribed in the Tender	
3	Certificate of Confidentiality	
4	Application for Pre-Qualification duly filled	
5	Annexure I	
6	Annexure II	
7	Annexure III	
8	Annexure IV	
9	Annexure V	
10	Annexure VI	
11	Annexure VII	
12	Annexure VIII	

HLL LIFECARE LIMITED
(A Government of India Enterprise)
CENTRAL ENGINEERING DIVISION
P.B.NO.2, PEROORKADA.P.O,
THIRUVANANTHAPURAM - 695 005
KERALA, INDIA

PRICE BID

SUPPLY, INSTALLATION, TESTING AND
COMMISSIONING OF
AUTOMATIC THREE LINE SQUARE PACKING MACHINES
IN PAIR FOR FOIL SEALING OF CONDOMS

AT

HLL LIFECARE LIMITED PEROORKADA
FACTORY, THIRUVANANTHAPURAM

IFB No : HLL/CED/SITC/3LINE PACKING/MACHINE/2016
Date : 15-01-2016

**HLL LIFECARE LIMITED
(A Government of India Enterprise)
CENTRAL ENGINEERING DIVISION**

**P.B.NO.2, PEROORKADA.P.O,
THIRUVANANTHAPURAM - 695 005
KERALA, INDIA
Phn: - (++ 91 471) 2437270
Fax: - (++ 91 471) 2432647**

INVITATION FOR BIDS (IFB)

IFB No : HLL/CED/SITC/3LINE PACKING/MACHINE/2016
Date : 15-01-2016

HLL Lifecare Limited invites sealed and super scribed Technical and Price bids from competent and experienced eligible Contractors for the following work at our Central Engineering Division.

Sl.No.	Brief description of work	Quantity in Nos.	EMD (Rs.)
1	Supply, Installation, Testing and Commissioning of Automatic Three Line Square Packing Machines in pair for foil sealing of condoms at HLL Lifecare Limited Peroorkada Factory, Thiruvananthapuram	2.00	25,000/-

2. Eligibility criteria for issue of Bid document.

- a) Minimum 5 years experience in the relevant field
- b) The Bidder should have executed successfully two fabrication works, each work costing not less than Rs.10Lacs during the last 5 years.
- c) Average annual financial turn over of the bidder during the last 3 years, ending 31st march of the previous financial year, should be at least Rs.30Lakhs.

3. A complete set of bid documents can be had from the Office of the Associate Vice President (CED), Central Engineering Division, HLL Lifecare Limited, Peroorkada Factory, Thiruvananthapuram – 695 005, Kerala, India during office hours on any working day on submission of written application along with the tender cost of Rs 550/- (inclusive of all taxes).

The Tender Documents can also be downloaded from our Website www.lifecarehll.com from the date of issue of tender document. Tender forms shall be filled in ink or typed. No tender filled in pencil shall be considered. The tenderer shall sign and seal the form at each page and at the end, in token of acceptance of all the terms and conditions of the tender.

Note:- In case the bidder downloads the tender form from our website, the bidder shall enclose DD for Rs 550/- (inclusive of taxes) as cost of tender along with the bid document.

4. The bid documents will be available up to 15.00 Hrs. on the previous working day of the opening of the bids.
5. The scheduled date for issue, receipt and opening of bids is as follows.
 - a) Date of issue of tender document - 15-01-2016 onwards.
 - b) Last date and time for receipt of bids - 30-01-2016 up to 15.00 Hrs.
 - c) Date and time of opening of bids - 30-01-2016 , 15.30 Hrs.
 - d) Address for communication, receipt and place of opening of bids:

Associate Vice President (CED)
Central Engineering Division,
HLL Lifecare Limited (A Government of India Enterprise),
PB No 2, Peroorkada, Thiruvananthapuram – 695005,
Kerala State, India
Ph: (++91 471) 2433374,2437270 –501,502
Tele Fax: (++ 91 471) 2432647
E-mail: snair@lifecarehll.com, rajeevrv@lifecarehll.com.

6. The completed and sealed bid documents and all schedules should be submitted to Associate Vice President (CED) in the above address along with the EMD. Bids received after due date and time will be rejected. Any bid not accompanied by EMD will be rejected
7. Bids will be opened in the presence of Bidders representative(s) who choose to attend on the specified date and time, at the office of HLL at the address given in Clause '5 (d)' above.

HLL LIFECARE LIMITED

8. In the event of the date specified for bid receipt and opening being declared as a closed holiday for Owner's office, the due date for submission of bids and opening of bids will be the following working day at the appointed times.
9. The Owner may, at its discretion, extend this deadline for submission of bids by amending the Bid Documents or any other reasons, in which case all rights and obligations of the Owner and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.
10. Owner will not be held responsible for the postal delay, if any, in the delivery of the bidding document or the non-receipt of the same. Bids sent by Telex/Fax/Telegraph will not be accepted.
11. The company reserves the right to club or split the items of works, change the qualifying criteria at their discretion and to reject or cancel the Invitation for bids without assigning any reason thereof.

ASSOCIATE VICE PRESIDENT (CED)

SCHEDULE I

CONDITIONS OF BID

1. Definitions

- a. **“Invitation For Bid (IFB)”** shall mean and include the present document, and such other complements and agenda, which may subsequently be issued in this connection.
- b. **“Owner”** shall mean HLL Lifecare Limited, (Thiruvananthapuram) or its units thereof.
- c. **“Bidder”** shall mean the person, firm or Corporation submitting a bid against this Invitation for Bid and shall also include his agents and representatives.
- d. **“Contractor/Fabricator”** shall mean the bidder whose bid has been accepted and shall also include his successors and assigns, agents and representatives.
- e. **“Contract”** means signed acceptance of the Letter of Intent, if issued, and work order by the Contractor.
- f. **“Site”** means the Owner’s manufacturing facility at Kerala.
- g. **“The bid documents”** in addition to the invitation for bids and Conditions of Bid (Schedule I), the bid documents include the following schedules.

SCHEDULE -II	: General Conditions of Contract
SCHEDULE -III	: User requirements
SCHEDULE -IV	: Format for quoting
SCHEDULE -V	: Format of Agreement

- h. **“Eligible Bidders”** This Bid is opened to all eligible manufacturers and/or their authorized agents.
- i. **“The contract price”** means the price payable to the Contractor under the contract for the full and proper performance of its contractual obligations.
- j. **“Performance of the Contract”** means successful completion of contract.

2. Bid Information and Period of Validity

2.1 Bidders shall submit their bids in two parts (TECHNICAL BID and PRICE BID)

2.2 The Technical Bid must include the following information;

- a. The details specified under Technical bid Evaluation Criteria.
- b. All other documents/certificate/information as specified in the bidding document.

2.3 The Price Bid must be as per the following

The bid is invited for **“Supply, Installation, Testing and Commissioning of Automatic Three Line Square Packing Machines in pair for foil sealing of condoms at HLL Lifecare Limited Peroorkada**

- a. Factory, Thiruvananthapuram” as per the Specification, Terms and Conditions as specified in the Bid Documents. The Bidder shall indicate the price in the enclosed format (**Schedule – IV**) inclusive of all the consumables, relevant taxes and duties, other levies, insurance and other local costs, loading and unloading of Contractor’s materials etc. on a turnkey basis as per the Specifications, Terms and Conditions, Schedule of Work specified in the Bid Documents. Civil work is excluded from the scope of the Contractor.
- b. Rates should be firm without any escalation on any account till the order is completely fulfilled.

2.4 Bids shall remain valid for 90 days after the date of bid opening prescribed by the Owner.

3. Format and Signing of Bid

3.1 Bidders shall submit their bids in two parts (TECHNICAL BID and PRICE BID) as under.

- a) Technical bids, in duplicate clearly marking each “Original Bid” and “Copy Bid”, as appropriate, consisting of the deviations in specifications if any, and also clause-by-clause compliance of Technical Bid evaluation criteria, specifications and commercial terms and conditions and EMD, in separate sealed covers super scribing “Technical Bid” inside a main cover.
- b) Price bids, in duplicate clearly marking each “Original Bid” and “Copy Bid”, as appropriate, showing only item wise rates and total prices in separate sealed covers super scribing “Price Bid” inside a main cover.

3.2 When the main cover is opened on the date and time scheduled for bid opening, only the technical bids will be opened.

3.3 Bidders whose technical bids are found substantially responsive will be informed of the date and time of opening of their price bids. Price bids of others will be returned to them unopened.

- 3.4 All pages of the bid, except for un-amended printed literature shall be signed by the person or persons signing the bid. The seal of the company shall be stamped in all pages.
- 3.5 Bids shall be made in English.
- 3.6 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be signed by the person or persons signing the bid.

4. Submission of Bids

Sealing and Marking of Bids

- 4.1 The Bidder shall seal the original and each copy of the bid in an inner and then in an outer envelope, duly marked the envelopes as “original” and “copy”.
- 4.2 The inner and outer envelopes shall be:
- (a) Addressed to the Owner in the following address and
- Associate Vice President (CED)
Central Engineering Division,
HLL Lifecare Limited (A Government of India Enterprise),
PB No 2, Peroorkada, Thiruvananthapuram – 695005,
Kerala State, India
Ph: (++91 471) 2433374,2437270 – 501, 502
Tele Fax: (++ 91 471) 2432647
E-mail: srnair@lifecarehll.com, rajeevrv@lifecarehll.com,
- (b) Bear the Enquiry No, closing date and General description of item tendered, and the words “DO NOT OPEN BEFORE” 15.30 Hrs (IST) on ----- (Indicate the Closing Date).
- 4.3 The inner envelopes shall indicate the name and address of the Bidder. If the outer envelope is not sealed and marked as indicated above, the Owner will assume no responsibility for the bid’s misplacement or premature opening.
- 4.4 Bids should be hand delivered or sent by courier/mail to ensure timely receipt. Telex, Cable, E-mail or facsimile bids will be rejected.

Deadline for submission of Bids

- 4.5 The Owner in the following address will receive the bids not later than the date and time specified in the Invitation for Bids or Subsequent extended dates.

Associate Vice President (CED)
Central Engineering Division,
HLL Lifecare Limited (A Government of India Enterprise),
PB No 2, Peroorkada, Thiruvananthapuram – 695005,
Kerala State, India
Ph: (++91 471) 2433374,2437270 – 501, 502
Tele Fax: (++ 91 471) 2432647
E-mail: srnair@lifecarehll.com ,rajeevrv@lifecarehll.com,

In the event of the specified date for submission of Bids being declared a holiday for the Owner, the bids will be received up to the appointed time on the next working day.

- 4.6 The Owner may, at his discretion, extend this deadline for submission of bids by amending the Bid Documents or any other reasons in which case all rights and obligations of the Owner and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.
- 4.7 It is the responsibility of the bidders to see that the completed bidding documents whether sent by post or by courier or by person are received in the **Office of the Associate Vice President (Central Engineering Division)**, in the above address by the date and time stipulated for receipt as above failing which the bid would be considered late and rejected. Owner will not be held responsible for the postal delay, if any, in the delivery of the bidding document or the non-receipt of the same. Bids received after due date and time will be rejected. Mere handing over of the bid documents at reception counter or at any other counter or room or person cannot be considered as submission of bid.

5. Clarification of Bidding Documents

1. A prospective Bidder requiring any clarification of the Bidding Documents may notify the Owner in writing, or by fax at the Owners mailing address indicated in the Invitation for Bids. The Owner will respond in writing to any request for clarification of Bidding Documents, which it receives not later than 7 days prior to the deadline for submission of Bids prescribed by the Owner.

2. Given specification is indicative only. **The bidder should visit the plant and see the machines and also make their own assessments before quoting of bids.** Prior permission from HLL shall be taken for visiting the plant. No photographs will be allowed inside the plant. The Owner will not be responsible for any wrong quotes due to inadequate information.

6. Amendment of Bidding Documents

- 6.1 At any time prior to the deadline for submission of bids, the Owner may, for any reason, modify the Bidding Documents by amendment.
- 6.2 The amendment will be notified in writing or fax or telegram or e-mail to all prospective Bidders, which have received the Bidding Documents and will be binding on them.
- 6.3 In order to afford prospective Bidders reasonable time in which to take the amendment in to account in preparing their bid, the Owner may, at its discretion, extend the deadline for the submission of bids.

7. Bid Opening by Owner

- 7.1 The Owner will open bids, in the presence of the bidders' representatives who choose to attend, at the date and time specified and in the location given in this document. The Bidders' representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of bid opening being declared a holiday for the Owner, the bids shall be opened at the appointed time and location on the next working day.
- 7.2 The Bidders' names, the presence or absence of the requisite EMD and such other details as the Owner, at his discretion, may consider appropriate will be announced at the opening.
- 7.3 The Owner will prepare appropriate bid opening register and bidders present during the opening of the bids and Owner shall sign the same.

8. Clarification of bids

To assist in the examination, evaluation and comparison of bids, the Owner may, at his discretion, ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing with a dead line date and no change in the price or substance of the bid shall be sought, offered or permitted.

9. Preliminary examination

- 9.1 The Owner will examine the bids to determine whether they are complete, whether any computational errors, have been made whether required EMD has been furnished whether the documents have been properly signed, whether the bid validity is as required and whether the bids are generally in order.
- 9.2 The determination will take into account the Bidder's financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, as well as such other information as the Owner deems necessary and appropriate.
- 9.3 Prior to the detailed evaluation, the Owner will determine the substantial responsiveness of each bid to the bidding documents. For the purpose of these clauses, a substantially responsive bid is one which conforms to specifications and all the terms and conditions of the bidding documents without material deviation. The Owner's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 9.4 A bid determined as not substantially responsive will be rejected by the Owner and may not subsequently be made responsive by the bidder by correction of the non-conformity.
- 9.5 The Owner may waive any minor informality or non-conformity or irregularity in a bid, which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any bidder.
- 9.6 The Owner's determination as to the substantial responsiveness or otherwise of each bid or consideration of a minor informality or non-conformity or irregularity is final and conclusive.

10. Evaluation and comparison of bids.

- 10.1 The Owner reserves the right to examine the details given in the technical bid by visiting the office and fabrication workshop/facility of the bidder and take decision based on the visit.
- 10.2 The Owner will technically evaluate all bids previously determined to be responsive and open the price bids previously determined to be substantially responsive and technically acceptable with intimation.

11. Post-qualification

- 11.1 Notwithstanding the qualification requirements given in this document, the Owner will determine to its satisfaction whether the Bidder selected as having submitted the lowest evaluated responsive bid is qualified to satisfactorily perform the Contract.
- 11.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be calculated. If there is a discrepancy between the words and figures, the amount in words shall prevail.
- 11.3 The Owner reserves the right to negotiate with the lowest evaluated responsive bidder.
- 11.4 An affirmative determination will be a prerequisite for award of the Contract to the Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Owner will proceed to the next lowest evaluated bid to make a similar determination of that bidder's capabilities to perform satisfactorily.

12. Award Criteria

The Owner will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily for the items offered.

13. Notification of Award

- 13.1 Prior to the expiration of the period of bid validity, the Owner will notify the successful Bidder in writing by or cable or telex or fax, to be confirmed in writing by post, that its bid has been accepted. The notification of award may be sent in the form of Letter of Intend and/or Work order.
- 13.2 The signed acceptance of the notification of award & execution of agreement in the format attached on proper stamp paper by the Contractor will constitute a concluded contract.
- 13.3 Upon the successful Bidder's furnishing of Security Deposit, the Owner will discharge EMD submitted by unsuccessful bidders.

14. Security Deposit and Agreement

- 14.1 Simultaneously with the execution of the contract successful bidder shall furnish a Security deposit in the form of a Demand Draft from a nationalised bank drawn in favour of HLL Lifecare Ltd, Thiruvananthapuram payable at Thiruvananthapuram or a Bank Guarantee from a nationalised bank, for an amount equal to 5% of the total contract value as Security Deposit for his faithful execution of contract. The Security deposit should be valid until successful completion of the contract and acceptance of the Equipment/works by the Owner and will be released after acceptance of the Equipment by the Owner. In case of a delay in the works the validity of security deposit shall be extended.
- 14.2 Within 21 days of the receipt of notification of award from the Owner; the successful Bidder shall furnish the security deposit in the form of a Demand Draft or Bank Guarantee in the security deposit form to be sent along with the Notification Of Award.
- 14.3 Failure of the successful Bidder to accept the notification of award or submission of security deposit within the timeframe shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD, in which even the Owner may make the award to the next lowest evaluated bidder or call for new bids.
- 14.4 The successful bidder should also sign an agreement with HLL on proper stamp paper within 21 days of award of work. The agreement format is enclosed as **Schedule V**.

15. Earnest Money

- 15.1 Each bid must be accompanied by E.M.D.
- 15.2 The EMD is required to protect the Owner against risk of Bidder's conduct, which would warrant the security's forfeiture
- a. The EMD shall be in the form of Demand Draft from a nationalized bank drawn in favour of HLL Lifecare Limited, Thiruvananthapuram payable at Thiruvananthapuram.
 - b. E.M.D. of the unsuccessful bidders will be released after tabulating tenders, keeping only the earnest money of the first three lowest bidders. The earnest money deposit of the remaining two unsuccessful bidders will be released after the acceptance of the notification of award by the successful bidder.

- c. In the case of successful bidder, the Earnest Money will be returned after signing the agreement and submission of Demand Draft towards Security Deposit, which they will have to offer for the faithful execution of the contract.
- 15.3 The EMD may be forfeited:
- (a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Document; or
 - (b) In case of the successful Bidder, if the Bidder fails:
 - (i) to sign the agreement.
 - (ii) to furnish security deposit.
 - (iii) does not accept the correction of his bid price pointed out by HLL

SCHEDULE - II

GENERAL CONDITIONS OF CONTRACT

1. PROJECT INFORMATION

The detailed information of the project given below is as per Owner's present requirement. However, it is not binding on the Owner in any way and shall not govern the scope of works.

2. LOCATION

The machines to be installed in HLL Lifecare Limited Peroorkada Factory, Thiruvananthapuram.

3. PRICE

Price quoted should be firm without any escalation till the order is completely executed and should be for complete Supply, Installation, Testing and Commissioning of Automatic Three Line Square Packing Machines in pair for foil sealing of condoms at HLL Lifecare Limited Peroorkada Factory, Thiruvananthapuram on a turnkey basis as per the terms and conditions of this bidding document.

4. TAXES / DUTIES / LEVIES

The rates quoted for each item should be inclusive of all applicable taxes and duties and any other levies for the successful fabrication, Assembly, Leading, Installation, Integration and Commissioning of the packing machines.

5. INSURANCE

The Fabricator shall at his own expense carry and maintain insurance with reputed insurance companies to the satisfaction of the Owner as under:

i) Insurance of employees:

The Fabricator shall accept full and exclusive liability for the compliance of all obligations and responsibilities imposed by the Employees State Insurance Act, 1948 and its amendments and any liability or penalty which may be imposed by the Central, State or Local Authorities due to the reason of violation by the Contractor or sub-Contractor of the Employees State Insurance Act, 1948 and its amendments. The Contractor shall agree to fulfill the requirement of the Employees State Insurance Corporation and maintain

the declaration forms and all such forms, which may be, required in respect of the Contractor's, sub-Contractor's employees who are employed in the work provided for or those covered by E.S.I.C. from time to time under the agreement. The Owner shall retain such sum as may be necessary from the total contract value until the Contractor shall furnish satisfactory proof that all contributions as required by the Employees State Insurance Act, 1948 and its amendments have been paid by him.

ii) Workmen's Compensation:

Insurance shall be affected for all the Contractor's employees engaged for this contract. The Contractor shall also carry and maintain all other insurance, which may be required under any law or regulations from time to time. He should also carry and maintain any other insurance, which may be required by the Owner.

iii) Loss or damage and Indemnity Agreement:

The Contractor shall be responsible during the progress of work as well as guarantee period for any liability imposed by law for any damage to work or any part thereof or to any of the material or other things including those of Owner used in performing the work or for injury to any person or persons or for any property damaged in or outside the site. The Contractor shall indemnify and hold the Owner harmless against all liabilities, claims, loss or injury, including costs, expenses and attorney's fees incurred in the defense of same, arising from any allegation whether groundless or not, of damage or injury to any person or property resulting from the performance of the work or from any material used in the work or from any condition of the work or work site or from any cause whatsoever during the progress and maintenance of the work.

iv) Third party insurance:

Before commencing the execution of the works the Contractor, but without limiting his obligations and responsibilities, shall insure against his liability for any material or physical damage, loss or injury which may occur to any property, including that of the Owner, or to any person, including any representative of the Owner, by or arising out of the execution of works or in the work being carried out by the Owner, by or arising out of the provision of clause 5 (iii) here of. Such insurance shall be affected with an insurer and in terms approved by the Owner.

v) The Contractor shall take suitable **Insurance** policy, jointly in the name of HLL Lifecare Limited and the Contractor and the insurance should be valid till the satisfactory completion of the work. The copy of the policy shall be deposited with HLL before commencing the work.

6. ESCALATION

The rates quoted by the Contractor in the contract documents shall be final and shall not be subjected to any change due to the increase in labour wages or inflation in the cost of materials or any other price variations due to any reason during the stipulated time period of the contract or during the extended time period of completion.

7. PAYMENT TERMS

The payment terms are as follows:-

- a) 50% of the payment on pro-rata basis shall be released after satisfactory supply, of Three line square foil seal packing at HLL Lifecare Limited Peroorkada Factory, Thiruvananthapuram-5.
- b) Balance 40% of the payment on pro-rate basis shall be released within installation ,testing and 45 days of satisfactory continuous operation for 2 shift operation/days (16 hrs) / 45days validation, performance evaluation in terms of quality, quantity and commissioning, and final acceptance certificate issued by the competent authority.
- c) The balance 10% payment shall be released against a Performance guarantee valid for a period of one year from the date of the issue of final acceptance certificate of the entire system.

Tax Deduction: All statutory deductions like Service tax, Income Tax, E.S.I., P.F. or any other government imposed liabilities for this labor contract shall be borne by the Contractor (as applicable at the time of execution of job) and shall be deducted from each bill submitted by the Contractor.

Owner will not entertain the presentation of documents through Bank.

8. DEFECT LIABILITY PERIOD

The defect liability period of the work shall be 12 months from the date of completion of the work and this date will start from successful completion and handing over. If any damage or defect occurs in the work during this period then the Contractor shall rectify the damage or defect at his own expense to the satisfaction of the Owner .If the Contractor fails to do so, then the

Owner shall have the authority to get the work done by other means and the expenditure incurred shall be recovered from the Contractor.

Even if Inspection and/or tests are fully carried out by Owner or their representatives, the Contractor is not absolved to any degree of his responsibility to ensure that all equipment fabricated comply strictly with the requirements as per specifications given in the order, and the Owner shall be free to point out any defect till the defect liability period is over.

9. PERIOD OF COMPLETION

The machines should be successfully commissioned at Owners site within **TWO MONTHS** from the date of notification of award.

Time being the essence of the Contract, the completion period stipulated should be strictly adhered to. Delay in erection and commissioning of the equipment will cause loss and/or damage to Owner. The completion period shall be counted from the date of sending of Owner's intimation of acceptance of the Contractor's offer (Letter of Intent (LOI) and/or Work order).

The equipment should be erected, tested, commissioned and handed over to Owner strictly within the time stipulated.

11. FABRICATION SCHEDULE

The Contractor shall furnish to Owner, a PERT/BAR CHART, within 15 days of receipt of the Order. The PERT/BAR Chart, should give all important milestones. If any of the initial or intermediary milestones gets delayed for any reasons, the Contractor shall adjust the subsequent milestones in such a way that the final date for handing over of the equipment as per the Order is not effected.

12. PROGRESS REPORT

During execution of the contract, the Contractor shall furnish bi-weekly progress reports to the Owner indicating the progress achieved during the week and the total progress up to the last week as against scheduled and anticipated completion dates in respect of key phases of the work. The Contractor shall also furnish any other information in order to ascertain progress, if called for by the Owner.

13. LIQUIDATED DAMAGES FOR DELAYS

If the equipment is not erected, commissioned and handed over to the Owner within the time stipulated in the Order, Owner may at their option, either (1) recover from the Contractor liquidated damages at the rate of 0.5 % of the total contract value for every week of delay, subject to a maximum of 7.5 % of the total contract value, or (2) at the risk and cost of the Contractor and without prejudice to the other remedies/rights as per the Contract, terminate the order wholly or partially and complete it themselves or reassign it to other contractors.

14. INSPECTION AND TESTING

HLL shall have the right to inspect and measure the progress of execution of the Order. The Fabricator should make available all tools, instruments, apparatus, equipment, facilities and services to enable the Owner's nominee to carryout such inspection/tests without obligations. Notwithstanding any such inspection/tests carried out, the equipment shall be accepted only after successful commissioning at the site and the inspection/tests carried out earlier will not relieve his contractual obligations for conforming to the specifications under the Order.

15. DEFAULT BY CONTRACTOR

If the Contractor fails to maintain progress and quality of work proportionate to time period allotted for the work in spite of notices or complete the work within the stipulated time period or extended time period, then the Owner shall have the right:

- i) To determine the contract: In this event, the contract shall be terminated by giving written notice to the Contractor and the unfinished works shall be got completed by labours engaged by the Owner or through other agency at the risk and cost of the Contractor.
- ii) Without determining the contract: In this event, the remaining works shall be got executed through a fresh Contractor in which case the Contractor shall not have any objection or claim on this account.
- iii) Before determining the contract: In this event, if the Owner finds that the defaults of the Contractor can be rectified, then an opportunity shall be given to the same Contractor to rectify the defects /defaults in the specified time.
- iv) Termination of contract for death: If the Contractor is an individual of a proprietary firm and proprietor of the firm dies and if the Contractor is a

Attorney of partnership firm and dies, then the Owner has the right to terminate the contract unless and until the Owner is satisfied that the surviving partners are capable of executing and completing the remaining contract. In case of termination of contract, the legal representatives of the deceased Contractor are not entitled for any compensation or claim. Also, the Owner shall not levy any penalty against the damage caused by incomplete work.

- v) Termination of Contract in part or in full for CONTRACTORS default: If the Contractor fails to execute the work in the manner described in the contract documents or if he at any time, in the opinion of the Owner:
- a) Fails to carry out the works in accordance with the contract conditions or as per the specifications mentioned in the documents.
 - b) Stops the execution of works without giving prior information to the Owner.
 - c) Fails to carry out the works to the satisfaction of the Owner both with respect to qualities and time schedule.
 - d) Fails to supply sufficient or suitable tools, tackles, materials and labours etc.
 - e) Commits breach of any of the provisions of the contract.
 - f) Abandons the work.
 - g) Becomes bankrupt during the continuance of the work.

The Owner can terminate the contract in part or in full.

16. DELAY IN WORK EXECUTION DUE TO REASONS BEYOND CONTRACTOR'S CONTROL

- 16.1 Force majeure: If the execution of work is delayed due to force majeure, then Owner as per the affected period may extend the time period.
- 16.2 In case work is delayed due to non-availability of stores supplied by Owner or any decision by Owner holding the progress of work, the contractor then upon any such happening causing delay shall immediately but not later than 10 days, give notice thereof in writing to the Owner, but nevertheless use constantly his best effort to prevent or make good delay. The Owner may in his discretion grant such extension of time as may appear reasonable to him and the same shall be communicated to the

contractor in writing and shall be final and binding on him and the contractor shall be bound to complete the work within such extended time

17. COMMITMENT OF CONTRACTOR

1. Interpretation of Contract documents:
2. All the documents forming part of the contract are to be taken as mutually explanatory, supplementary and complementary to each other. If there is any error, omission or discrepancy in any of them, it shall be brought to the notice of the Owner. The decision of the Owner shall be final and binding. The Contractor shall execute the work accordingly.
3. The Contractor shall examine all the contract documents thoroughly including the scope, nature and magnitude of works he has to execute in accordance with the contract documents.
4. There may be change in layout of site as per technical requirements and the Contractor shall not be entitled for any claim due to such changes & should carry out such changes.

18. STAFF AND WORKERS

The Contractor shall depute qualified engineers for execution of the project. The technical staff employed by the Contractor shall be responsible for the quality and workmanship of the work as per the satisfaction of the Owner. The Contractor's supervisory staff should follow the instructions given by Owner or his authorised representative. If any of the Contractor's staff members is incapable or in-experienced, in the opinion of the Owner, then he should be removed immediately and the Contractor should do suitable substitution.

Technical staff employed should be degree holder from a government-recognized institution or equivalent with at least 3 years practical experience of work in addition to Diploma holders and other experienced supervisory staff.

If the workers or the supervising staff of the Contractor are involved in riotous or illegal activities to such an extent that it becomes necessary to hand over the matter to the police then the Contractor would be solely responsible for the case and all the expenses incurred in the legal proceedings shall be borne by the Contractor.

19. CO-OPERATION WITH OTHER AGENCIES AT SITE

The Contractor or his authorised representatives must work in close co-operation with the agencies executing other works forming the part of the project and also with the representatives of the Owner for the execution of works which are not included in the contract. Contractor shall permit free access and generally afford reasonable facilities to other agencies or departmental workmen etc.

The Contractor's quoted amount/rate shall be deemed to cater for all the above contingencies and nothing extra shall be admissible on this account.

Contractor should keep his working site clean and the materials brought for work shall be kept in a properly stacked / stored way. The work site should be swept at the end of each working day after removal of debris / left over materials. The Contractor has to take full care so as not to spoil or damage other Contractor's/ Owner's job / material.

20. SAFETY OF ADJOINING PROPERTIES

The Contractor or his authorised representatives should conduct all the operations necessary for the execution of works in such a manner that no inconvenience / damage is caused to the properties of other persons & Owner.

21. SETTLEMENT OF DISPUTES

Any disputes or differences or questions or claims arising under or relating to or touching this agreement shall be referred for arbitration to a Sole Arbitrator under the provisions of the Arbitration and Conciliation Act 1996 or any statutory modification or re-enactment thereof for the time be in force. The award passed by the arbitrator shall be final and binding on the parties hereto.

The contract shall be deemed to have been concluded at Thiruvananthapuram, Kerala and suits and proceedings, if any, shall be only in the courts of competent jurisdiction in Thiruvananthapuram.

The venue of arbitration shall be the place from where the contract is issued.

22. EXECUTION OF WORK

General:

All the works shall be executed in accordance with the detailed drawings, specifications and instructions to be given by the Owner or mentioned in the contract document.

Drawings:

The drawings given in the tender document are as per our present requirement and are meant for the purpose of giving idea of the type and quantum of work to be executed. The Contractor has to examine the existing machines at Owner's facility and discuss with Owner for the exact requirement. He should execute the work as per the detailed working drawings given to him from time to time for execution.

Inadequate/substandard works:

If any work executed by the Contractor is found to be of bad workmanship or not as per the drawings, then the same is to be dismantled and re-executed by the Contractor without claiming any extra payment or extension in time period.

Default of Contractor in compliance:

If the Contractor or his authorised representative fails to follow the instructions given by the Owner regarding any of the works, then the same shall be got executed by other persons employed by the Owner and the expenses incurred shall be borne by the Contractor.

Discrepancies between instructions:

If any discrepancy occurs between the various instructions conveyed to Contractor or his authorised representative or if any misunderstanding arises between the Contractor's staff and Owner's staff, the Contractor shall report the matter immediately to the Owner. The decisions of Owner shall be final and binding. Moreover, no claims for losses due to discrepancies between instructions, doubts or misunderstandings shall be admissible.

Change in specifications:

If there is any variation in specification or any change in make of item, then it has got to be approved from the Owner prior to installation or execution. The rate for the works not mentioned in the schedule will be derived from the rates of similar works mentioned in the schedule of work.

Work not specified in the specification:

If, for any work, no specification has been given in the tender document, then the work will be executed as per the IS specifications, and if the work is not covered by IS specifications also, then it should be executed as per standard engineering practice, subject to the approval of the Owner.

23. LIABILITIES FOR DEFECTS AND RECTIFICATIONS

If it shall appear to the Owner that any work has been executed with imperfect or unskilled workman, or of quality inferior to that contracted for, or otherwise not in accordance with the contract, the Contractor shall on demand in writing from the Owner or his representative specifying the work, notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct that work so specified at his own charges and cost, and in the event of failure to do so within a period to be specified by the Owner or his demand aforesaid, the Owner may on expiry of notice period rectify or remove, re-execute the work at the risk of Contractor and the cost shall be recovered from the Contractor. The decision of the Owner as to any question arising under this clause shall be final and conclusive.

24. CARE OF WORKS

From the commencement to the completion of works, the Contractor shall take full responsibility for the care of all works including all temporary works and in case any damage or loss occurs then the Contractor shall at his own cost repair and make good the same so that on completion of the work, the same shall be in good order in every respect in accordance with the contract and to the satisfaction of the Owner.

25. LABOUR LAWS AND SAFETY REGULATIONS

Labour Laws:

- i) Labourers below the age of 18 years shall not be employed on the work.
- ii) The Contractor shall not pay less than what is specified by the law to labourers engaged by him on the work.
- iii) The Contractor shall, at his own expenses, comply with all labour laws and the Owner shall not be responsible for any recovery/penalty imposed by the respective authorities for violating the labour laws.
- iv) If the Contractor is covered under the Contract Labour (Regulation & Abolition) Act, he shall obtain a license from the licensing authority (i.e. the Office of Labour Commissioner), by payment of the necessary prescribed fee and deposit, if any, before starting the work.
- v) The Contractor shall furnish to the Owner, the details of the workers employed on the works.
- vi) The Contractor shall comply with the provisions of the existing rules and regulations relating to labour laws.
- vii) The Owner shall on a report having been made by an inspecting officer as defined in Contract Labour (Regulation and Abolition) Act, 1980, have the power to deduct from the amount due to the Contractor any sum required or estimated to be required for making good the losses suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the workers, or if deductions made from his or their wages which are not justified by the terms of contract or non-observance of the said regulations.

Minor Accident on Duty:

For cases of minor accident on duty not covered under compensation by insurance, the Contractor shall have to compensate the affected person by reimbursing these medical expenses against submission of actual expenditure document. The absence from duty, if takes place, due to such accident shall be considered as special leave and full payment shall have to be made for duration of such absence.

Provident Fund:

It shall be solely the Contractor's responsibility to complete all provident fund formalities as per statutory regulations.

26. SAFETY CODE:

Safety and Protection:

The Contractor shall adhere to safe construction practice and guard against hazardous and unsafe working conditions. While carrying out the work, the Contractor should provide for;

- i) Safety of personnel engaged in the construction.
- ii) Protection and safety of works and materials during their progress.
- iii) Sanitary and hygienic conditions of working and living for his workers, as required by the Owner.

Use of Safety Gadgets:

The Contractor shall have to ensure availability and use of all desired safety gadgets like safety belts, helmets, goggles, hand gloves etc.

Unsafe working condition:

If any activity is found to be progressing without proper and complete safety measures (including use of safety gadgets) being implemented, the Contractor may be asked to stop the work unless he fulfills the desired safety norms. Such delays shall not be allowed to be considered for extension in duration of the allotted time period.

First Aid:

The Contractor shall provide first aid facilities for his employees and those of his sub-CONTRACTORS. The requisite first aid box and medicines should always be available at work site.

Contractor's Barricades:

The Contractor shall erect and maintain barricades required in connection with his operations to guard or protect: -

- i) Excavations
- ii) Hoisting Areas
- iii) Areas adjudged hazardous by the Contractor's or Owner's representatives.
- iv) Charged electrical panels.
- v) Owner's existing property liable to get damaged by Contractor's operation.

Preservation of peace:

The Contractor shall take precautions to prevent any riotous or unlawful behavior by his workers, for the preservation of peace and protection of inhabitants and the security of property in the neighborhood of the work.

27. DETAILS OF WORK EXECUTION

- i) The work shall be done in such a manner so as to clear work front availability for other agencies working at site.
- ii) Finish of work shall be as per drawings & details given by Owner.
- iii) In general the complete work is to be done as per Indian Standard and esthetical norms as specified and detailed in Tender

28. CONTRACTOR'S SCOPE OF SUPPLY

All consumables required for installation, testing and commissioning of packing machines specified in the Schedule of Work, inclusive of welding gases, protective gears, all tools, tackles, scaffolding, consumables & testing equipments shall be procured and supplied by the Contractor at his own cost except for any items specified as Owner supplied.

29. RECOVERY FROM THE CONTRACTOR

- i) If the Contractor or his employees damage or destroy the property of the Owner, then the same shall be replaced/ refunded by the Contractor; otherwise the expenses may be recovered from his bill or security deposit.
- ii) All compensation & recoveries to be made as per terms of the contract shall be deducted from the Contractor's bill or security deposit.
- iii) Forfeiture of Security Deposit: Whenever any claim against the Contractor is to be recovered then the same may be made from the security deposit. If the Contractor abandons the work or leaves the work incomplete, then the Owner has the right to forfeit the security deposit.

30. SPECIAL INSTRUCTIONS

- a) The work should be carried out in truly professional manner, neatly finished with proper line, level and plumb. Cleanliness and finishing of the job is of utmost importance. Hence the job should be done most carefully with best workmanship. For all finishing jobs samples should be approved from the Owner before completely executing the work.
- b) The Owner should be immediately informed for any discrepancy in drawings, specifications and instructions in the execution of job before actual execution of particular item having discrepancy.
- c) Any item found to be having been executed with poor workmanship then the Contractor shall have to rectify /reconstruct the work as specified by Owner. No extra charge will be admissible in such case. If CONTRACTORS fails to do so, the Owner reserves the right to rectify/reconstruct the work through some other agency at the expenses of Contractor.
- d) The schedule of activities as submitted by the Contractor shall have to be strictly adhered to. Regular progress reports shall have to be submitted by the Contractor giving all details for monitoring of the schedule.
- e) Special care is to be taken for cleanliness of the site. After the end of day's work, the site should be cleaned immediately.
- f) The Contractor shall have to co-operate with the agencies executing other works in the same area.
- g) While executing the work, the Contractor shall ensure safety and security of the property of the Owner so as to avoid theft etc.

31. SECRECY

HLL Lifecare Limited is the sole owner of the technology, equipment specification and drawings given along with the bidding document and to be given to the Contractor. The details given to bidders and Contractor should be kept confidential and should not be used for any other purpose or should not be used or transferred to third party. The Contractor has to sign a secrecy agreement with the Owner.

SCHEDULE IV

FORMAT FOR QUOTING


**Schedule for the Supply, Installation, Testing
and Commissioning of Automatic Three Line Square Packing
Machines in pair foil sealing of condoms at
HLL Lifecare Limited Peroorkada Factory,
Thiruvananthapuram**

SI.No.	Description of Item	Unit	Quantity	Rate in Rs.	Amount in Rs.
1	Supply, Installation, Testing and Commissioning of Automatic Three Line Square Packing Machines in pair for foil sealing of condoms at HLL Lifecare Limited Peroorkada Factory, Thiruvananthapuram	SET	1.00		
	Basic price in Rs.				
	Packing & Forwarding charges Rs.				
	CST in Rs.				
	Freight charges in Rs.				
	Other taxes/Charges any in Rs.				
	Gross Amount in Rs.				

(In words)

I agree to supply all the items as per schedule at the rates quoted by me as above and the terms and conditions of the tender document.

SIGNATURE OF THE SUPPLIER

HLLIFECARE LIMITED LIMITED					
CENTRAL ENGINEERING DIVISION					
CENTRAL ENGINEERING DIVISION	User Requirement Specifications				
	Equipment	THREE LINE SQUARE PACKING MACHINE			
	Identification #	TS-CED-001	Document#	URS/TS-PKG/01	
	Effective Date	05-09-2014	Revision#	00	

**User Requirement
 Specifications –
 Three line square packing
 Machine
 Equipment ID: TS-CED-001**



HLLIFECARE LIMITED LIMITED					
CENTRAL ENGINEERING DIVISION					
CENTRAL ENGINEERING DIVISION	User Requirement Specifications				
	Equipment	THREE LINE SQUARE PACKING MACHINE			
	Identification #	TS-CED-001	Document#	URS/TS-PKG/01	
	Effective Date	05-09-2014	Revision#	00	

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HLLIFECARE LIMITED LIMITED

CENTRAL ENGINEERING DIVISION

CENTRAL ENGINEERING DIVISION	User Requirement Specifications				
	Equipment	THREE LINE SQUARE PACKING MACHINE			
	Identification #	TS-CED-001	Document#	URS/TS-PKG/01	
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HLL LIFECARE LIMITED LIMITED					
CENTRAL ENGINEERING DIVISION					
CENTRAL ENGINEERING DIVISION	User Requirement Specifications				
	Equipment	THREE LINE SQUARE PACKING MACHINE			
	Identification #	TS-CED-001	Document#	URS/TS-PKG/01	
	Effective Date	05-09-2014	Revision#	00	

1.0 OVERVIEW

HLL Lifecare Limited is a public sector undertaking under the Ministry of Health and Family Welfare. It was incorporated in 1966 with the primary goal of producing quality condoms for the National Family Planning Program. HLL continues to be a leader in manufacturing condoms and contraceptives in India. HLL had since diversified into the manufacturing of other healthcare products such as Blood Bags, Surgical Sutures etc.

HLL in its quest to become a comprehensive healthcare player, proposed to set-up an Engineering excellence department for the fabrication of machines indigenously to cop up future machine demands in various manufacturing units..

For this purpose HLL has decided to engage Central Engineering Division to manufacture a Three line Primary Packing machine, which complies all the statutory requirements.

1.1 PROJECT STANDARD

The facilities, upon completion, shall be in compliance with the Indian FDA (Schedule R), WHO, USFDA, and EUGMP and also the HLL's internal quality standards.

1.2 EQUIPMENT DESCRIPTION

Three lines square packing machine shall be used for Primary Condom packing. Three line Square Packing machine consists of a product bowl with a vibratory mechanism. Due to the electro magnetic vibration the condom will pass to the machine with the respective paths.

The machine is supported on main frame made up of SS square tubes, which has the capability to withstand the dynamic loads.

The overall design ensures a dust free operation and automatic to obtain satisfactory packs.


The machine will be controlled by the control system of the equipment.

1.3 REFERENCE STANDARDS/GUIDELINES FOR EQUIPMENT

The equipment should comply with the following guidelines / standard:

GMP-Regulations

- EU-GMP-Guideline
- CGMP in Manufacturing, Processing, Packing.

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2.0 PRODUCTIVITY REQUIREMENT.

SI No	Specifications	Remarks
2.1	Productivity Requirement	
2.1.1	Desired/ suggested capacity ----Minimum 120 condom/ minute (3line x 40 packets per min)	Essential
2.1.2	Size of pack – 57x55 mm format, sealing jaw as per drawing	Essential
2.1.3	Change Over Time (if applicable) Vendor to give information on change over time from one product to another product	Optional
2.2	Cleaning Time (if applicable)	
2.2.1	The equipment shall be easily accessible for cleaning the non-product contact part at maintenance side of the equipment	
2.2.2	Equipment contact parts shall be easily dismantable and cleanable.	

3.0 SAFETY REQUIREMENT

SI No	Specifications	Remarks
3.1	General	
3.1.1	In the event of equipment malfunction or loss of utilities, the unit must contain all necessary protection devices to ensure that the equipment and the article remain in a safe condition	Essential
3.1.2	Noise level below 75 db at a distance of 1 m from the equipment	Essential
3.1.3	Emergency stop function on all accessible areas	
3.1.4	Appropriate failure detection and alarm notification	
3.1.5	Appropriate closure of all the rotating parts	
3.1.6	Interlocking with limit switch	

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3.1.7	Proper earthing of the equipment	
3.2	Power failure and recovery	
3.2.1	On power failure equipment shall come to rest, to protect operator, equipment itself and the product.	
3.2.2	Power restart must not be automatic and human intervention must be required	
3.2.3	After regain of power the equipment should start from the step it stopped	


4.0 GMP REQUIREMENTS

SI No	Specifications	Remarks
4.1	Process control: The equipment must operate and control the following process parameters.	
4.1.1	Speed of the Machine	
4.1.2	Sealing temperature	
4.1.3	Silicon dosing quantity	

5.0 FAILURE MODE DETECTION

SI No	Specifications	Remarks
5.1	Equipment shall be capable to detect the following failure, notify the operator with alarm and shutdown the process	
5.2	Emergency stop	
5.3	Bowl vibrator stop	
5.4	Low compressed air	


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6.0 LEVEL OF INSTRUMENTATION

Sufficient and suitable instrumentation for the process, safety and productivity control as indicated in the following table:

Type of control	Purpose	Instrumentation	Remarks
Speed of the machine	To monitor & Control the speed of the machine	Tachometer	
Empty foil sensor	To sense the empty foil as soon as it reach empty	Sensor with alarm	
Silicon oil dosing	To monitor the quantity of silicon oil	Timer	
Pre- jamming detection	Pre-jamming detection sensor.	Control sensor	
Level of lubricant	To monitor the level of silicon oil	Level sensor	

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7.0 CLEANING REQUIREMENT

- 7.1 All bolts, nuts on the exterior part of equipment will be with cap head or cap nut.
- 7.2 Design of equipment should enhance cleaning feasibility by providing minimum sharp corners, minimum crevices & smooth finished welds joints.
- 7.3 The equipment shall be compatible to different cleaning agents

8.0 QUALIFICATION REQUIREMENT

8.1 General

- 8.1.1 Equipment shall be qualified for design phase (DQ), installation phase (IQ), Operational phase (OQ) and the performance phase (PQ).
- 8.1.2 Vendor shall support client in execution of all the qualification phases.

9.0 MATERIAL OF CONSTRUCTION


- 9.1 All following metallic critical contact surfaces should be constructed of 316L grade stainless steel or better with internal mirror surface finish $< 0.5\mu\text{m Ra}$ and external surface finish matt finish $< 1.2\mu\text{m Ra}$.
- a) Surfaces coming in direct contact of product
- 9.2 All non-product contact metallic surfaces should be constructed of 316 grade stainless steel or better, external surface finish as matte finish $< 1.2\mu\text{m Ra}$.
- 9.3 All welds should be ground finished to $< 1.2\mu\text{m Ra}$ and properly passivated

10.0 USE OF LUBRICANTS

- 10.1 Any lubricant, used in the equipment must be of food grade and non-toxic.

11.0 DATA INTEGRITY(Optional)

- 11.1 System security shall be provided to access the operating system and configurable parameter values through access password. 3 level accesses shall be preferred

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11.2 BATCH RECORD PRINTING (QUOTE AS OPTIONAL)

Equipment identification number	Remarks
Process code &/or identification (process program number)	
Program information and parameters	
Start date and time	
End date and time	
All failures and alarms	
Process record, preferably a real time graphical representation for important process controls parameters.	
Operator code and name	
There should be a possibility to store and archive the data for future retrieval	
Company logo in the report	

11.2.1 A complete batch record indicating the following important parameters in English language, but not limited to these:

11.2.2 The System shall include the following important parameters not limited to these:

11.2.2.1 Alarms.

11.2.2.2 Product information and set parameters (if applicable).

12.0 Desired documents


12.1 Phase 1: Preordering of the equipment

12.1.1 Filled in URS

12.1.2 Equipment layout drawing fitted in the room layout block

12.1.3 Detail technical offer that support the compliance of the URS

12.2 Phase 2: Post ordering and prefabrication stage of the equipment.

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12.2.1 Functional design specification and technical specification, that should contain the following:

- Equipment descriptions and its function
- Equipment operation steps
- List of failure indications
- List of interlocks
- List of input/outputs and its functions
- Critical list of major component, devices and instruments with their specific functions, specifications data sheet
- List of media contact surface and its MOC
- Schematic/GA diagram of the equipment


12.3 Phase 3: Fabrication stage of the equipment

12.3.1 Vendor shall provide the FAT protocol at least 1 month in advance of the date of FAT, for the approval by the user.

12.4 Delivery of the equipment

Vendor shall provide the following documents in the delivery package in minimum 2 sets. The delivery package shall reach the site of user at least 15 days before the delivery equipments for the engineering check of the documents.

- 12.4.1 Operation and maintenance manuals, preventive maintenance schedule for equipment major component as well as the operating system.
- 12.4.2 Operation and maintenance manuals for the bought out items.
- 12.4.3 Installation instructions/ guideline for equipment.
- 12.4.4 Final as-built drawing for equipment.
- 12.4.5 Spare and/ or change parts list with ordering information.
- 12.4.6 Weld verification reports.

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12.4.7 Instrument calibration certificates with respect to the traceable national reference standard instrument and their calibration procedure.

12.4.8 Guaranty/ warranty certificates for each equipment and major bought-out items, such as PLC, printer, recorders, instrumentation etc.

13.0 Training

13.1 A special training for operators has to be included

13.2 A special training for technical staff has to be included

14.0 Technical requirement

14.1 Basic technical requirement

14.1.1 A proposal of a possible installation layout should be added to the documentation.

14.1.2 The manufacturer has to give the clear details on the total weight and the capacity of the equipment.

14.1.2 The construction of the complete system should be described in the documentation in detail.

14.1.3 All revolving parts should be mounted on antifriction thrust bearings.


14.1.4 All the required conditions and data values are displayed on the touch screen.

14.1.5 Cables, air tubes, etc required from the point (single utility point) to equipment is in scope of vendor.

14.1.6 Vendor shall provide special tools for maintenance of the equipment.

14.1.7 Space below the equipment shall be six inches for the accessibility of cleaning.

14.1.8 Supply of three line square packing machines with auto feeder and linear feeder and accessories as per GA drawing no. [HLL-CED-B3-001](#) capable of foil sealing with automatic silicon oil dosing quantity from 100mg to 1000mg and tested and rolled condoms different sizes a type, b type ,a type,b type and 56 mm width condoms in rolled condition. plc based automation package with manual override for the integration of the three line square packing machine and accessories to complete the foil sealing of rolled condoms with silicon dosing.

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14.1.9 size of pack – 57x55 mm format

14.1.10 Multiposition pneumatic cutting with zig zag perforation at single point, programmable cutting 1, 2,3,4,5,6,7,8,9,10.

14.1.11 Cutting unit.(**Perforation** Single point cutting and perforation is equipped with modified cutting unit)

14.1.12 CONDOM SIZE – 53 MM +/- 2MM.

14.1.13 Automatic stopping system for foil finishing in the loaded reel.

14.1.14 Pneumatic pump 3 lanes for dozing lubricant in the range of 200 to 1000 mg per pack.

14.1.15 Automatic stopping system for foil finishing in the loaded reel.

14.1.16 Pneumatic pump 3 lanes for dozing lubricant in the range of 200 to 1000 mg per pack.

14.1.17 Pre-jamming detection sensor.

14.1.18 Sealing temperature – interlock system.

14.1.19 Oil detection system (no-lub alarm).

14.1.20 Sealing jaw


14.1.21 The works involved are inclusive of suitable design, integration, and synchronization of the system to fulfill three line square format with different materials of foils.

14.1.22 Drive system: it consists of direct driven motorized gearbox solid shaft type with suitable out put rpm connected to the main shaft through roller chain/standard/latest method drives with suitable roller chain sprockets and also able to drive the sealing rollers, slit cutters and the pulling system etc to match the linear speed of the foil movement.


14.1.23 Foil release mechanism: foil feeding should be with most efficient mechanical drive with standard energy efficient engg transmission method.

14.1.24 Cooling system: a centrifugal blower with suitable out let hose is to be provided for cooling the sealed foils on line. Specification of the blower with ductron hose.

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- 14.1.25 Material of construction: all the other parts of the machine body should be with SS 304 to avoid rusting during running and periodical painting expenses. the material used in the paths and contact parts should be perfectly in conformance to eliminate handling damage to the natural rubber product and as per WHO,GMP standards. Standard engineering materials should only be used in the case of other components like gears, bushes locks used for the mechanism used in the integration of the system with accessories. All the specifications are given in the relevant drawings of parts.
- 14.1.26 Slit waste removal: two small suitable blowers are to be provided for the sucking of slit waste generated during slitting of the foils during running. slitting cutters should be as per the drawing
- 14.1.27 Cutting and perforation: pneumatic cutting with single station cutting and perforation is to be used. The specification and cutting unit with plc controlled cutting selection.
- 14.1.28 Foiled strip movement: proper chute arrangements are to be provided for the discharge of foils at the rate of 120 pcs per minute.
- 14.1.29 PLC control system: all the components like sensors, timers, motor controllers, temperature controls, temperature switches, solenoid operated valves, wiring and hardwares and softwares will be incorporated to carry out the complete feeding and foiling process. process parameters setting
- 14.1.30 All controllers should be suitable for withstanding power fluctuations and with soft starting technology. Pneumatic control valves and other actuators are to be of suitable design with the space limit mentioned.
- 14.1.31 Necessary painting/powder coating works suitable for dusty and hot environment as per standard norms. Suitable sensing and control system should be provided for completing the process starting from foil feeding, oil feeding, foiling and cuttings. Static electricity dischargers should be provided wherever necessary.
- 14.1.32 Rate should be quoted separately for supply and installation like integration, testing and commissioning of one such system as per price schedule.& Bill of materials should be provided separately in support to the supply.
- 14.1.33 Commissioning: commissioning of the system or any part thereof shall be commenced by the bidder immediately after receipt of intimation from HLL. HLL shall supply the operating personnel and all raw materials, utilities, lubricants, chemicals services and other matters required for commissioning.
- 14.1.34 Performance test: the performance test shall be conducted by the bidder during the commissioning of the system to ascertain whether the system can attain the functional guarantees specified in the technical specification.
- 14.1.35 Operational acceptance: operational acceptance shall occur in respect of the system when the performance test has been successfully completed and the functional performances are met.
- 14.1.36 Period of warranty shall be 12 months from the date of installation and commissioning as certified jointly by the supplier and the purchaser.
- 14.1.37 The bidder shall attend the pre-bid conference if any arranged by HLL
- 14.1.38 Three copies of instruction/operational manual (especially for brought out items) and maintenance manual should be supplied along with the machine.
- 14.1.39 A list of spare parts should be provided. a minimum set of spare parts should be provided for each machine.
- 14.1.40 Brought out items such as electrical/electronic items, electric heat banks etc should be as per relevant

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indian standards approved certifications.

15.0 Level of automation

15.1 The equipment should operate with minimum operator involvement. The equipment control panel must be provided with PLC.

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SI No	Item	Specifications	Qty	Make	Description
1	MAIN MOTOR (GEARED TYPE) DIRECT DRIVE.	P=400 WATTS, 0.37 KW, 1/2 HP, 220V, 2.5/1.4A GEAR RATIO=1:38, Output RPM: 40	1	NORD/ROSI/BONFIGOLI	1. GEAR RATIO :- 1:38 2. SUPPLY VOLTAGE (VAC/HZ) :- 1 X 440/ 50 3. SPEED :- 1500 rpm 4. TORQUE :- 5.3 Ncm 8. THIS MOTOR SHOULD BE THERMALLY PROTECTED. 9. COOLING TYPE : F1 10. ENCLOSURE : IP 55 It should be as per IS 12615
2	TRANSFORMERS	250 K , 240 V AC, 50 Hz	3		It should be as per IS 2026
3	COOLING FAN BLOWER	V-220V, FREQUENCY-50Hz, P=28 W, FLOW RATE=1.7m³/min,	3		It should be as per IS 4894.
4	UP MOULD TEMPERATURE CONTROLLER/ UNDER MOULD CONTROLLER	RANGE-50°-1300°C , NUMBER OF PORTS- 8NOS FREE PORT- 2NOS, CONNECTED LINES-6NOS PID Controller	1 set each	AUTONICS/ OMRON	
5	HEATER CATRIDGE	650 W, HIGH DENSITY CATRIDGE HEATER IN STAINLESS STEEL HOUSING LENGTH 230mm- Ø18.75mm 2 LEAD WIRES (EACH 300mm LONG, Fibre Glass Insulated 1.5sq mm, 240V,700W) with suitable heat resistant washers for continuous Operation	2		Heater & washer should be made for continuous operation , Heater Body should be made of inconel with proper body insulation as per IS
6	SOLINOID VALVE FOR PUMP WITH PUP TUBE	a) Solenoid Coil made-pc, SGI-A2, AC-220V, 3.4VA, I=16mA b) 5PORTS IN VALVE (TWO SIDE CONNECTEION) one touch connectors-3, inlet connection-1 Inlet-8MM (One touch) outlet connections-2 Outlet -6MM (One touch) One connection is air regulator type.	1	FESTO	
7	AUTO CUTTER SOLINOID VALVE (2NOS), CONNECTED		3	FESTO	

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	TO COMMON PU TUBE				
8	PNEUMATIC ACTUATED SILICON OIL DISPENSER	PRESSURE-3BAR, CAPACITY- 200-100ml/SHOT WITH SUCTION AND DELIVERY NRV WITH INJECTOR NOZZLE INSIDE SURFACE ROUGHENED, STROKE RATE 0-60 STROKE/min, connections/ point-6NOS	1	FESTO	
9	COUNTER	100-240V AC, 4.5 VA, FREQUENCY-50Hz, TERMINAL-6, USED TERMINALS-4 (USED PORT- 1,4,5,6)	1	AUTONIX/ OMRON	
10	FUSE	5A-2NOS, 2A-2NOS	4	SCHNEIDE R/L&T/HAV ELS	It should be as per IS 13703.
11	PROXIMITY SWITCH (SENSOR)	FREQUENCY RESPONSE MAX= 500HZ, SENSING RANGE MAX= 4mm, SENSOR INPUT=INDUCTIVE, SUPPLY OF VOLTAGE DC= 30 V, SUPPLY OF VOLTAGE DC MIN= 10V	3	AUTOMICS /OMRON	It should be as per IS 6875.
12	LIMIT SWITCH	16A, 1/2 HP, 125OR, 250 VAC, 0.6A, 125VDC, 0.3A, 250VDC, 16(3)A, 250V	3	SCHNEIDE R/L&T/HAV ELS	It should be as per IS 6875.
13	INVERTOR	FR-S520E-0.1K TO 3.7K(-C)	1	MITSUBUS HI ELECTRIC/ SIEMENS	
14	DIGITAL PRESSURE SWITCH	DUAL DISPLAY TO CHECK (CURRENT VALUE AND SET VALUE), 3 COLOUR DISPLAY , COPY FUNCTION OF SETTING DETAILS, 3-MODE SETTINGS, SIZE 30X25.5 MM	1	FESTO/JA NATICS	It should be as per IS 6875.
15	DIGITAL TEMPERATUR E CONTROLLER INDICATOR(PI D).	PID CONTROLLER , MULTI RANGE- RTD , THERMO COUPLE , OUTPUT SSR 100/240 V AC	1	AUTONICS/ OMRON	It should be as per IS 6875.
16	UPMOULD/ UNDER MOULD	FLAT SENSOR(BUTTON TYPE)	2	AUTONICS/ OMRON	It should be as per IS 6875.


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	HEATER SENSOR				
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17	MCB 20 A	450 V , 50 Hz	1	SCHNEIDER/L&T/HAVELS	It should be as per IS 2516
18	PROXIMITY SWITCH (SENSOR) 3 PIECED FOR PUMP (SILICON OIL)	10-30V DC , 8 MM PNP , MAX LOAD-300 MA	3	AUTONIC S/OMRON	
19	FILTER REGULATOR WITH DIAL GAUGE (2NOS) WITH PU TUBE	MAX PRESSURE 10 BAR, SET PRESSURE 0.5 TO 10 BAR		FESTO/JANATICS	2 CONNECTIONS 1- IN AND 1- OUT, 8 MM DIA TUBE CONNECTION
20	SLIP RING(4NOS)	SET; As per sealing jaw	4		
21	ROTAY SWITCHES (ON/OFF)	440 V AC ,15A	10	SCHNEIDER/L&T/HAVELS	It should be as per IS 6875
22	PUSH SWITCHES (ON/OFF)	440 V AC ,5A	2	SCHNEIDER/L&T/HAVELS	It should be as per IS 6875
23	EMERGENCY STOP	230 V AC ,5A	1	SCHNEIDER/L&T/HAVELS	It should be as per IS 6875
24	POWER SUPPLY SOURCE 24 V DC	24 V DC	1	SCHNEIDER/L&T/HAVELS	It should be as per IS 6875
25	VFD DRIVE FOR MAIN MOTOR	0.4 KW , 450 V AC , 50 HZ	1	SIEMENS /ALENBRADLEY/ABB	
26	MCB 10 A	230V AC ,50 Hz	3	SCHNEIDER/L&T/HAVELS	It should be as per IS 2517
27	3 C X 4 Sq mm Heat Resistant Cable	PVC Sheath(Fibre glass type with insulation)	50 mtrs	FINOLEX/HAVELS/GLOSTER	It should be as per IS 649
28	4 C X 4 Sq mm Heat Resistant Cable	PVC Sheath(Fibre glass type with insulation)	50 mtrs	FINOLEX/HAVELS/GLOSTER	It should be as per IS 649

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29	5 C X 2.5 Sq mm Cable	PVC Sheath	50 mtrs	FINOLEX/ HAVELS/ GLOSTE R	It should be as per IS 649
30	3 C X 2.5 Sq mm Cable	PVC Sheath	50 mtrs	FINOLEX/ HAVELS/ GLOSTE R	It should be as per IS 649
31	Sensor Cable	Fibre Glass Type	50 mtrs	FINOLEX/ HAVELS/ GLOSTE R	
32	MCCB	120 A , 440 V AC ,50Hz	1	SCHNEID ER/L&T/H AVELS	It should be as per IS 6875
33	Contactors with Relay	24 V DC	18	SCHNEID ER/L&T/H AVELS	
34	Analog/DIGITAL CONVERTER 64 Bit	24 V DC	1	SCHNEID ER/L&T/H AVELS	

15.2 Specific requirements

- 15.2.1 Variable speed drives to be provided for main motor.
- 15.2.2 Preferred makes for Motor: Kirloskar / Compton Greaves/ Siemens/ABB
- 15.2.3 Preferred makes for PLC: Siemens / Allen Bradley
- 15.2.4 Preferred make of Pneumatics: Festo.
- 15.2.5 Provision of Light

15.3 Utility Requirement

Electricity: _____(Report Requirement)
Compressed air: _____(Report Requirement)

16.0 Good Engineering Practices Requirements

- a. Equipment must be fabricated following all Good Engineering Practices. The vendor's Quality System must follow applicable national or international standards.
- b. Vendor must generate all applicable documents during all phases of equipment fabrication i.e. design, fabrication, testing and shipment as per applicable standards e.g. GAMP.

- c. All sensors, controllers, PLC, transmitters, indicators and any other controller or indicators to read, print or control any of the parameter, will have to be calibrated, traceable to National or international standards. Original calibration certificate along with traceability to be submitted by vendor in their IQ file
- d. All material of construction should have test certificate
- e. Vendor must generate and provide all specifications and test certificates of software used in the equipment control and/or monitoring system.

17.0 Inspection and testing

- a) System shall be inspected and tested (FAT) at the Vendor's site in the presence of user's representative before delivery.
- b) Vendor shall prepare FAT and SAT protocol and get approved from Client
- c) Minimum 3 days shall be reserved for FAT and SAT each and vendor shall ensure the availability of relevant personnel test material and measurement devices.

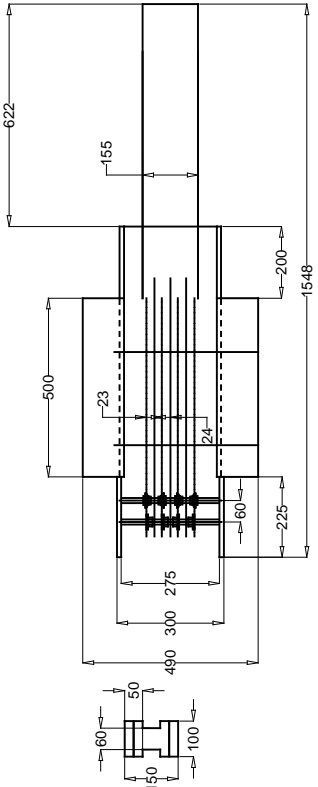
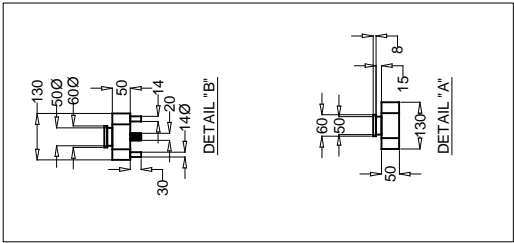
18.0 Constraints

18.1 Timelines

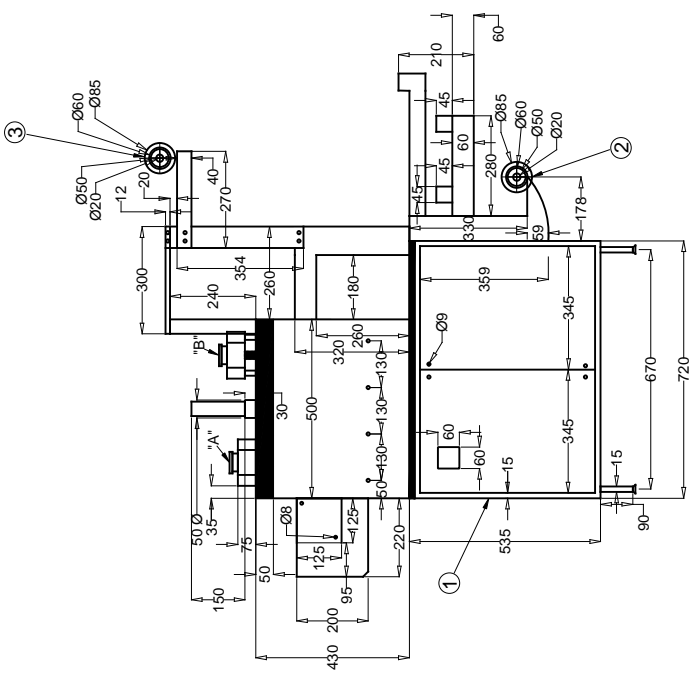
- 18.1.1 Response to URS: Within 1 weeks of receipt of URS
- 18.1.2 Quotation Submission: Within 2 weeks of receipt of URS
- 18.1.3 Submission of detail functional design specification, schematic/GA drawings Within 3 weeks after order finalization.
- 18.1.4 Submission of FAT/SAT Specification-: Before 4 weeks of FAT
- 18.1.5 Submission of Installation Qualification (IQ) and Operational Qualification (OQ) protocols:
Minimum Two weeks before delivery.
- 18.1.6 Mechanical and electrical drawings: Minimum Two weeks before delivery.
- 18.1.7 Submission of control system details and control system verification protocol: Minimum 2 weeks before FAT
- 18.1.8 Equipment Delivery: Maximum 8 weeks from the approval of specification and drawing

NOTE:

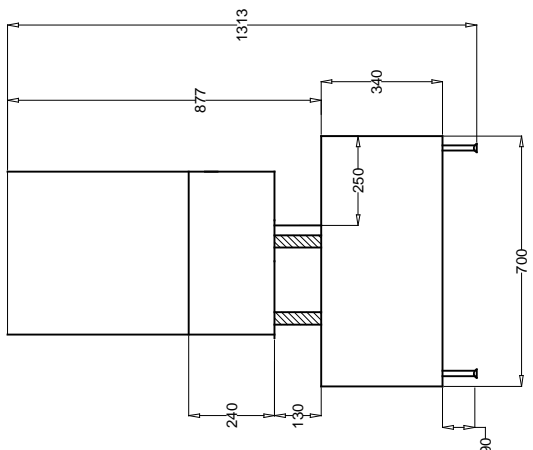
PACKING MACHINE NAME - 3-LINE SQ.PACKING MACHINE
 DIMENSION-2400 mm LENGTH X 1000 mm WIDTH X 1600 mm HEIGHT
 POWER SUPPLY-240 V
 PACKAGE SIZE-55X57mm
 CAPACITY-120 Pcs PER MINUTE
 ELECTRIC POWER -3 KWH



TOP VIEW



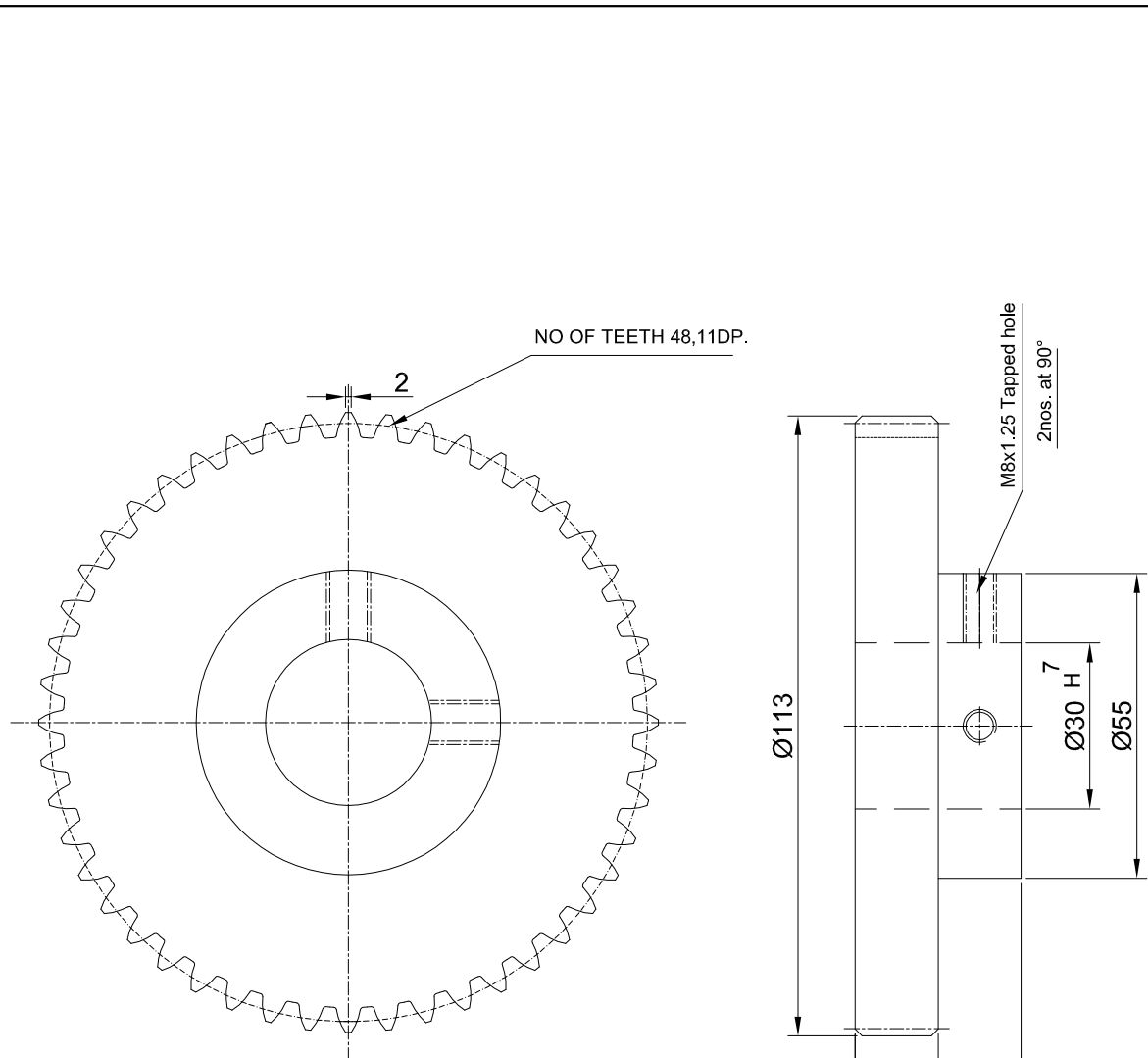
FRONT VIEW



RIGHT SIDE VIEW

- 1.MAIN BASE OF SEALING PART
- 2.BOTTOM FOIL FEEDER
- 3.TOP FOIL FEEDER

MATERIAL: H6Hcr	NO.OFF:		HLL Lifecare limited.
			Thiruvananthapuram-5
DRAWN BY: RAJIKRAN D	TITLE:- ASSEMBLY OF THREE LINE SQUARE PACKING MACHINE WITHOUT BOWL AND LINEAR FEEDER		
CHECKED BY:			
APPROVED BY:			
DATE: 19-1-2016	Dwg .no:- HLL-CED-B3-002		
SCALE:	SHEET.NO:-1OFF.1		
ALL DIMENSIONS ARE IN M.M		REV:00	

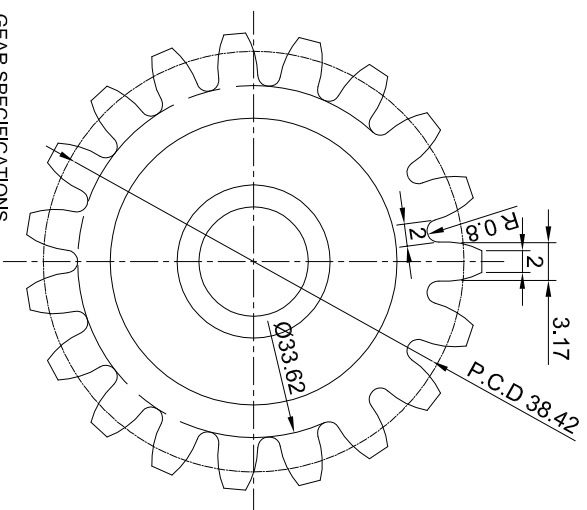


NO OF TEETH 48,11DP.

NOTE:-

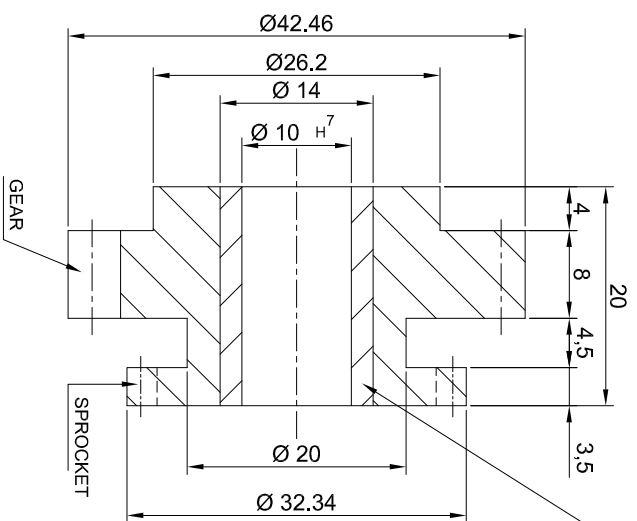
- NO OFF TEETH =48NOS.
- OUTSIDE DIA. =113
- ROOT DIA =98.5
- DEPTH =7.25

MATERIAL:- EN 24, 45HRC.	HLL LIFECARE LIMITED. Thiruvananthapuram-5		NO.OFF. 2
DRAWN BY:	Paul.M.P	TITLE:- GEAR FOR PRESSJAW (N.T=48)	
CHECKED BY:			
APPROVED BY:			
DATE:	15-10-01	Drg.no:- HLL-F-125-02	
SCALE:		SHEET NO. 1 OFF. 1 REV:- 0	
ALL DIMENSIONS ARE IN M.M.			



GEAR SPECIFICATIONS

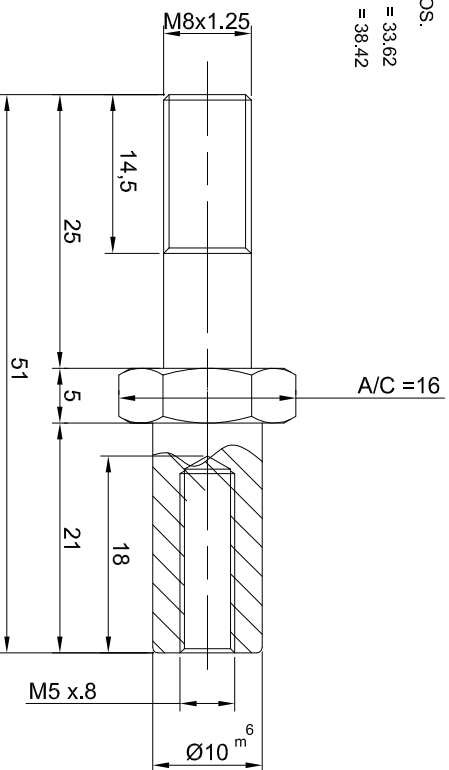
OD = 42.46
 PITCH = 6.35
 N.T = 19 NOS.
 ROOT DIA = 33.62
 P.C.D = 38.42



BUSH
 (MALT: PHOSPHORUS BRONZE)

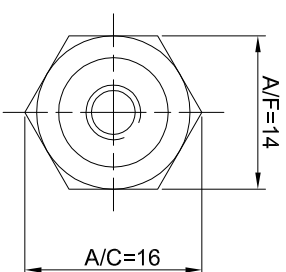
SPROCKET SPECIFICATIONS

OD = 32.34
 PITCH = 6.35
 P.C.D = 28.31
 N.T = 14 NOS.
 ROOT DIA = 23.5
 ROLON CHAIN = B25 - 6.35 X 3.18MM
 (1/4" x 1/8")

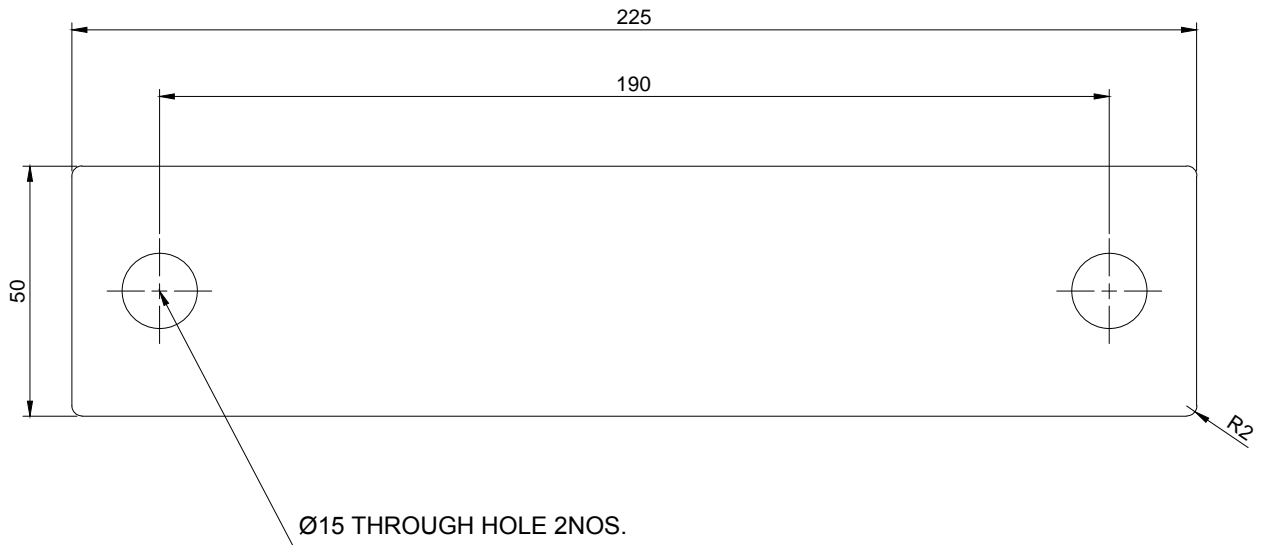


MATERIAL: IS 2073-C40 (EN 8 Forged)

STUD



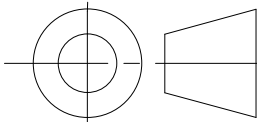
MATERIAL:	IS 2073-C55Mn75 (EN 9)		
DRAWN BY:	Paul M.P		
CHECKED BY:			
APPROVED BY:			
DATE:	11-01-11		
SCALE:			
ALL DIMENSIONS ARE IN M.M			
HLL Lifecare Limited. Thiruvananthapuram-5		NO:OFF.	
TITLE: SPROCKET WITH SHAFT FOR BRT CUTTING UNIT			
Dwg .no:-HLL - F- 125 -10		REV:- DATE:-	
SHEET .NO:-10FF:1			



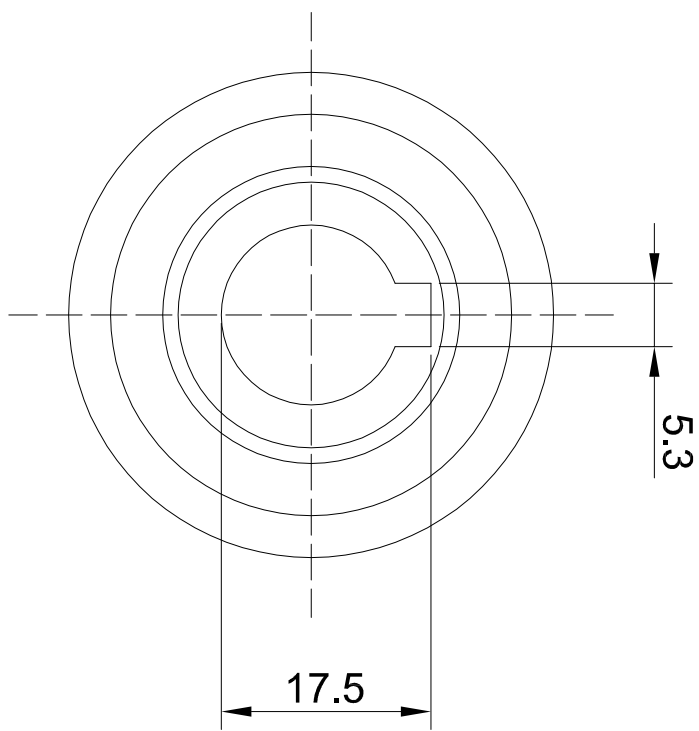
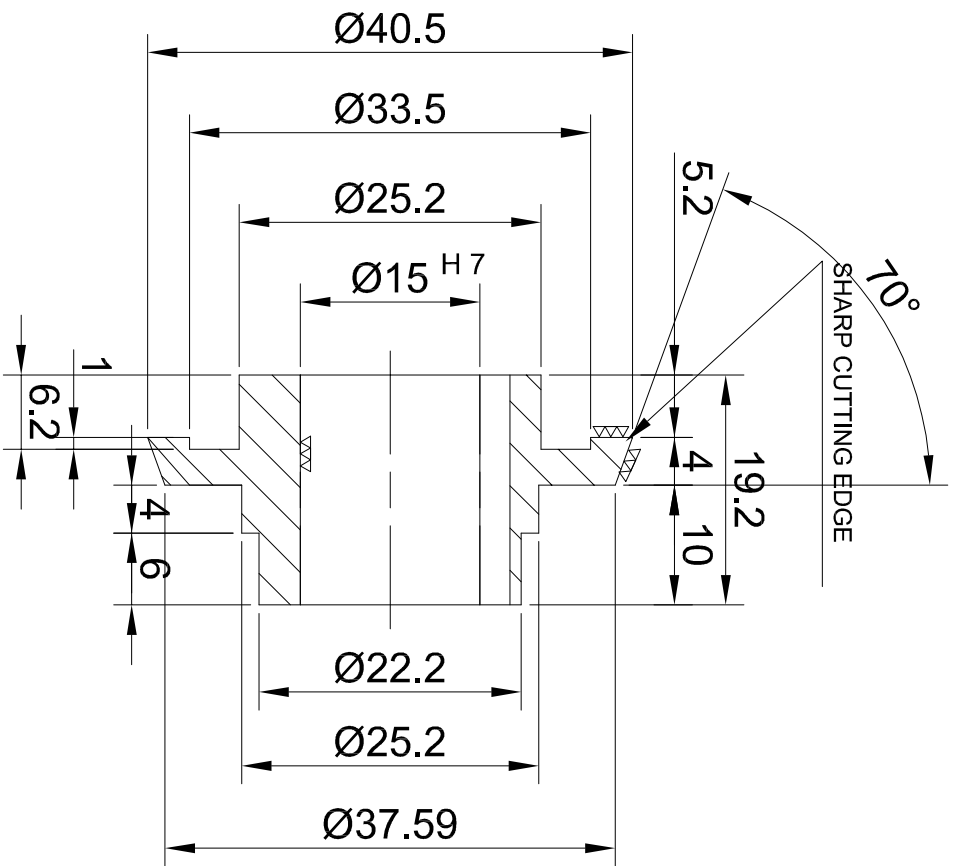
NOTE:

IN ORDER TO MAINTAIN THE SPRING QUALITY TEMPERING
IS TO BE CARRIED OUT PROPERLY.

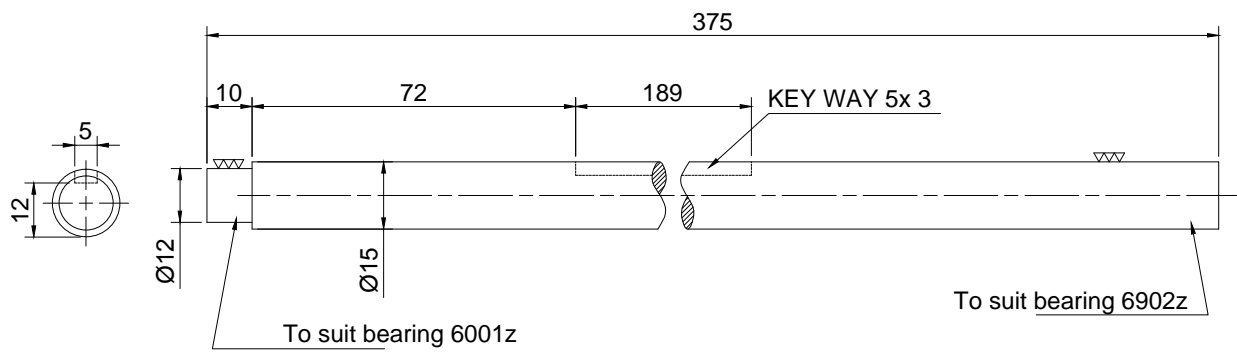
MATERIAL:- spring steel IS:3431-1965 55Si 2 Mn 90 , 45 Hrc (EN 42 J)		HLL Lifecare Limited. Thiruvananthapuram-5		NO.OFF.
DRAWN BY:	Paul.M.P	TITLE:- SPRING PLATE		
CHECKED BY:				
APPROVED BY:		Drg no:- HLL-F-125-17		
DATE:	17-09-2012			
SCALE:		SHEET NO. 1 OFF. 1		
ALL DIMENSIONS ARE IN M.M.				

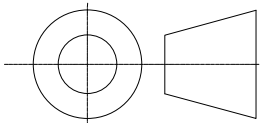


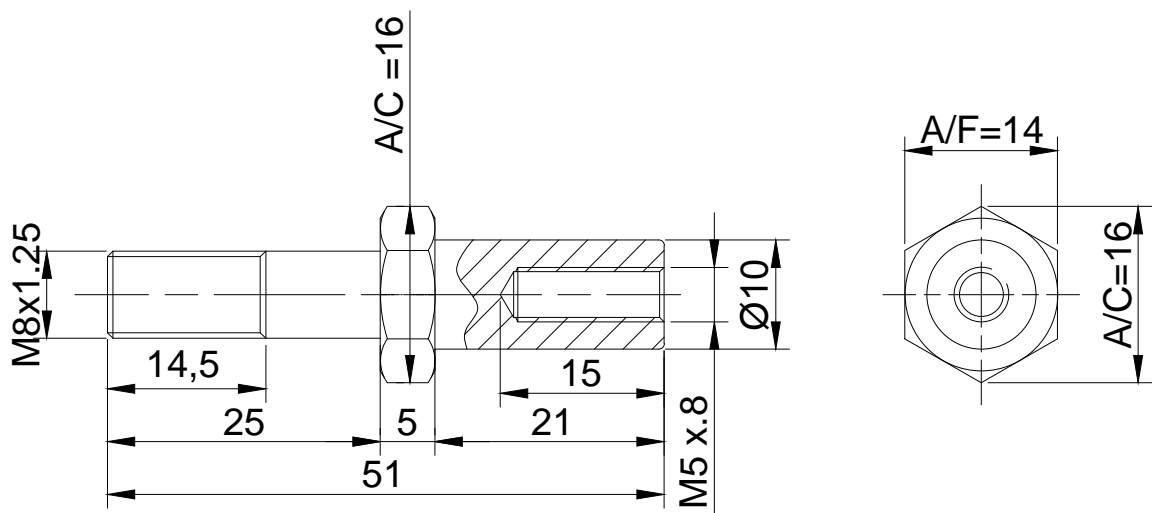
REV:- 0
DATE:-

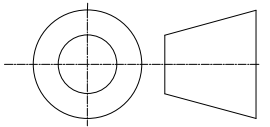


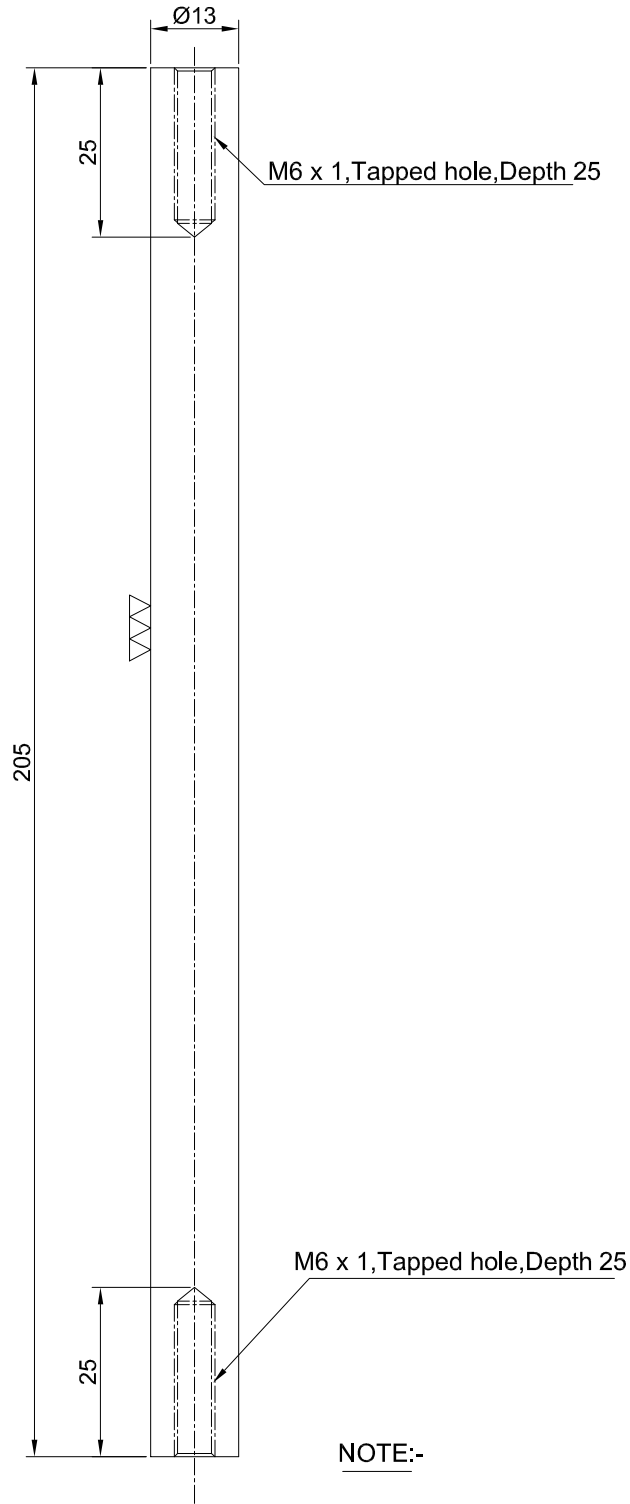
MATERIAL: IS 1570-T33M0W6C4V2 (HSS/MSI M2)		NO:OFF.	
DRAWN BY: M.P. PAUL		TITLE: HLL Lifecare limited, Thiruvananthapuram-5	
CHECKED BY:		SLITTING CUTTER (THREE LINE KOREAN PACKING MACHINE)	
APPROVED BY:		Drg .no:- HLL-F-123-00	
DATE: 29/09/07		SHEET .NO:-10FF.1	
SCALE:		REV:- 01	
ALL DIMENSIONS ARE IN M.M		DATE:22-10-2012	

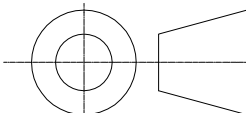


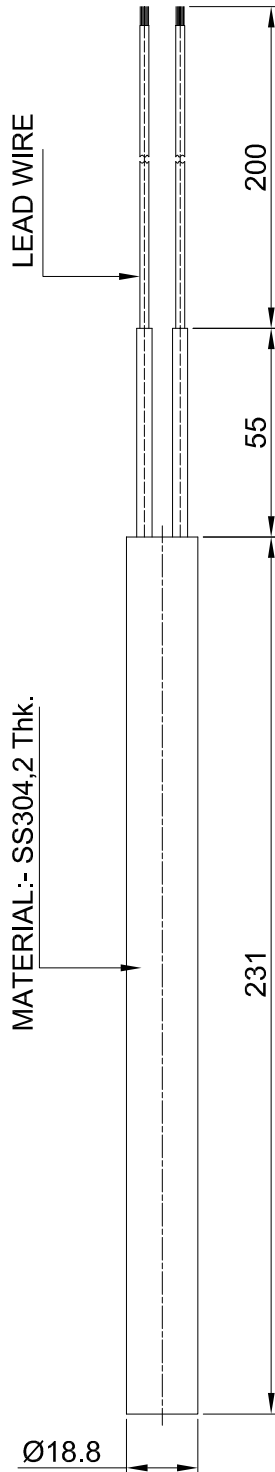
MATERIAL:- EN 24 40-45HRC	HLL LIFECARE LIMITED. Thiruvananthapuram-5		NO.OFF.
DRAWN BY:		TITLE:- Shaft for slitting cutter	
CHECKED BY:			
APPROVED BY:			
DATE:	9-7-2012		Drg.no:- HLL-F-125-16
SCALE:			
ALL DIMENSIONS ARE IN M.M.		SHEET NO. 1 OFF. 1	REV:- 00 DATE:-



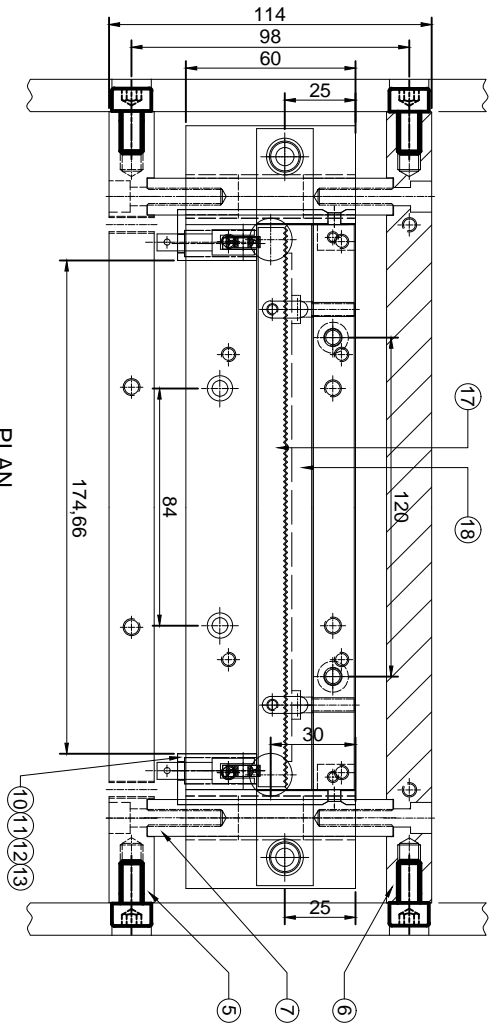
MATERIAL:- MS	HLL Lifecare Limited. Thiruvananthapuram-5		NO.OFF.
DRAWN BY:	Paul.M.P	TITLE:- SHAFT FOR PULLER SPROCKET	
CHECKED BY:			
APPROVED BY:			
DATE:	28-10-2010		Drg no:- HLL -F -125 -08
SCALE:			SHEET NO. 1 OFF. 1
ALL DIMENSIONS ARE IN M.M.			



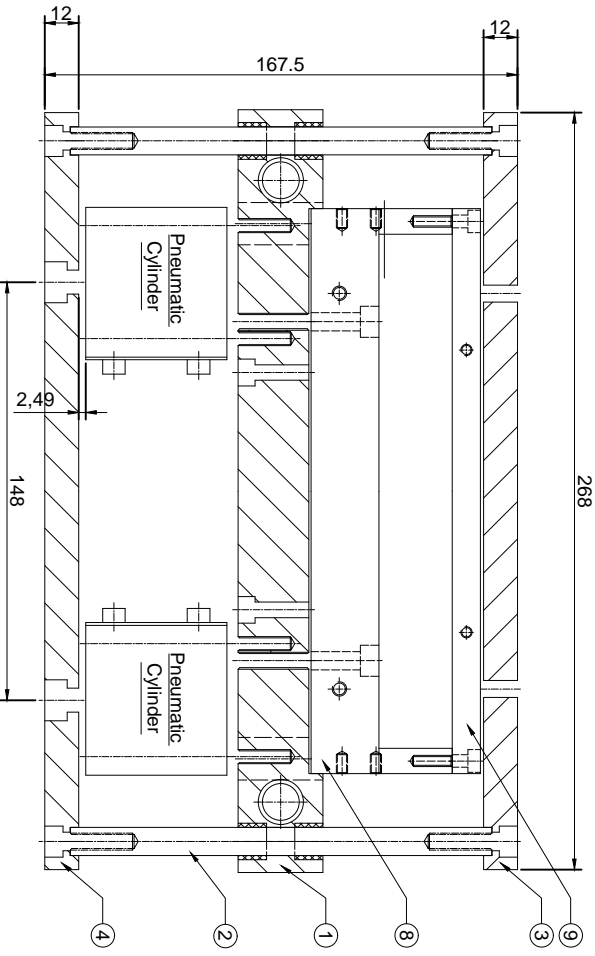
MATERIAL:- EN 24, 60 Hrc	HLL LIFECARE LIMITED. Thiruvananthapuram-5		NO.OFF.
DRAWN BY:	PAUL M.P	TITLE:- SHAFT FOR CONDOM PUSHER(TPM)	
CHECKED BY:			
APPROVED BY:		Drg.no:-HLL-F-125-14	
DATE:	13-06-2012		
SCALE:		SHEET NO. 1 OFF. 1	
ALL DIMENSIONS ARE IN M.M.			
			
		REV:- DATE:-	



MATERIAL:-	HLL Lifecare Limited.		NO.OFF.
	Thiruvananthapuram-5		
DRAWN BY:	Paul.M.P	TITLE:-	HEATER CARTRIDGE (TPM M/C)
CHECKED BY:			
APPROVED BY:			Drg no:- HLL F-125-12
DATE:	10-01-2012		
SCALE:			SHEET NO. 1 OFF. 1
ALL DIMENSIONS ARE IN M.M.			
			REV:- 0
			DATE:-

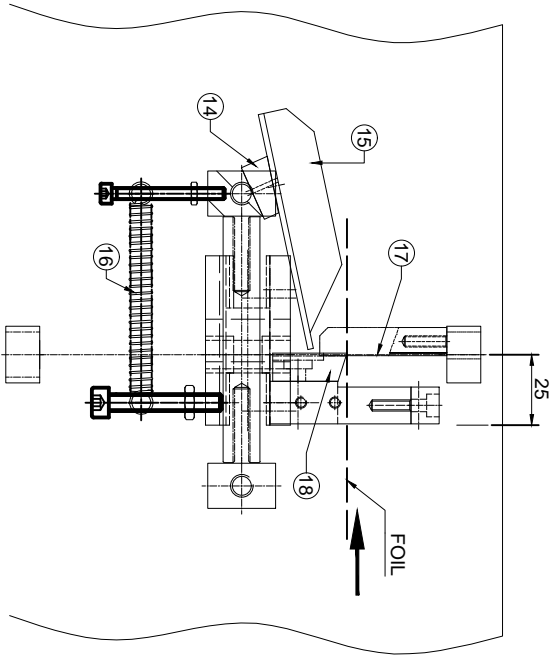


PLAN



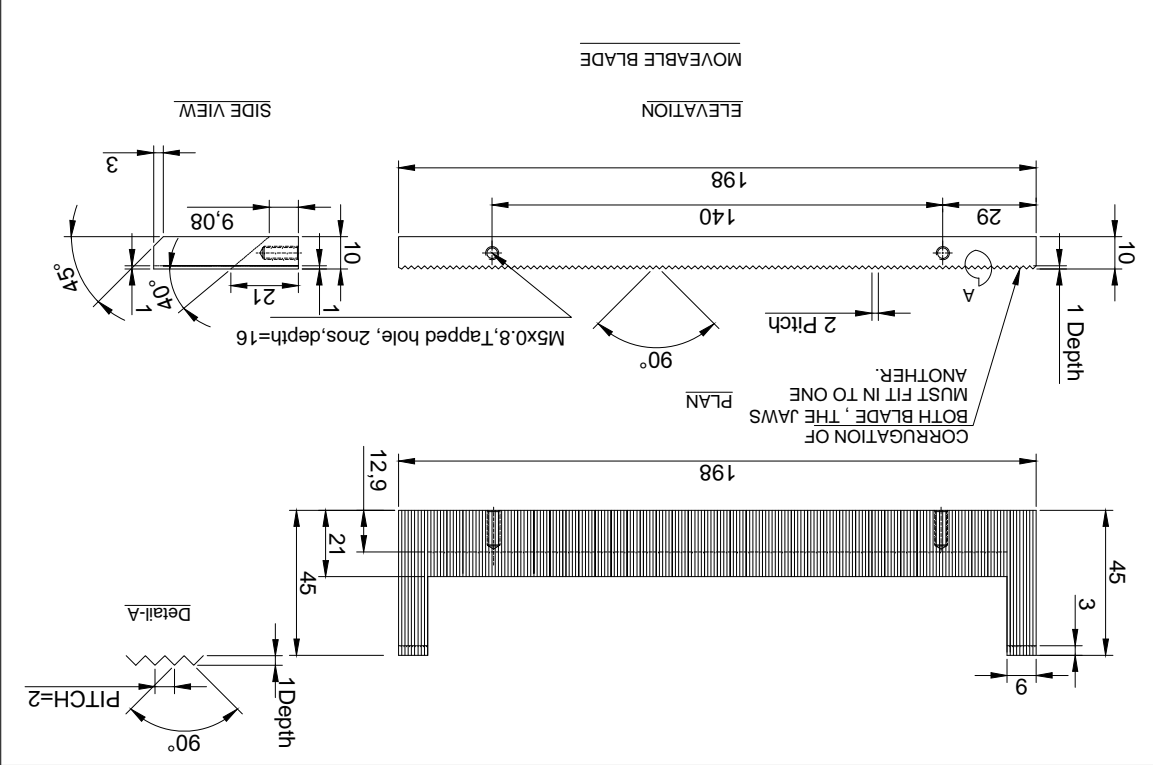
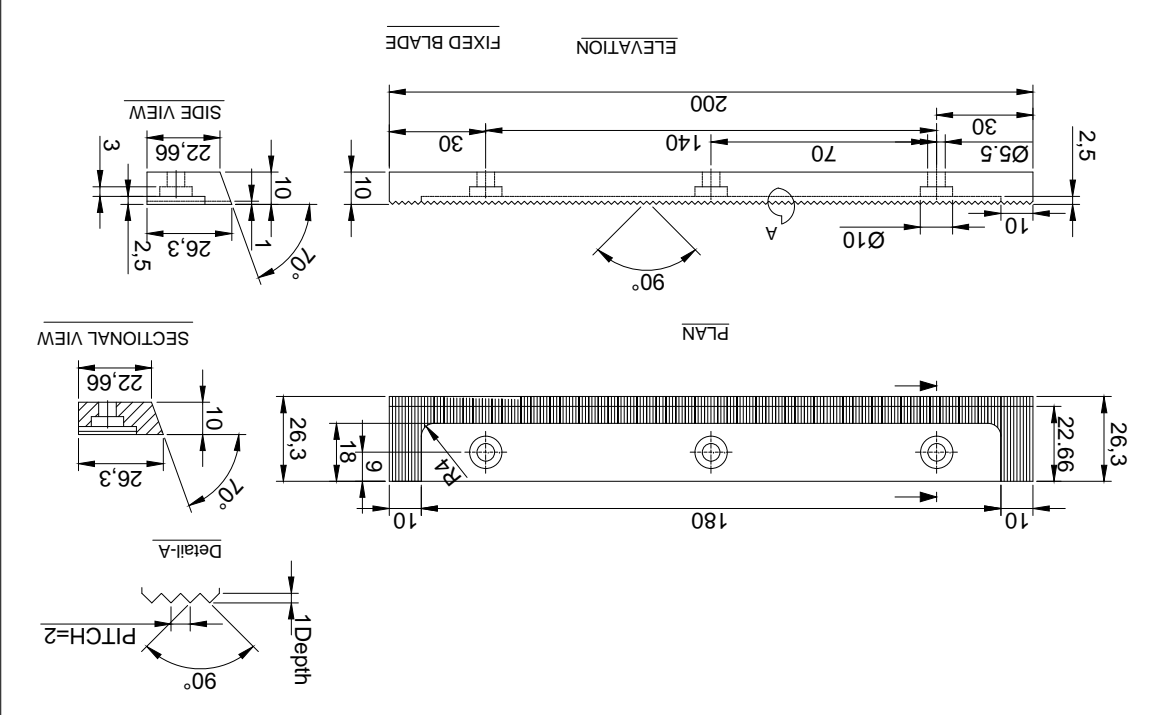
ASSEMBLY (ELEVATION)

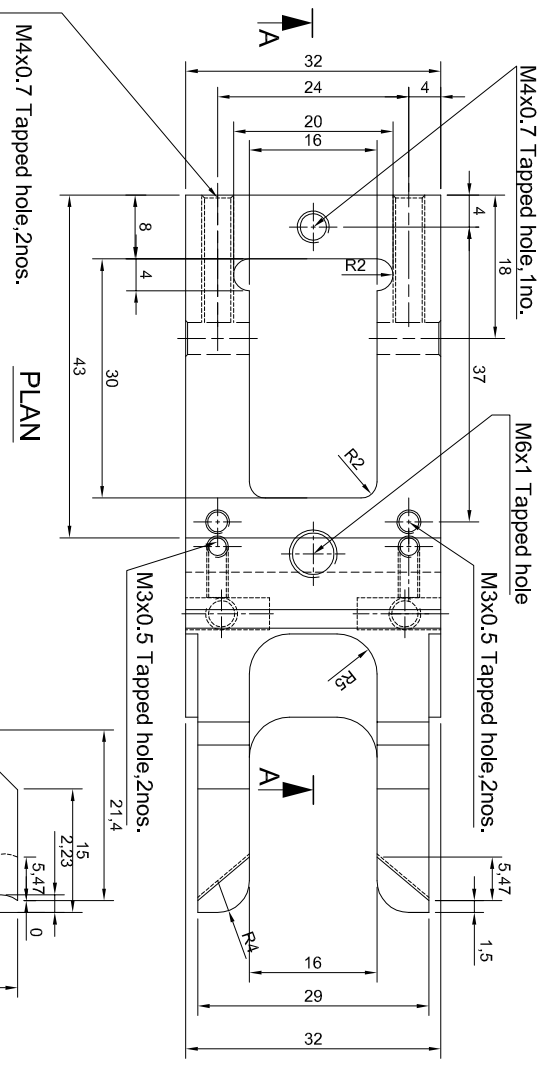
NOTE: ALL SHARP EDGES SHOULD BE AVOIDED.



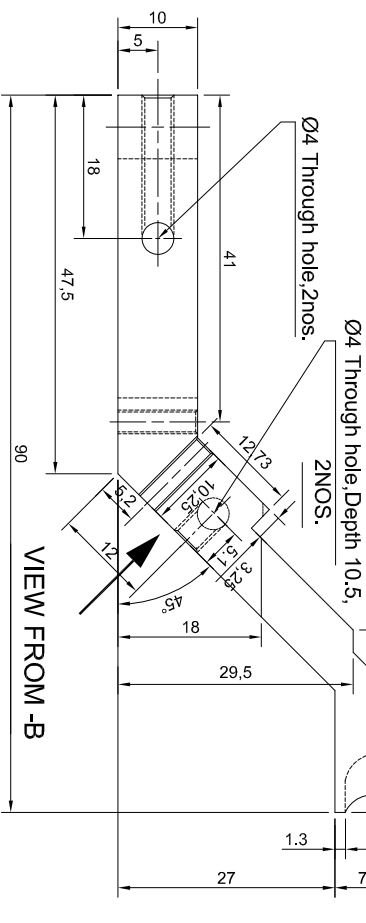
MATERIAL:		NO.OFF.
DRAWN BY:	M.P. PAUL	
CHECKED BY:		
APPROVED BY:		
DATE:	22-01-2010	
SCALE:		
ALL DIMENSIONS ARE IN M/M		
HLL Lifecare Limited. Thiruvananthapuram-5		
TITLE:- CUTTING UNIT ASSEMBLY(TPM)		
Drg .no:- HLL - F - 125 -07		REV:-
SHEET NO:-1 OFF. 4		DATE:-

MATERIAL:- HSS M2 grade 60 HRC / IS 1570-T83M6W6Cr4V2		DRAWN BY: M.P. PAUL	
CHECKED BY:		APPROVED BY:	
DATE: 18-07-208		SCALE: 1:1	
ALL DIMENSIONS ARE IN M.M.			
NO.OFF.		TITLE:- HLL LIFECARE LIMITED. Thiruvananthapuram-5	
Drg .no:- HLL-F-125-04		SHEET NO. 1 OFF. 1	
REV:- 09		DATE:- 01-11-2012	



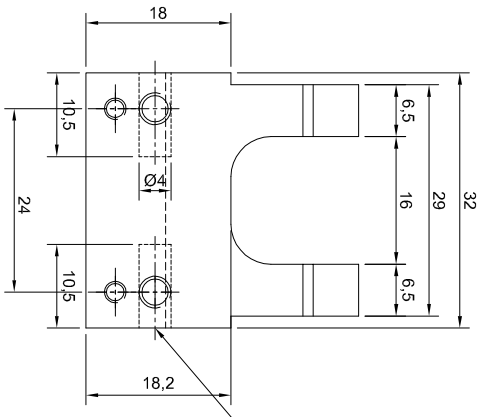


PLAN

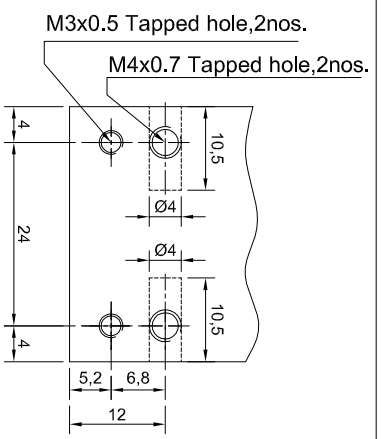


VIEW FROM -B

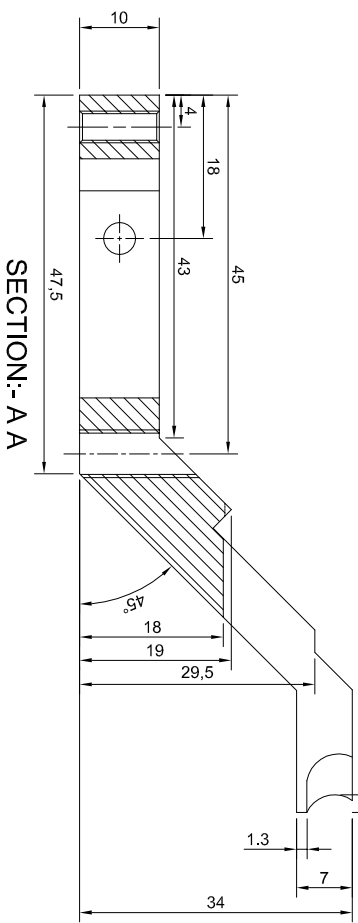
SIDE VIEW



ELEVATION

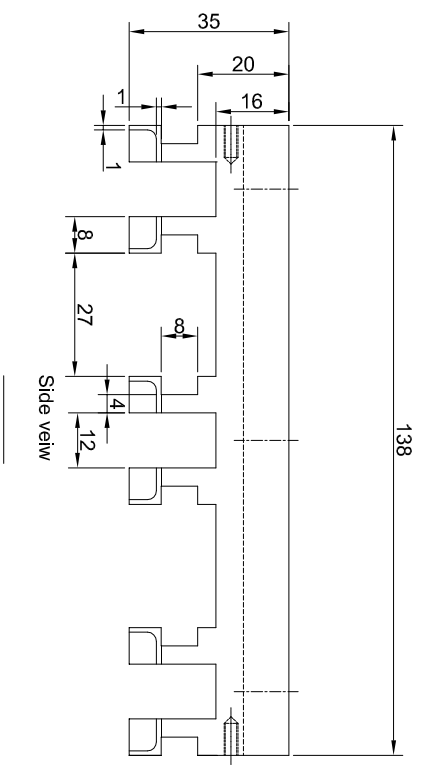
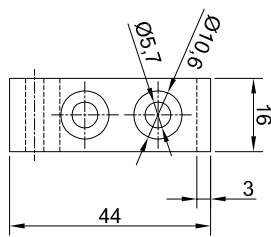
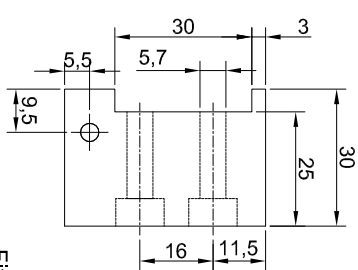
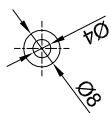
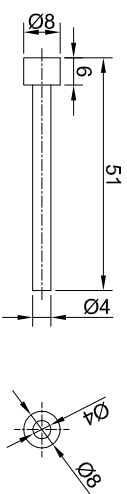
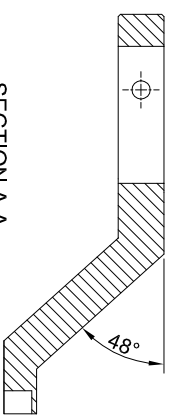
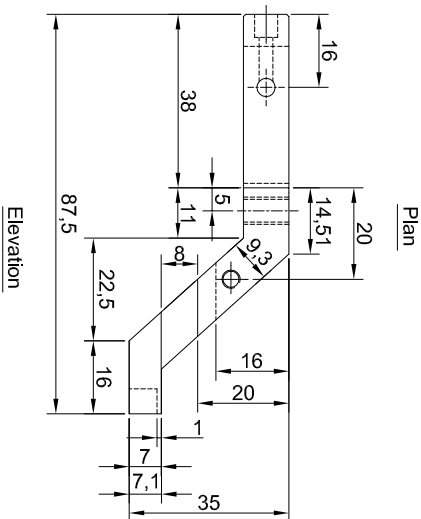
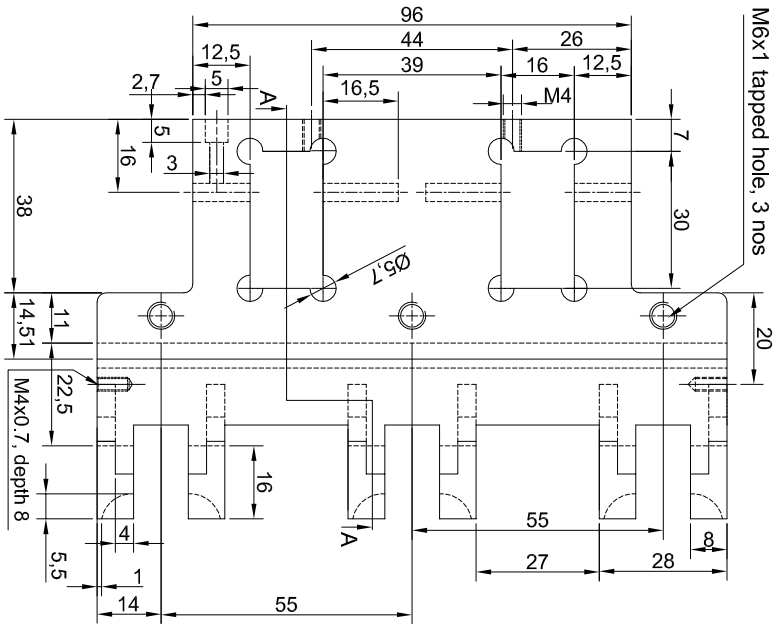


VIEW - B

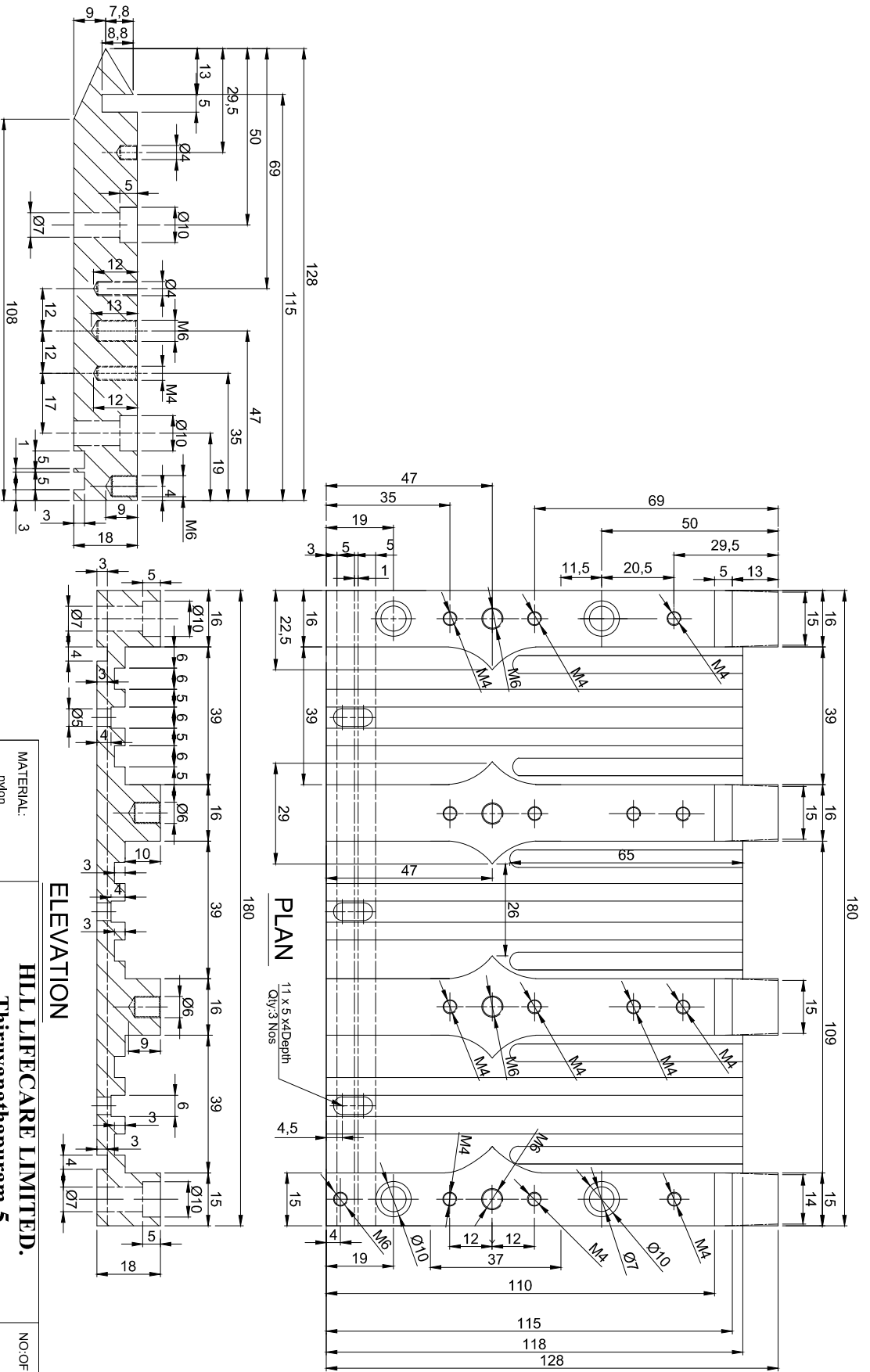


SECTION - AA

MATERIAL:	Aluminium Alloy	HLL Lifecare Limited, Thiruvananthapuram-5	ING:OFF.
DRAWN BY:	Paul.M.P	TITLE:-	
CHECKED BY:		FORK (TPM)	
DATE:	24-09-2011	Dwg.no:-HLL-F-125-11	
APPROVED BY:		REVISIONS:	
SCALE:		DATE:	
ALL DIMENSIONS ARE IN MM			
SHEET NO 1 OF 1			



MATERIAL:		HLL LIFECARE LIMITED.		NO.OFF.
DRAWN BY:		Thiruvananthapuram-5		
CHECKED BY:		PAUL M.P		
APPROVED BY:		TITLE:-		
DATE:		CONDOM PUSHER FOR NEW BRT M/C		
SCALE:		Drg.no:-		
ALL DIMENSIONS ARE IN M.M		SHEET NO: OF		REV:-

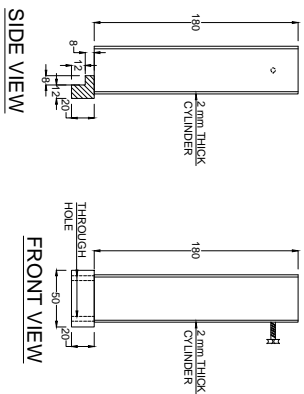
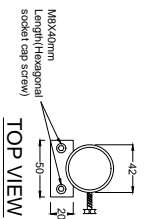


SIDE VIEW

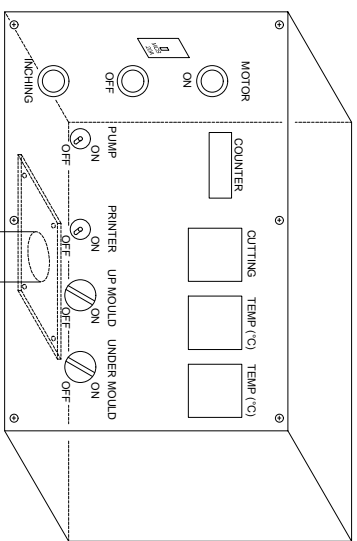
PLAN

ELEVATION

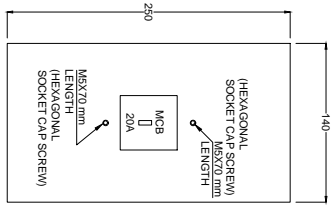
MATERIAL:	nylon	HLL LIFECARE LIMITED.	NO.OFF.
DRAWN BY:	PAUL M.P	Thiruvananthapuram-5	
CHECKED BY:		TITLE:-	
APPROVED BY:		CONDOM PATH FOR BRT M/C (MODIFIED)	
DATE:	04-01-2013		
SCALE:			
ALL DIMENSIONS ARE IN MM			
Drg.no:-HLL-F-125-19			
SHEET NO: OF			REV:-



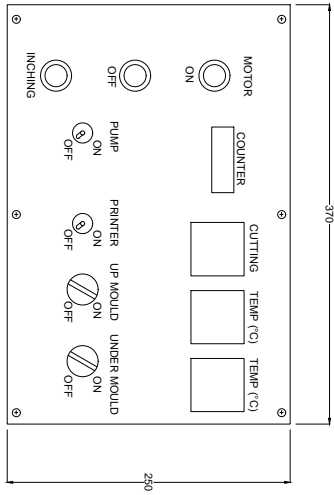
DETAIL "A"



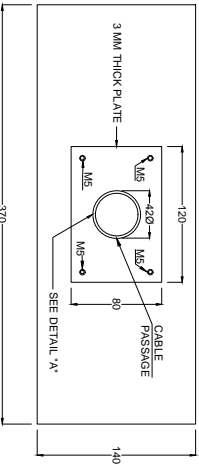
CONTROL AND FUNCTION BOARD



SIDE VIEW



FRONT VIEW



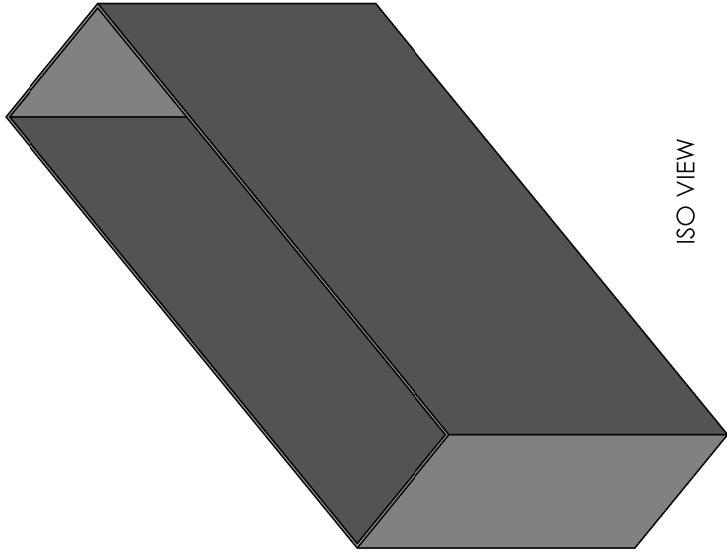
BOTTOM VIEW

CONTROL AND FUNCTION BOARD

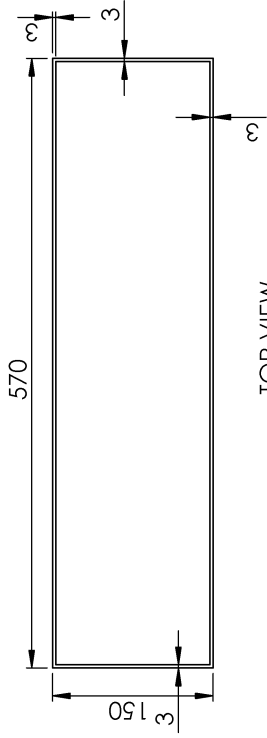
Material: SS 316

MATERIAL:	HLL LIFE CARE LIMITED.	NO.OFF:
DRAWN BY:	RAJGRAND	TITLE:
CHECKED BY:		CONTROL AND FUNCTION BOARD
APPROVED BY:		
DATE:		Drg.no.: HLL-CED-TPM-42-00
SCALE:		SHEET NO.: OF
ALL DIMENSIONS ARE IN MM		REV:-

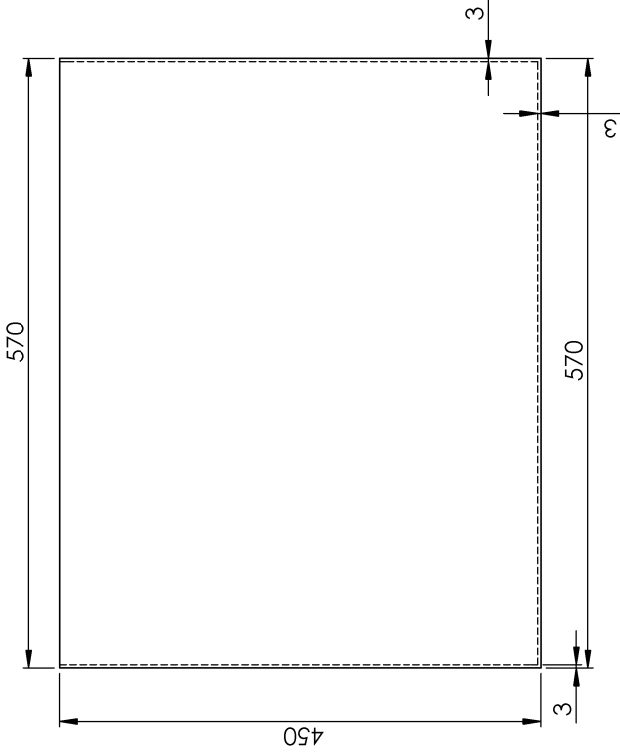




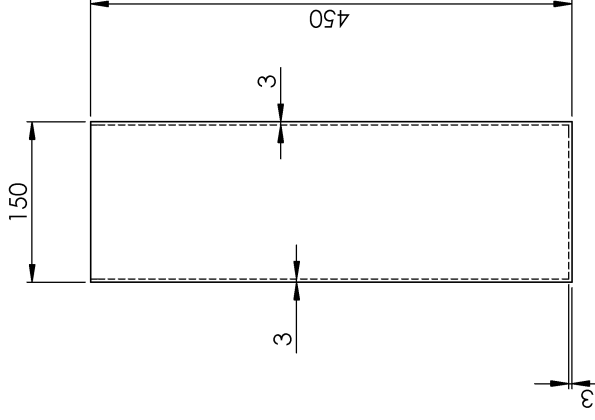
ISO VIEW



TOP VIEW



FRONT VIEW

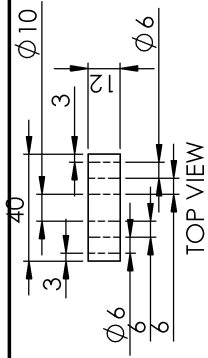


SIDE VIEW

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL DECIMAL ANGULAR:									
DRAWN	NAME	SIGNATURE	DATE					TITLE	
CHKD	RAJIBRANO		9-11-2015					SLIT WASTE COLLECTION BASIN	
APPVD								DWG NO. HLL-CED-TPM-41-00	
MFG								SCALE: 1:1	
Q.A.								SHEET 1 OF 1	
				MATERIAL: SS 304				A3	



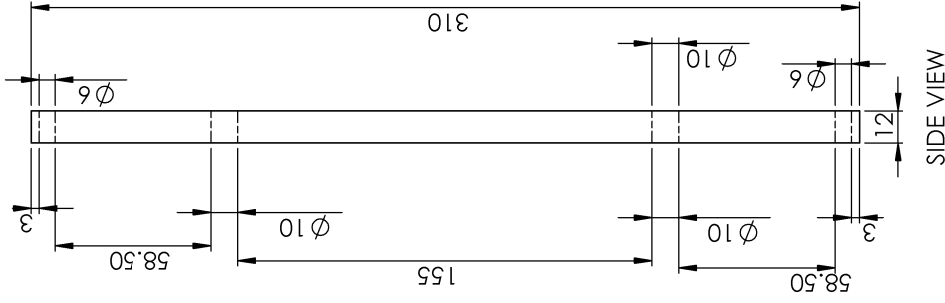
ISO VIEW



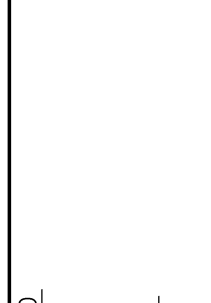
TOP VIEW



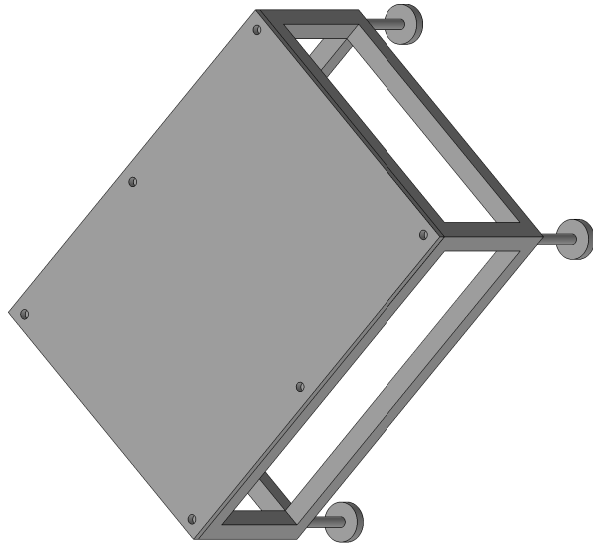
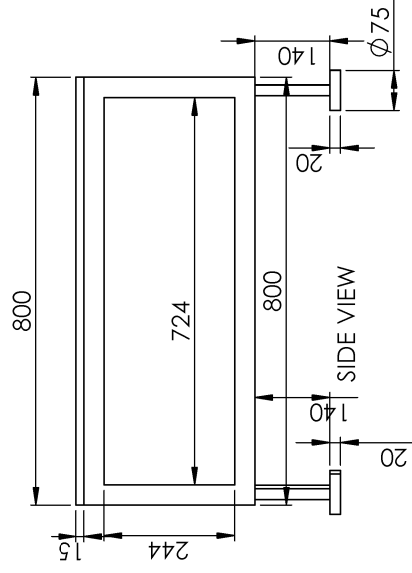
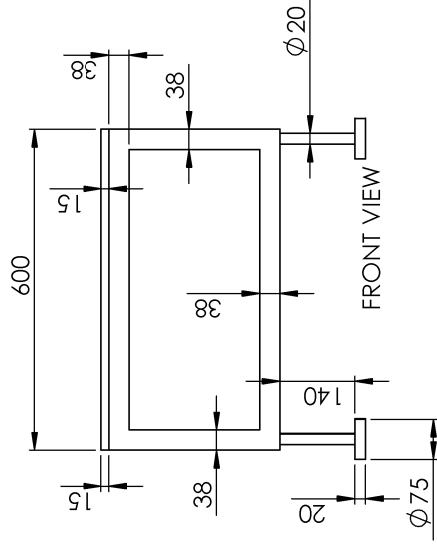
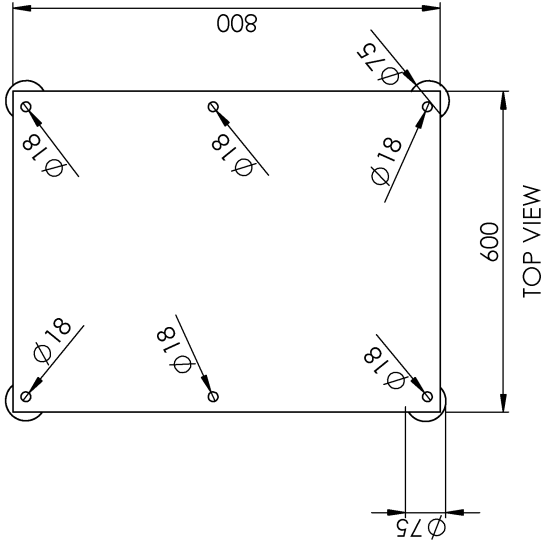
FRONT VIEW



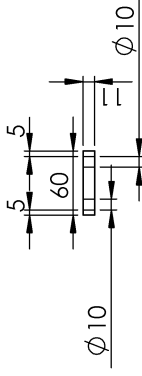
SIDE VIEW



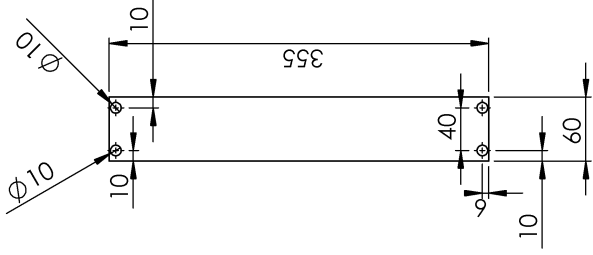
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES:		SIGNATURE		DATE		TITLE		vibrator support plate 2 ,3of 5	
FRACTIONAL		NAME		9-11-2015		DWG NO.		HLL-CED-TPM-40-00	
DECIMAL		RAJIBRANJAN				MATERIAL:		SS 304	
ANGULAR:		CHKD				WEIGHT:		SCALE:1/2	
		APPRVD						SHEET 1 OF 1	
		MFG							
		Q.A.							



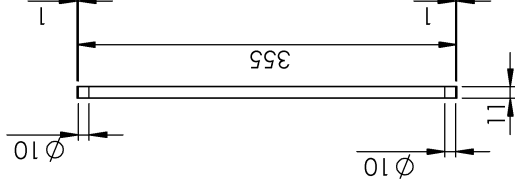
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
SURFACE FINISH:		TOLERANCES:		MATERIAL:		TITLE:		Assem of vibratory feeder base	
ANGULAR:		NAME:		SIGNATURE:		DATE:		DWG NO. HILL-CED-TPM-38-00	
DRAWN:		RAJIBRABD				7-11-2015		A3	
CHKD:								SS-304	
APPVD:								SCALE: 1:10	
MFG:								SHEET 1 OF 1	
Q.A.:								WEIGHT:	



TOP VIEW



FRONT VIEW



SIDE VIEW

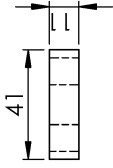


ISO VIEW

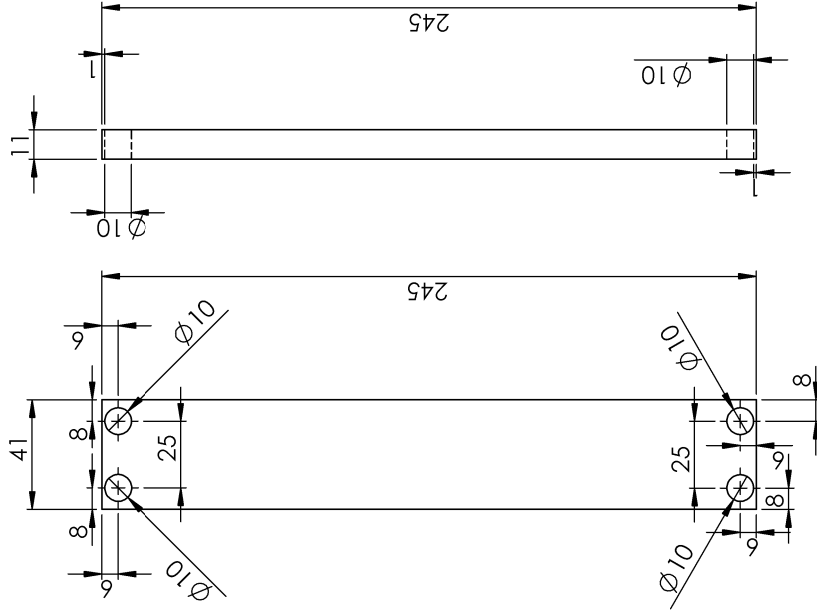
AREA-10045 MM 2

QTY 2 PIECES

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL DECIMAL ANGULAR:									
DRAWN	NAME	SIGNATURE	DATE					TITLE	
CHKD	RAJIBRANJAN		7-11-2015					Top vertical support plate 2	
APPRD								DWG NO. HILL-CED-TPM-37-00	
MFG								A3	
Q.A.				MATERIAL: SS-314				SCALE: 1:1	
				WEIGHT:				SHEET 1 OF 1	



TOP VIEW



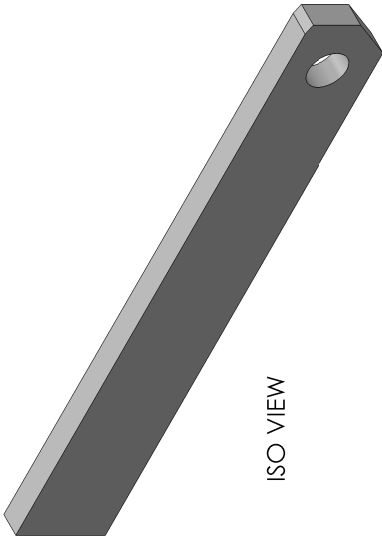
FRONT VIEW

SIDE VIEW

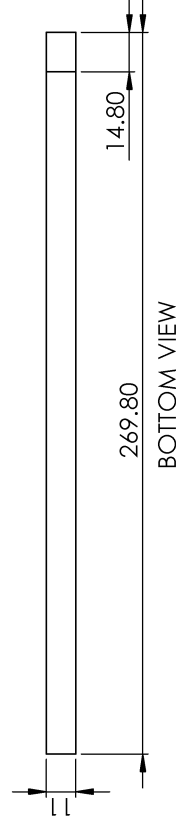
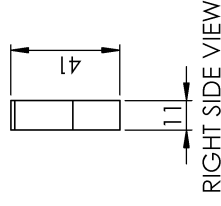
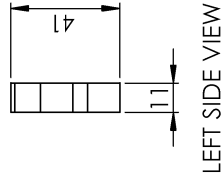
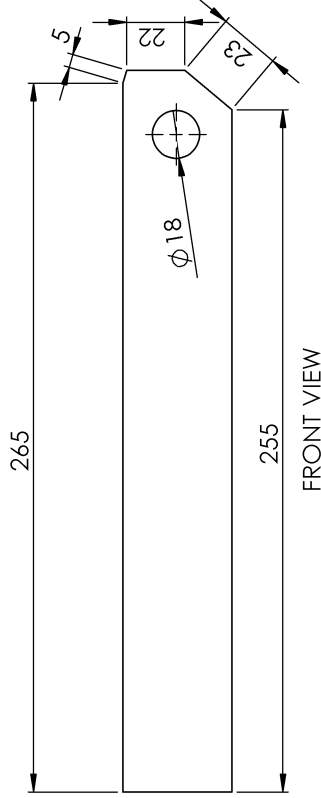


ISO VIEW

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL DECIMAL ANGULAR:									
DRAWN	NAME	SIGNATURE	DATE						
CHKD	RAJIBRANOJ		7-11-2015						
APPVD									
MFG									
Q.A.									
				MATERIAL:		SS-304		TITLE:	
								Top vertical support plate 1	
								DWG NO. HLL-CED-TPM-36-00	
								A3	
								SCALE: 1/2	
								SHEET 1 OF 1	



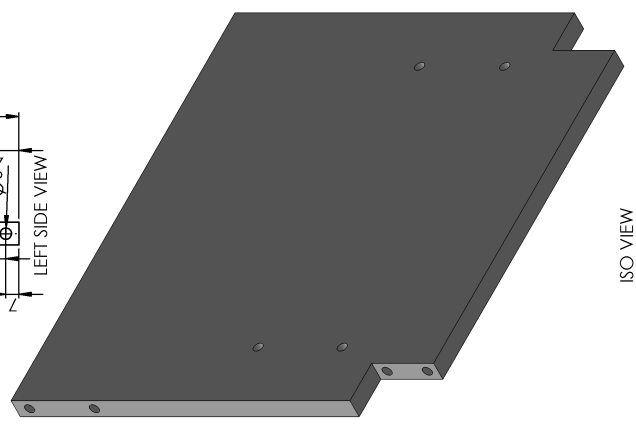
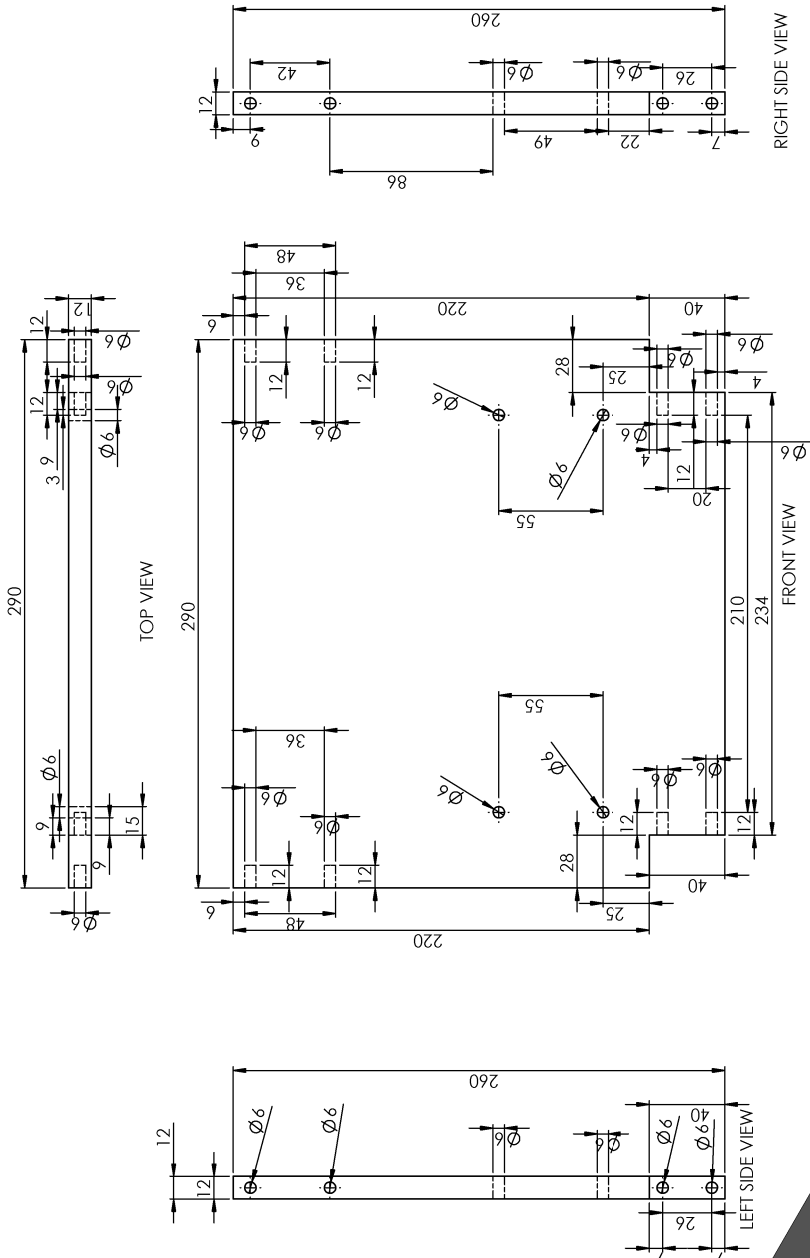
ISO VIEW



QTY-2 NOS

AREA-10455 MM 2

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
SURFACE FINISH: Rough		TOLERANCES: ANGULAR:							
								TITLE	
								Top support plate 3	
								DWG NO. HILL-CED-TPM-35-00	
								A3	
								SCALE: 1:2	
								SHEET 1 OF 1	
				MATERIAL: SS-304					
				WEIGHT:					
				DATE: 7-11-2015					
				SIGNATURE:					
				NAME:					
				DRAWN:					
				CHKD:					
				APPVD:					
				MFG:					
				Q.A:					

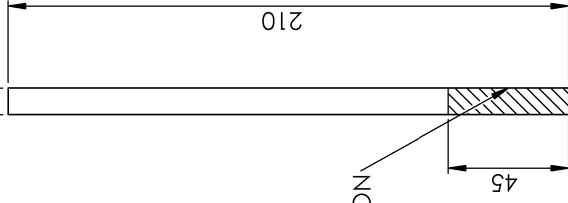


DO NOT SCALE DRAWING		INVENOR	
TITLE		TOP HORIZONTAL PLATE	
DATE		PART NO.	
SIGNATURE		SS-304	
SCALE		HILL-CED-IPM-34-00	
DRAWN		DWG. NO.	
CHECKED		A2	
APPROVED		DATE	
DATE		SCALE	
BY		SHEET 1 OF 1	

$\phi 10$

TOP VIEW

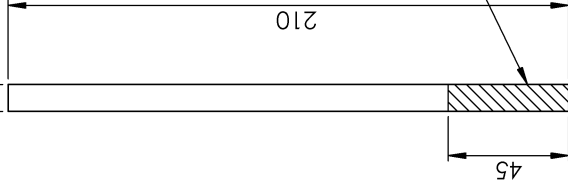
$\phi 10$



THREADED REGION

FRONT VIEW

$\phi 10$



THREADED REGION

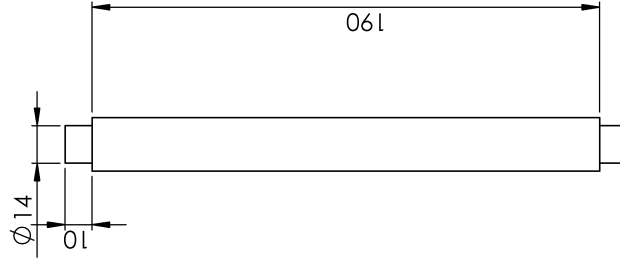
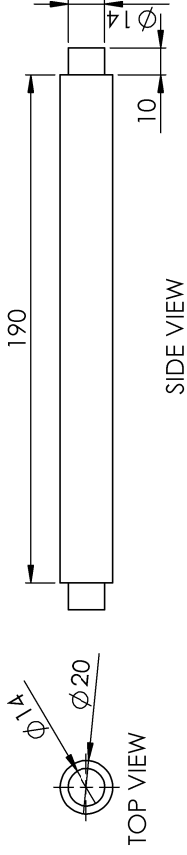
SIDE VIEW

QTY- 4 PIECES

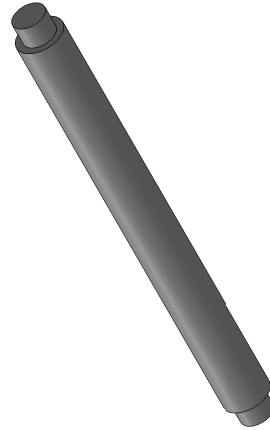


ISO VIEW

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL ANGULAR:		SIGNATURE		DATE		TITLE		HILL-CED-TPM-32-00	
DRAWN	RAJIBRABD			7-11-2015		Top foil guide shafts(Small)		A3	
CHKD								DWG NO.	
APPVD								HILL-CED-TPM-32-00	
MFG								SCALE: 1/2	
Q.A.								SHEET 1 OF 1	
								MATERIAL: SS-304	
								WEIGHT:	



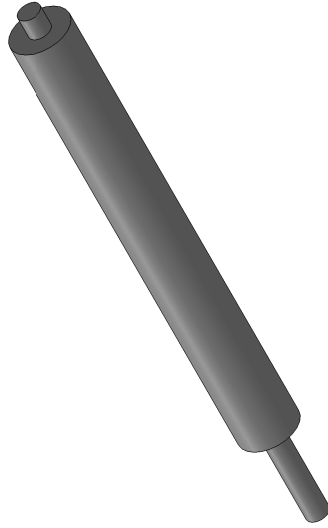
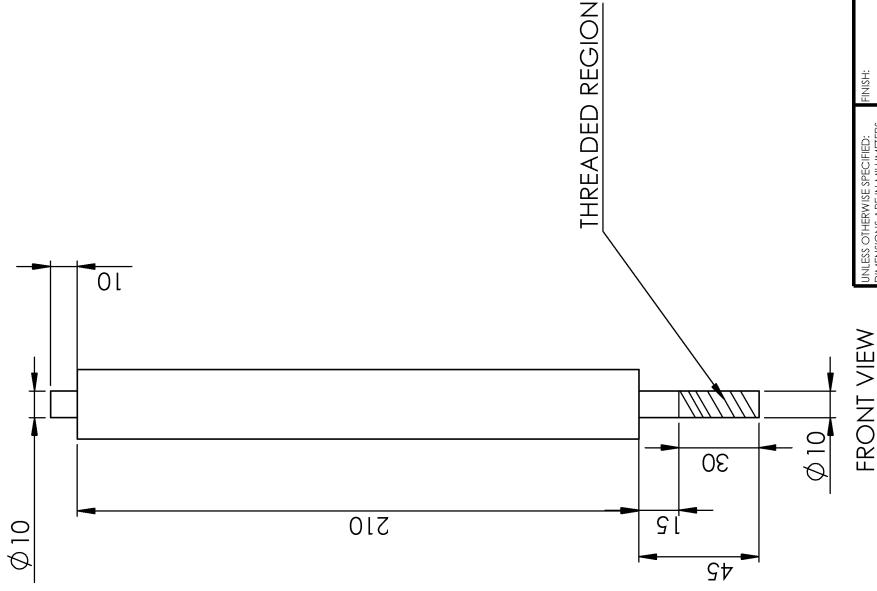
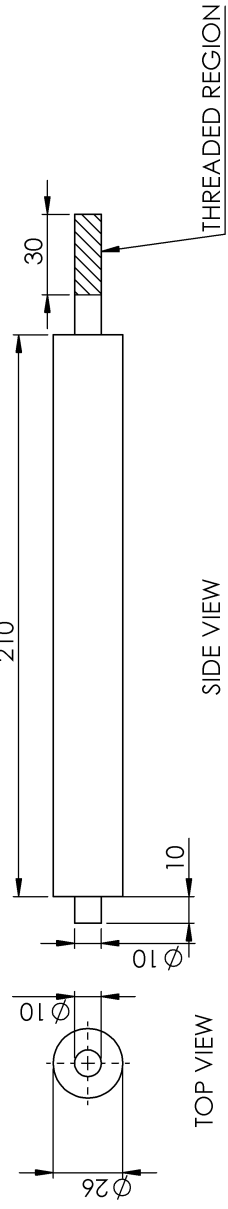
FRONT VIEW



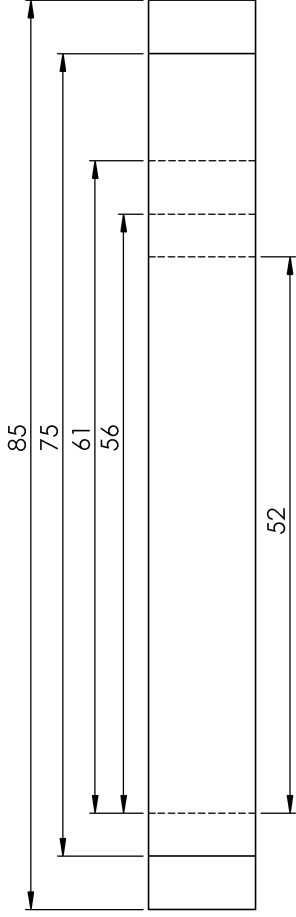
ISO VIEW

QTY - 2 PIECES

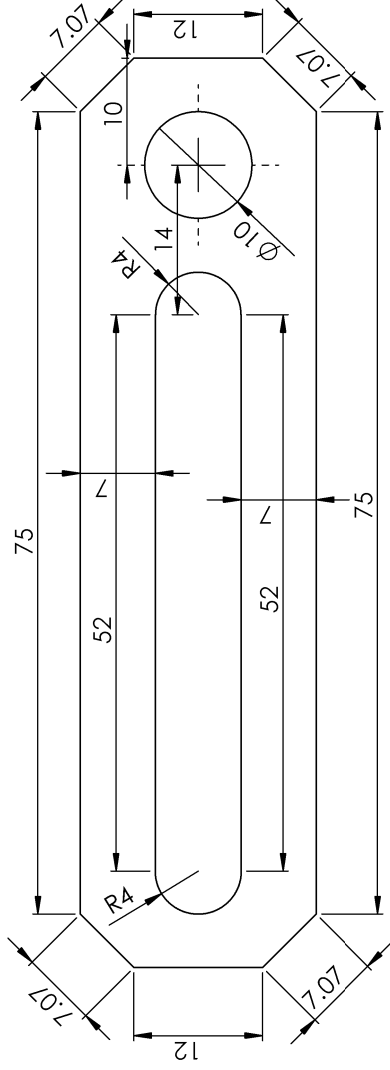
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TOLERANCES: FRACTIONAL DECIMAL ANGULAR:									
DRAWN	NAME	SIGNATURE	DATE					TITLE	
CHKD	RAJIBRANJ		7/11/2015					Top foil guide shafts (BIG)	
APPVD								DWG NO. HLL-CED-TPM-31-00	
MFG								A3	
Q.A.				MATERIAL: SS-304				SCALE: 1/2	
				WEIGHT:				SHEET 1 OF 1	



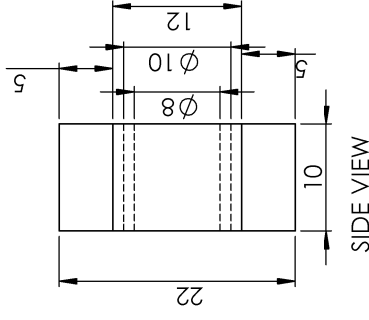
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TOLERANCES: FRACTIONAL ANGULAR:		SIGNATURE		DATE		TITLE		DWG NO.	
DRAWN	NAME	SIGNATURE		DATE		TITLE		DWG NO.	
CHKD	RAJIBRANOJ			7/11/2015		TOP FOIL GUIDE CYLINDER		HLL-CED-TPM-30-00	
APPVD								MATERIAL:	
MFG								SS-304	
Q.A.								SCALE: 1/2	
								SHEET 1 OF 1	
								A3	



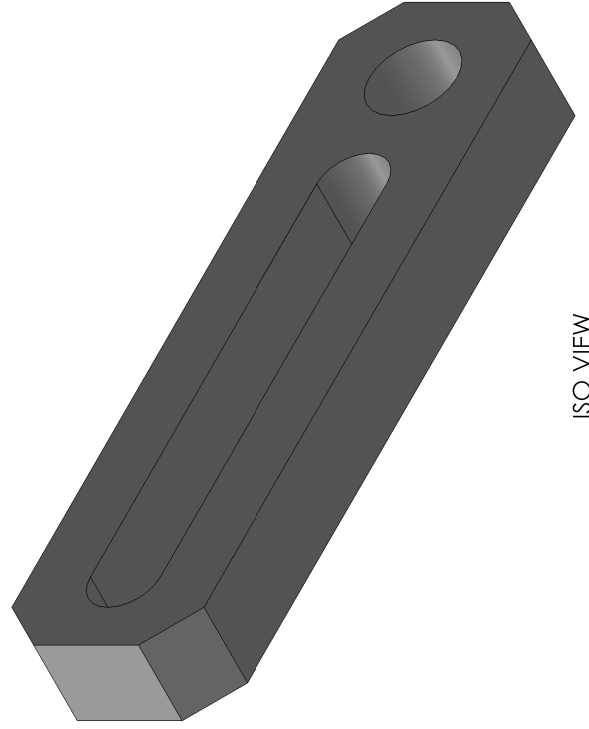
TOP VIEW



FRONT VIEW

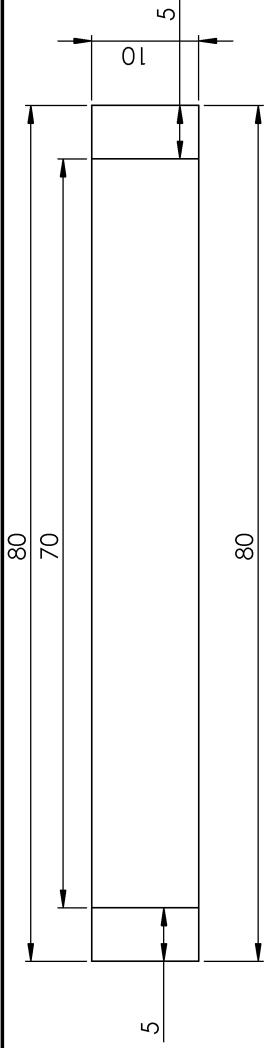


SIDE VIEW

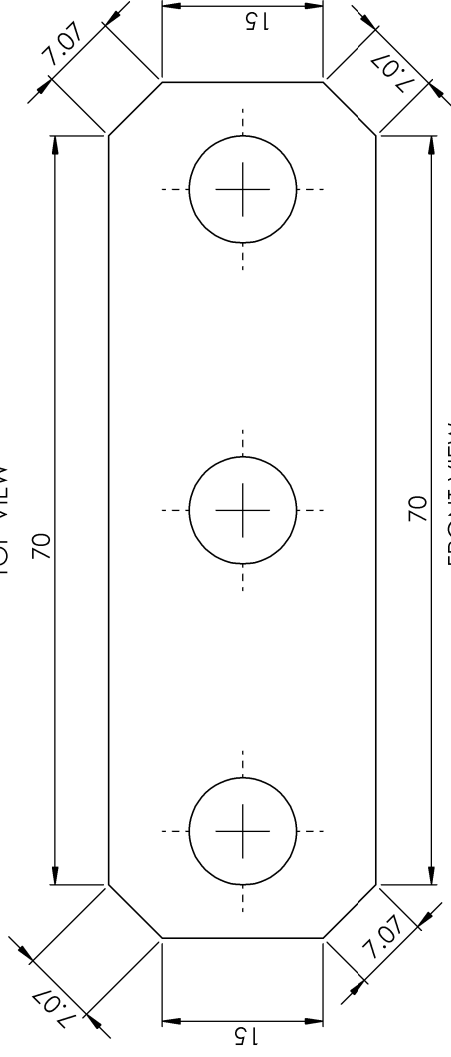


ISO VIEW

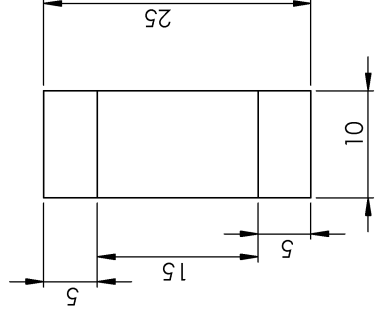
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TOLERANCES: FRACTIONAL DECIMAL ANGULAR:									
DRAWN	NAME	SIGNATURE	DATE					TITLE	
CHKD	RAJIBRANO		7/11/2015					Top foil connector-2	
APPRD								DWG NO. HLL-CED-TPM-29-00	
MFG								SCALE: 2:1	
Q.A.								SHEET 1 OF 1	
				MATERIAL: SS-304				A3	



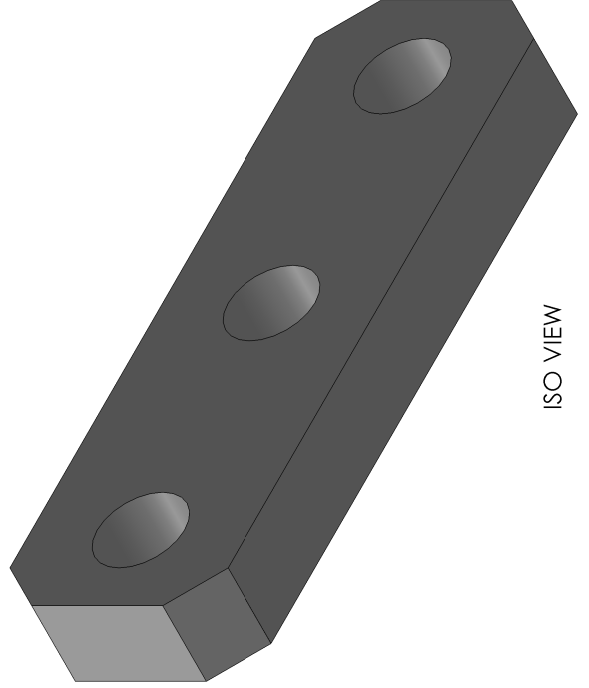
TOP VIEW



FRONT VIEW

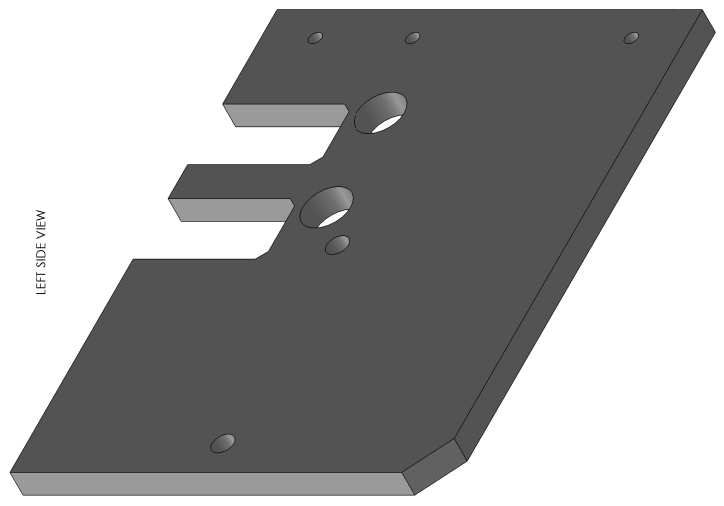
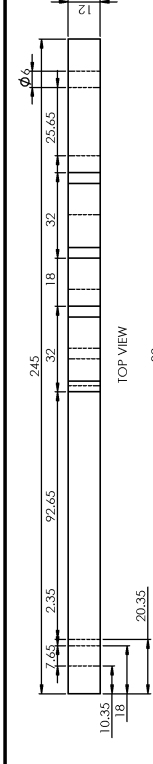
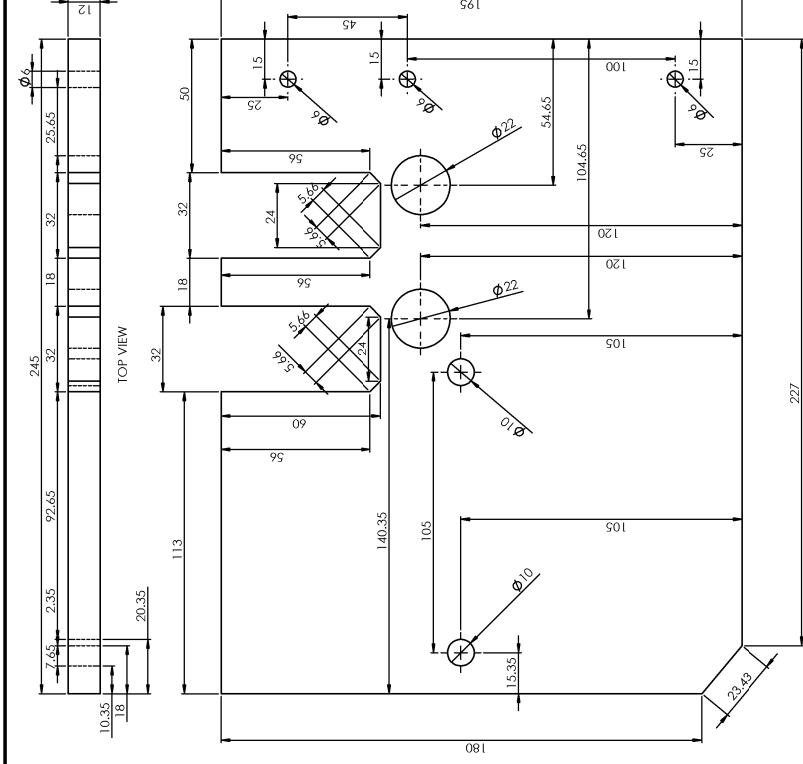


SIDE VIEW



ISO VIEW

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL DECIMAL ANGULAR:									
DRAWN	NAME	SIGNATURE	DATE						
CHKD	RAJIBRANO		7-11-2015						
APPRD									
MFG									
Q.A.									
				MATERIAL:		SS-304		TITLE:	
								Top foil connector-1	
								DWG NO. HLL-CED-TPM-27-00	
								A3	
				WEIGHT:		SCALE:2:1		SHEET 1 OF 1	



LEFT SIDE VIEW

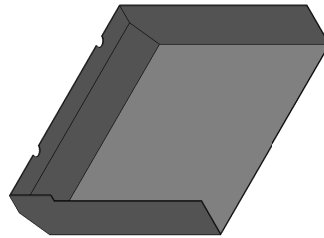
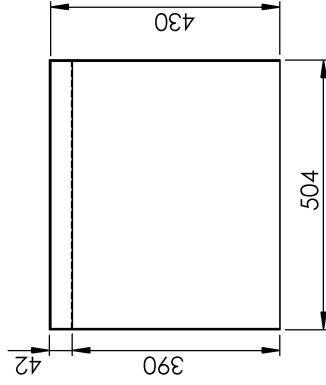
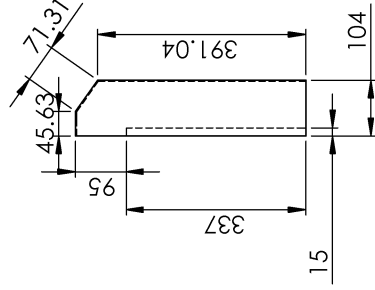
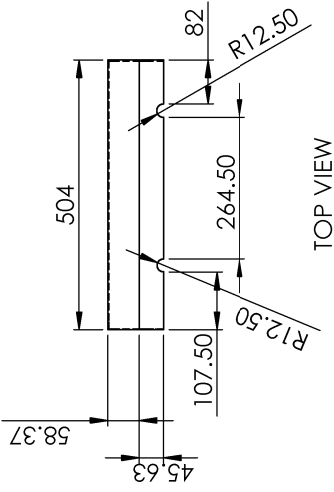
FRONT VIEW

BOTTOM VIEW

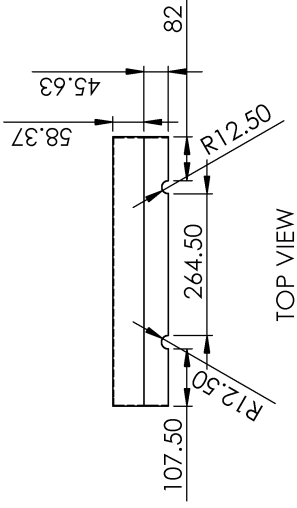
RIGHT SIDE VIEW

ISO VIEW

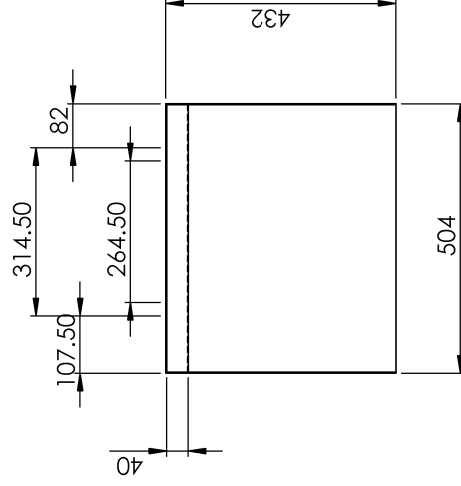
COMPANY NAME: HILL-CED-TPM-27-00 PROJECT NO: SS 304 DATE: 11/11/2023 DRAWING NO: HILL-CED-TPM-27-00		TITLE: Side plate of pulling mechanism PART NO: SS 304 QUANTITY: 1 UNIT: PCS	DESIGNED BY: [Blank] CHECKED BY: [Blank] APPROVED BY: [Blank]
--	--	---	---



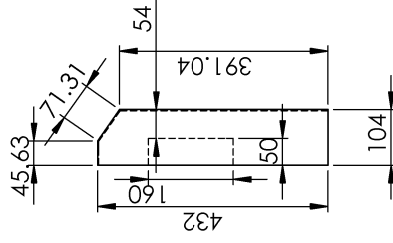
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL ANGULAR:		DRAWN		DATE		TITLE		DWG NO.	
		CHKD		7-11-2015		SIDE COVER RIGHT SIDE		HLL-CED-TPM-26-00	
		APPVD						A3	
		MFG							
		Q.A.							
		NAME		SIGNATURE		MATERIAL:		SCALE: 1:10	
		RAJIBRANJAN				SS-304		SHEET 1 OF 1	
						WEIGHT:			



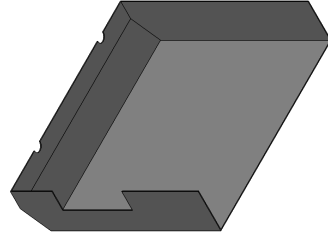
TOP VIEW



FRONT VIEW

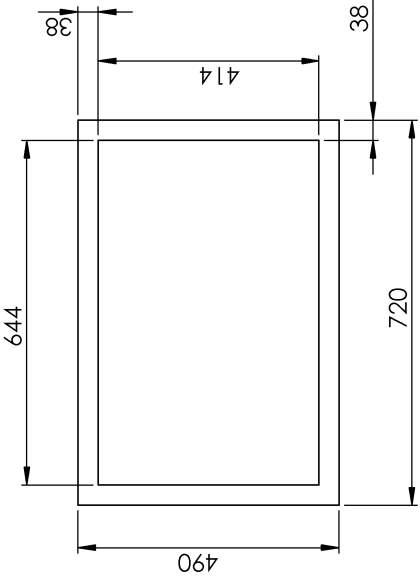


SIDE VIEW

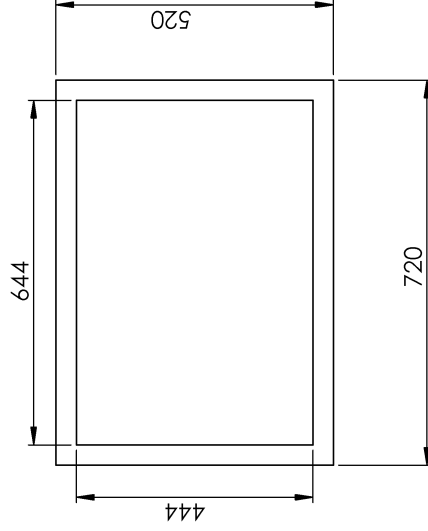


ISO VIEW

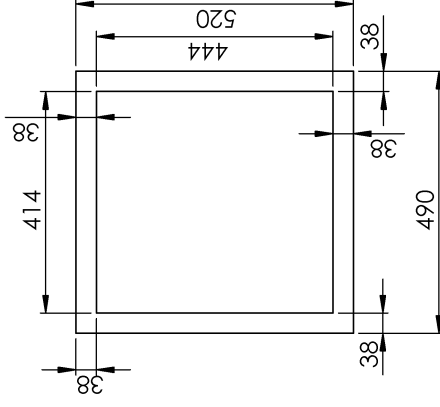
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TOLERANCES: FRACTIONAL DECIMAL ANGULAR:									
DRAWN	NAME	SIGNATURE	DATE						
CHKD	RAJIBRABD		7/11/2015						
APPVD									
MFG									
Q.A.									
				MATERIAL:		SS-304		DWG NO. HLL-CED-TPM-25-00	
				WEIGHT:				SCALE: 1:1	
				TITLE:		SIDE COVER LEFT SIDE		A3	



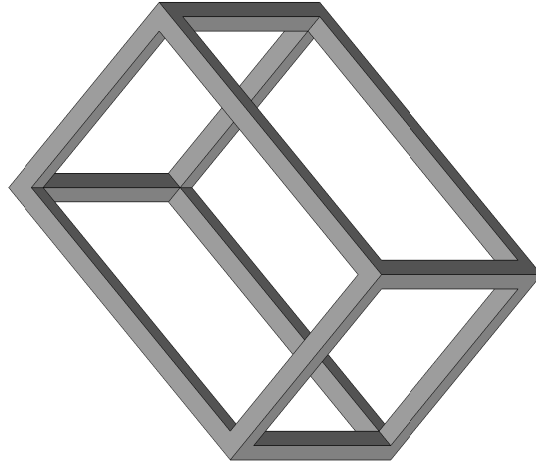
TOP VIEW



FRONT VIEW

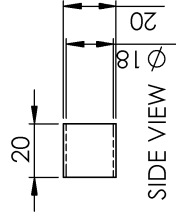
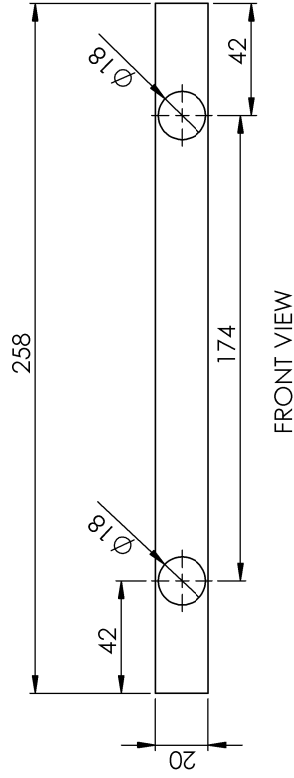


SIDE VIEW



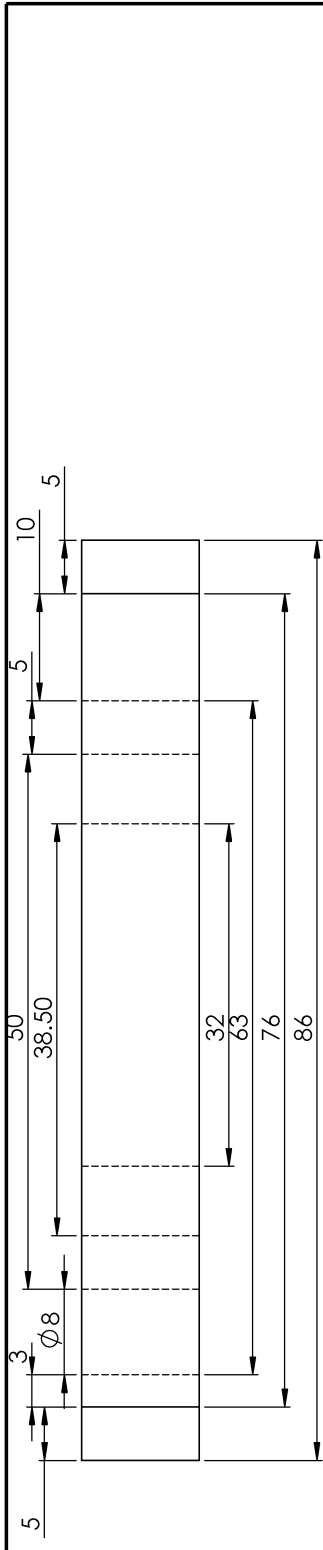
S/O VIEW

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL ANGULAR:		SIGNATURE		DATE		TITLE		Sealing machine main base structure	
DRAWN	NAME	RAJIBRANO	7/11/2015			DWG NO.		HLL-CED-TPM-23-00	
CHKD						MATERIAL:		MS	
APPVD						WEIGHT:		SCALE: 1:10	
MFG								SHEET 1 OF 1	
Q.A.								A3	

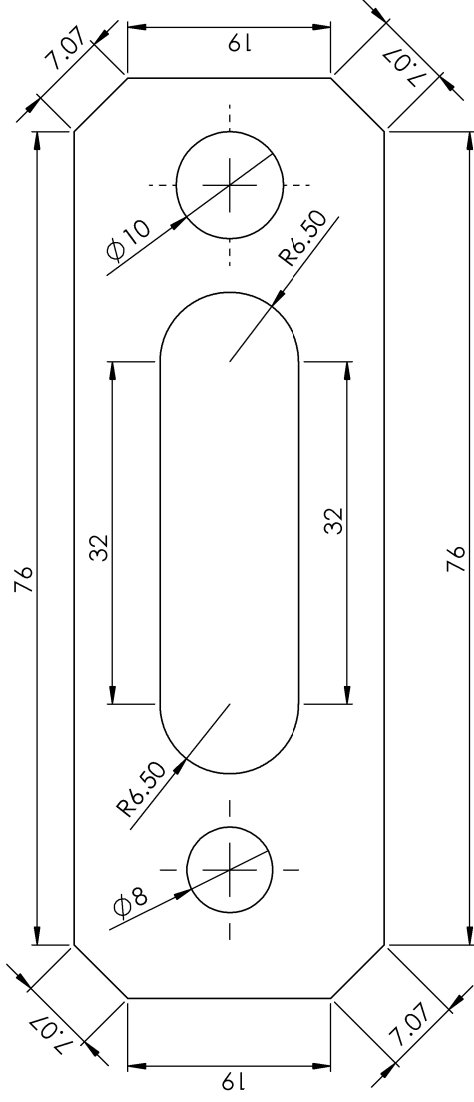


QTY -5 PIECES

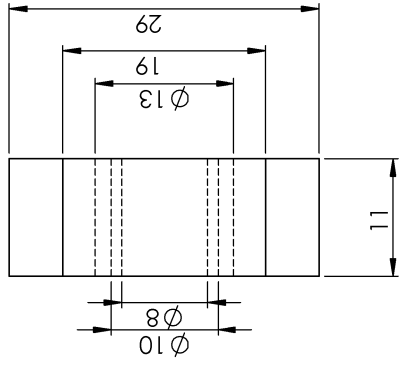
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
SURFACE FINISH:		TOLERANCES:		TITLE:		RECTANGULAR PLATE BETWEEN PERFORATION BLADE AND SEALING JAW-1			
ANGULAR:		NAME:		SIGNATURE:		DATE:		DWG NO.:	
DRAWN:		RAJIBRANOJ				7-11-2015		HLL-CED-TPM-22-00	
CHKD:								A3	
APPRVD:								SCALE: 1/2	
MFG:								SHEET 1 OF 1	
Q.A.:								MATERIAL: SS-304	
								WEIGHT:	



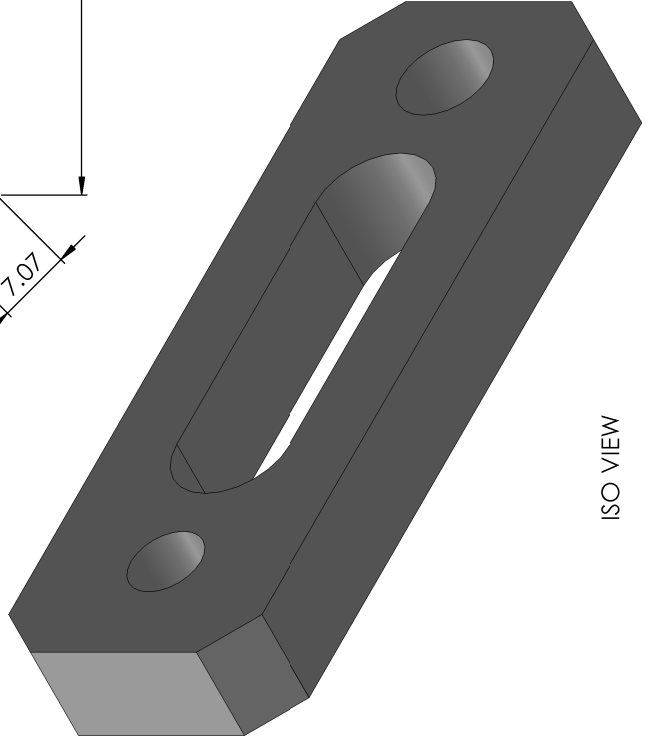
TOP VIEW



FRONT VIEW

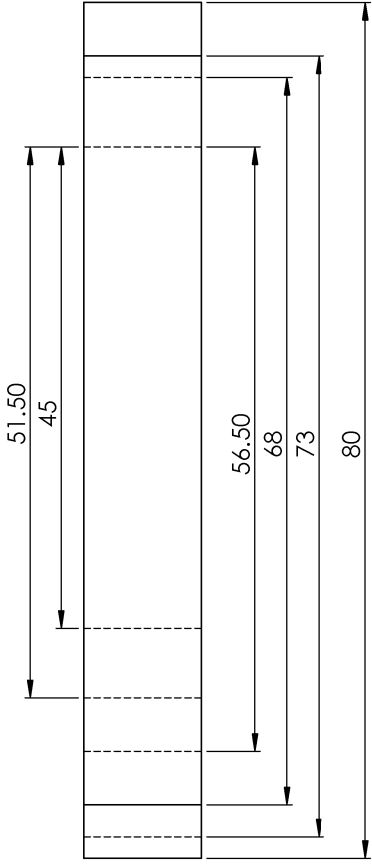


SIDE VIEW

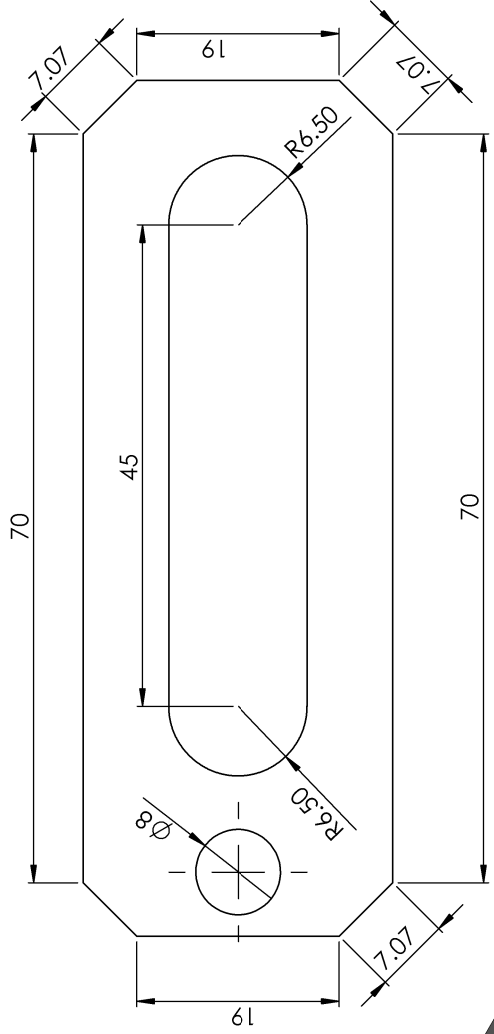


ISO VIEW

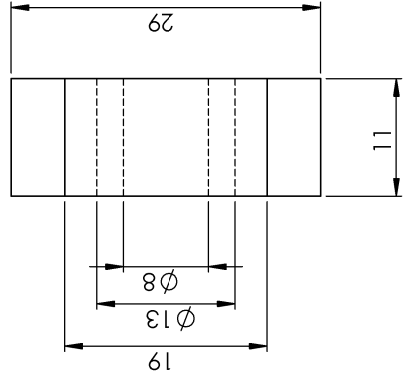
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TOLERANCES: FRACTIONAL ANGULAR:									
DRAWN	NAME	SIGNATURE	DATE					TITLE	
CHKD	RAJIBRANO		5-11-2015					LINK FOR ALIGN CYLINDER NEAR SEALING JAW	
APPRD								DWG NO. HLL-CED-TPM-15-00	
MFG								SCALE: 2:1	
Q.A.								SHEET 1 OF 1	
				MATERIAL: SS 304				A3	



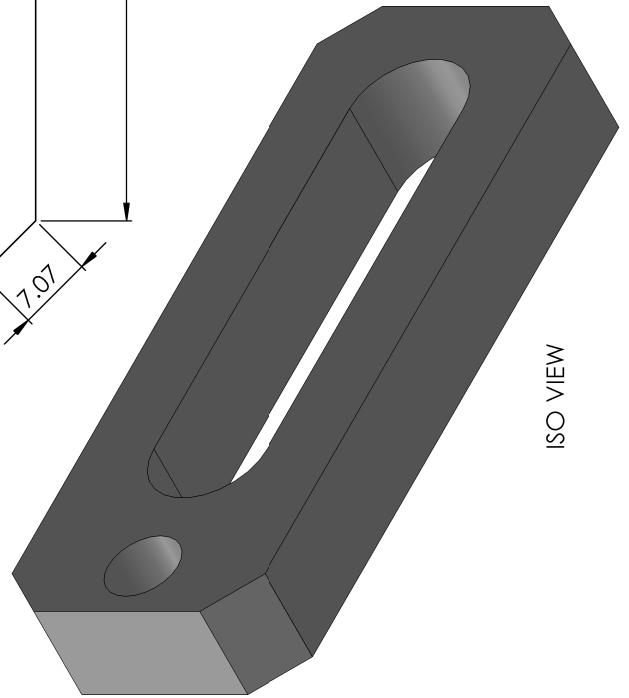
TOP VIEW



FRONT VIEW

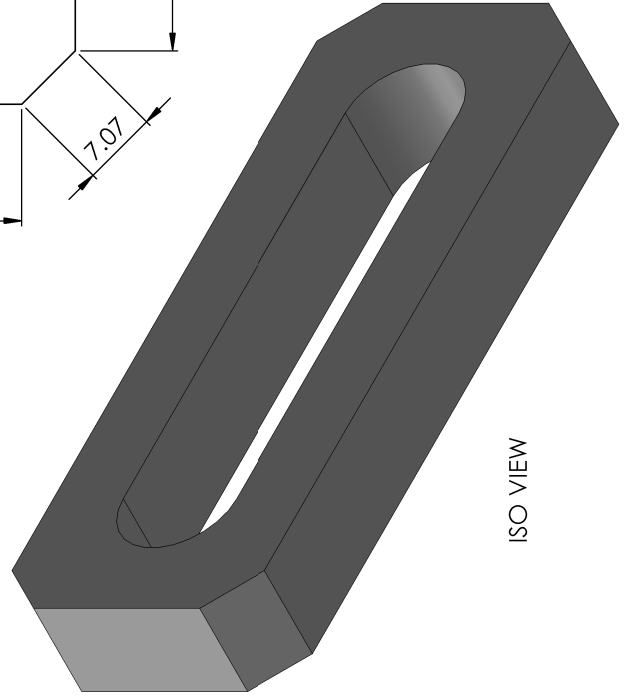
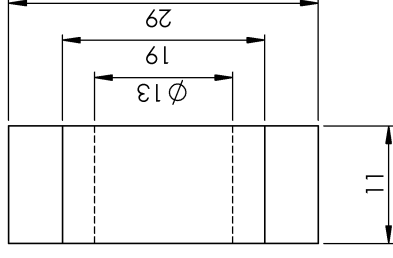
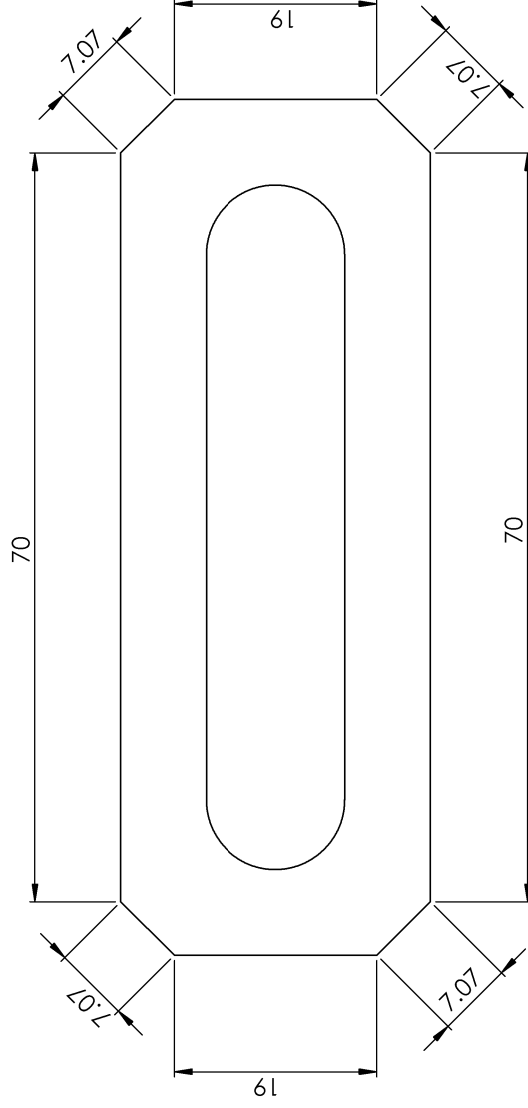
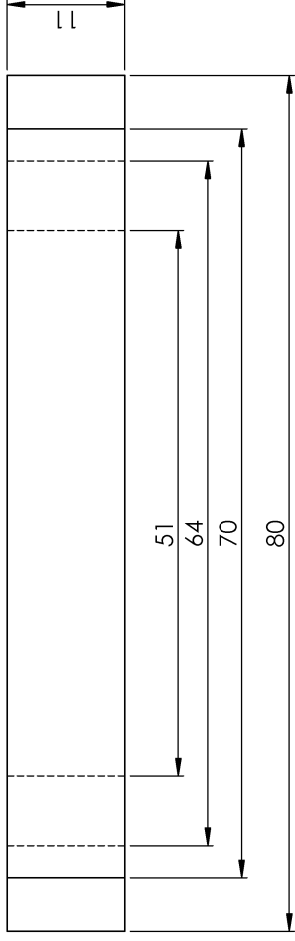


SIDE VIEW

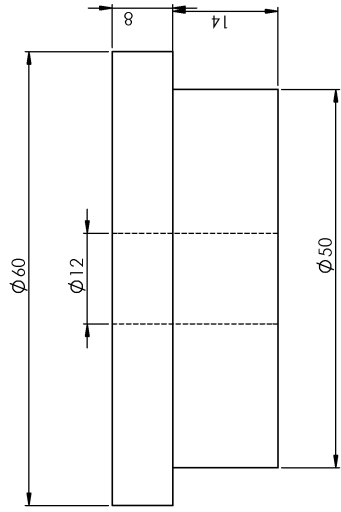


ISO VIEW

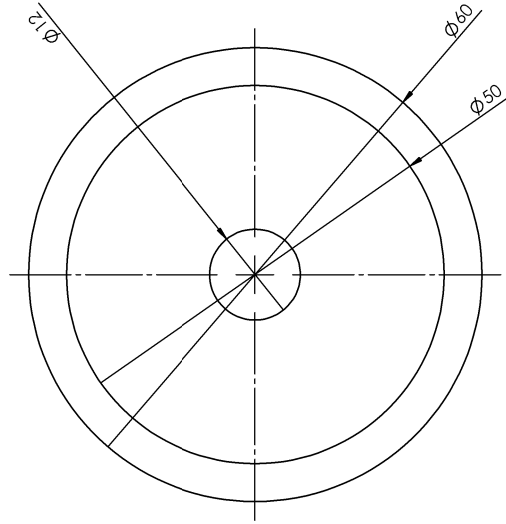
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TOLERANCES: FRACTIONAL DECIMAL ANGULAR:		DRAWN		DATE		TITLE		LINK FOR ALIGN CYLINDER NEAR SEALING JAW-2	
		CHKD		5-11-2015		DWG NO.		HLL-CED-TPM-14-00	
		APPRD				MATERIAL:		SS-304	
		MFG				WEIGHT:		SCALE:2:1	
		Q.A.				SHEET 1 OF 1		A3	



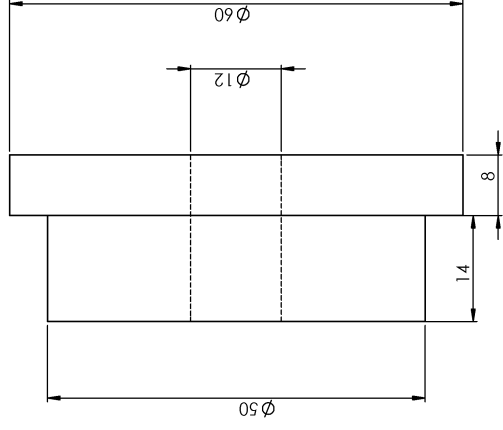
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL DECIMAL ANGULAR:		SIGNATURE		DATE		TITLE		LINK FOR ALIGN CYLINDER NEAR SEALING JAW	
DRAWN	NAME	SIGNATURE		DATE		DWG NO.		HILL-CED-TPM-13-00	
CHKD	RAJIBRANO	SIGNATURE		5-11-2015		MATERIAL:		SS-304	
APPRD		SIGNATURE				WEIGHT:		SCALE:2:1	
MFG		SIGNATURE				SHEET 1 OF 1		A3	
Q.A.		SIGNATURE							



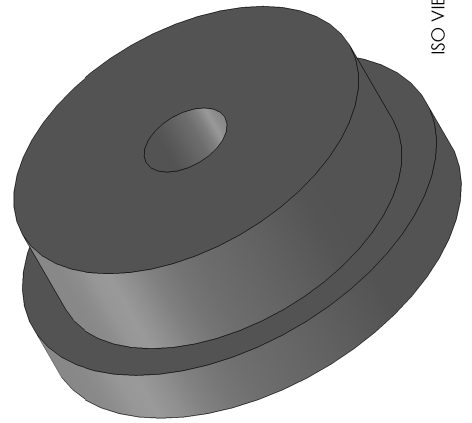
TOP VIEW



FRONT VIEW



RIGHT SIDE VIEW



BASE COURSE SPECIFICATIONS: DIMENSIONS ARE IN MILLIMETERS DIMENSIONS IN PARENTHESES: INDICATE TOLERANCES		FORM		FORM AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
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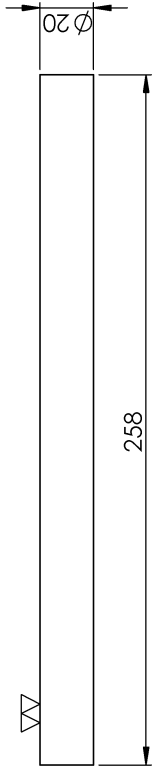
Disc of Sealing mould adjuster plate

HLL-CED-TPM-12-00

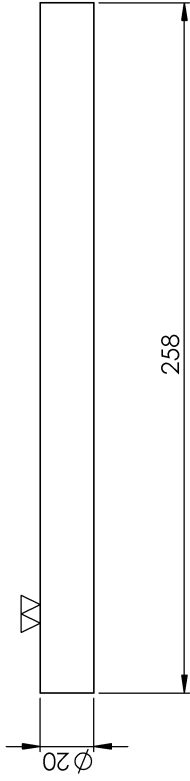
SS-304

A2

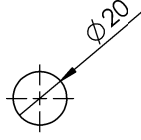
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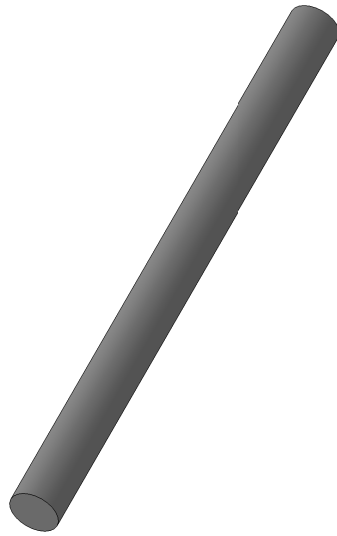
TOP VIEW



FRONT VIEW

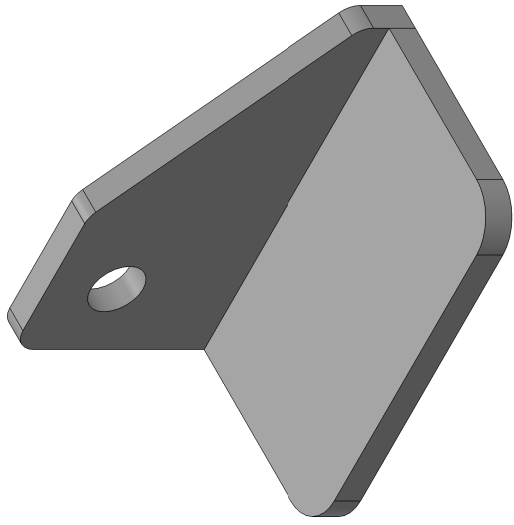


SIDE VIEW

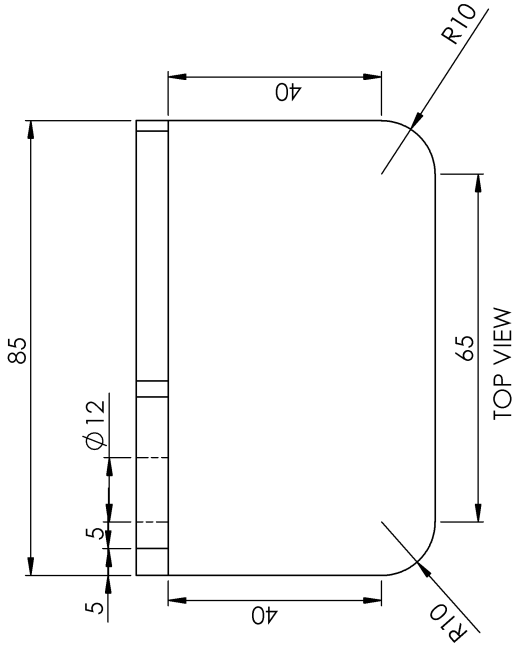


ISO VIEW

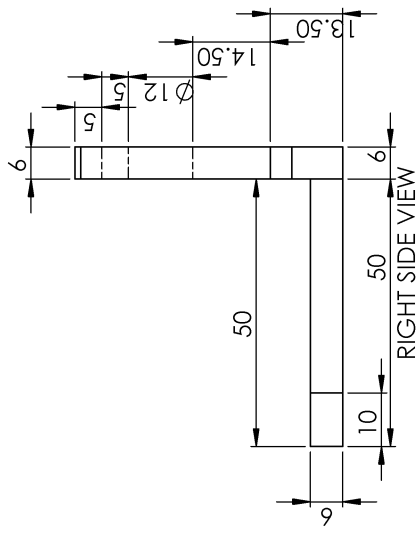
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL DECIMAL ANGULAR:		SIGNATURE		DATE		TITLE		CYLINDER ABOVE SEALING MOULD	
DRAWN	NAME	SIGNATURE		DATE		DWG NO.		HLL-CED-TPM-10-00	
CHKD	RAJIBRABD			5-11-2015		MATERIAL:		SS 304	
APPVD						WEIGHT:		SCALE: 1/2	
MFG						SHEET 1 OF 1		A3	
Q.A.									



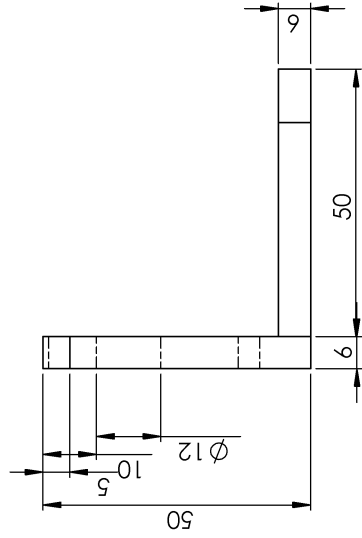
ISO VIEW



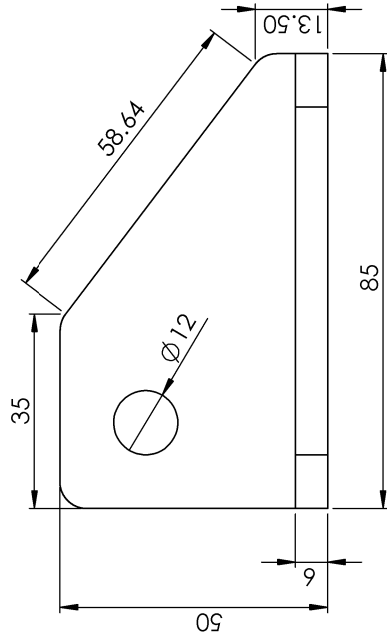
TOP VIEW



RIGHT SIDE VIEW



LEFT SIDE VIEW



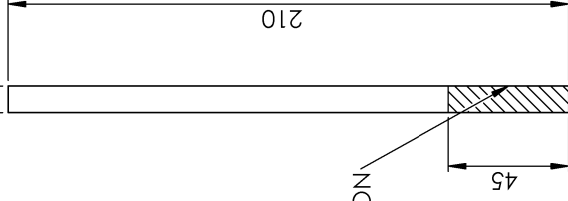
FRONT VIEW

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL DECIMAL ANGULAR:		DRAWN: RAJIBRANO		SIGNATURE:		DATE: 5-11-2015		TITLE:	
		CHKD:						CHAIN TENSIONER	
		APPVD:						DWG NO: HLL-CED-TPM-07-00	
		MFG:						SCALE: 1:1	
		Q.A.:						SHEET 1 OF 1	
								MATERIAL: SS-304	
								WEIGHT:	
								A3	

$\phi 10$

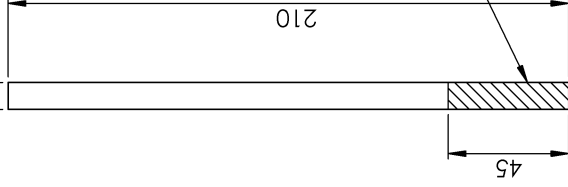
TOP VIEW

$\phi 10$



FRONT VIEW

$\phi 10$



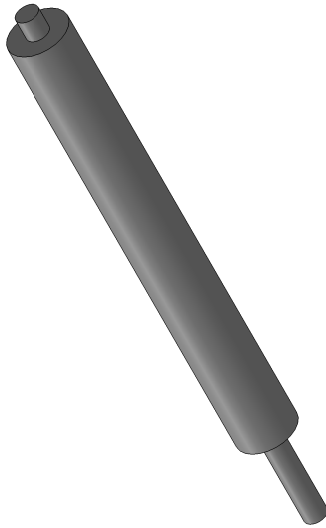
SIDE VIEW

QTY- 1 PIECE

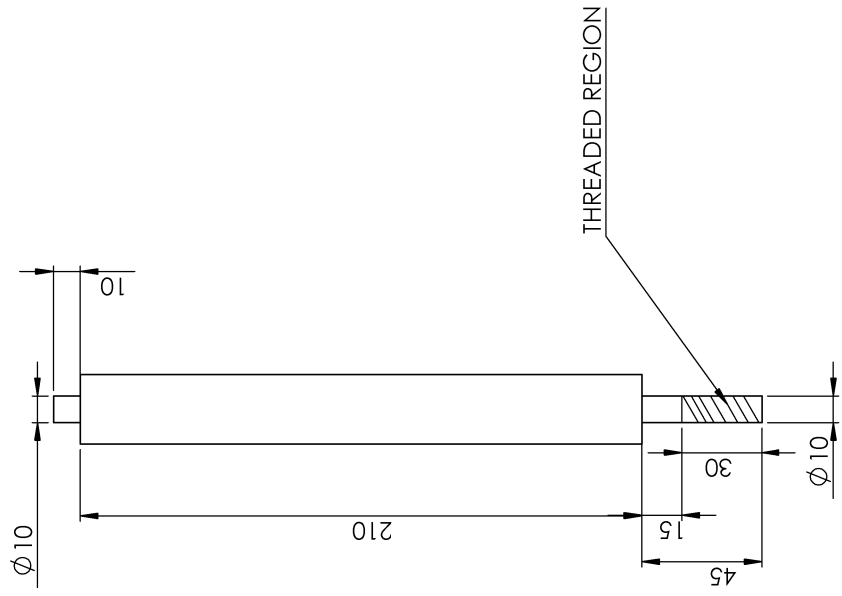
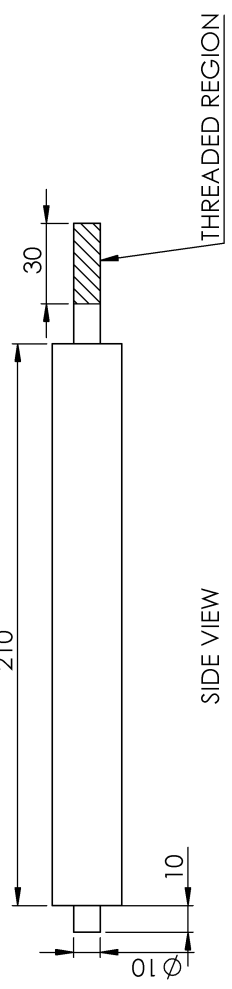


ISO VIEW

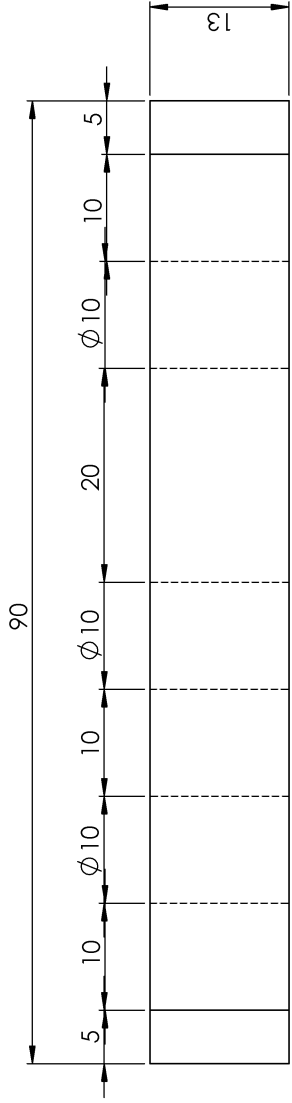
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TOLERANCES: FRACTIONAL DECIMAL ANGULAR:		SIGNATURE		DATE		TITLE		DWG NO.	
DRAWN	RAJIBRANOJ			5-11-2015		BOTTOM FOIL GUIDE SHAFT(SMALL)		HLL-CED-TPM-05-00	
CHKD								A3	
APPVD									
MFG									
Q.A.						MATERIAL: SS-304		SCALE: 1/2	
				WEIGHT:		SHEET 1 OF 1			



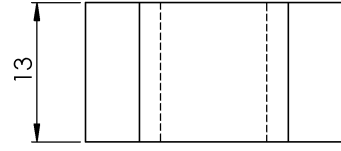
ISO VIEW



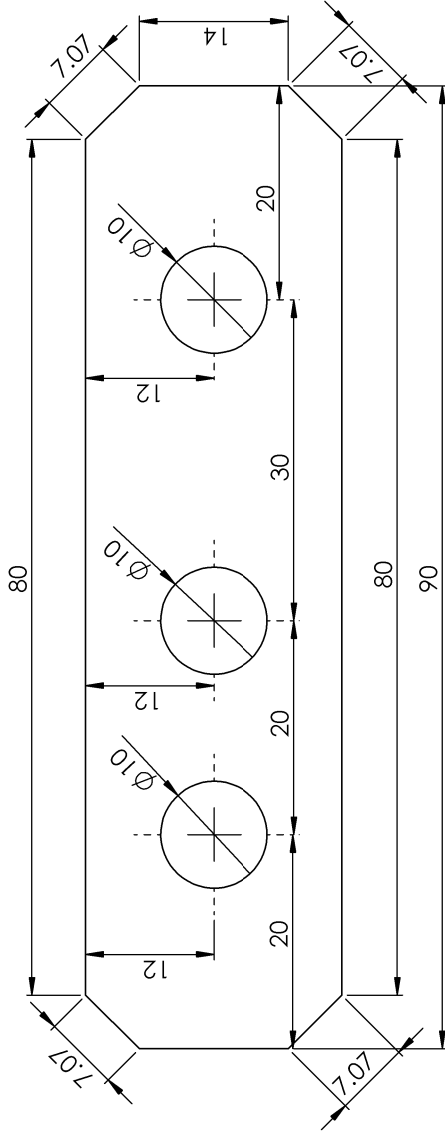
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL DECIMAL ANGULAR:									
DRAWN	NAME	SIGNATURE	DATE	TITLE					
CHKD				BOTTOM FOIL GUIDE CYLINDER					
APPVD				DWG NO. HLL-CED-TPM-04-00					
MFG				MATERIAL: SS 304					
Q.A.				SCALE: 1/2					
				WEIGHT:					
				SHEET 1 OF 1					



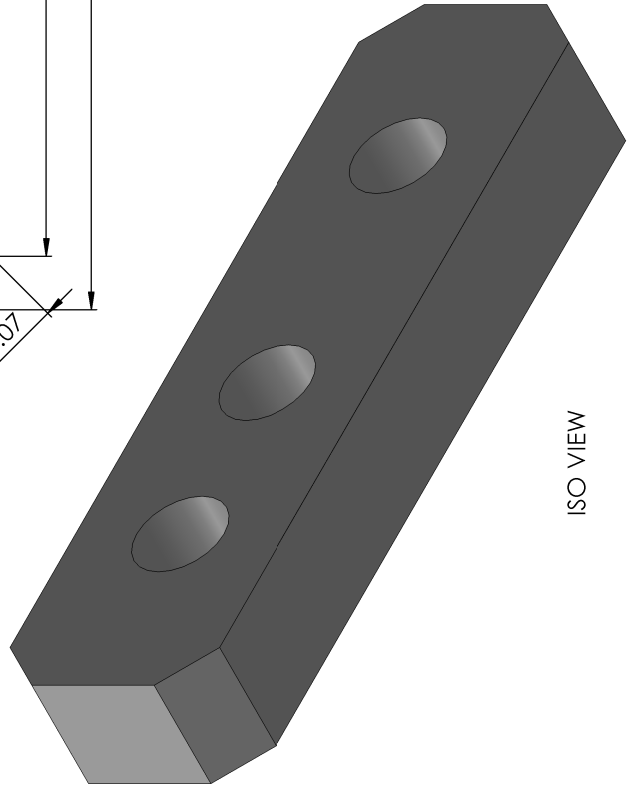
TOP VIEW



SIDE VIEW

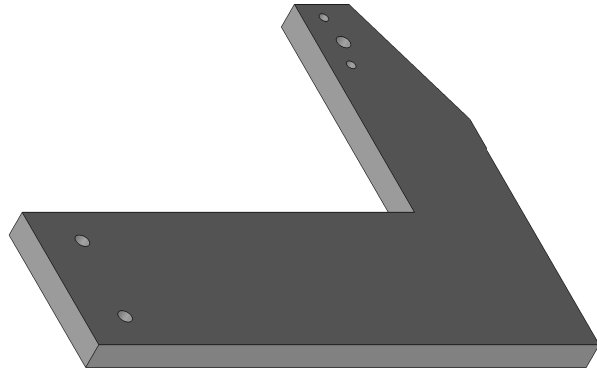
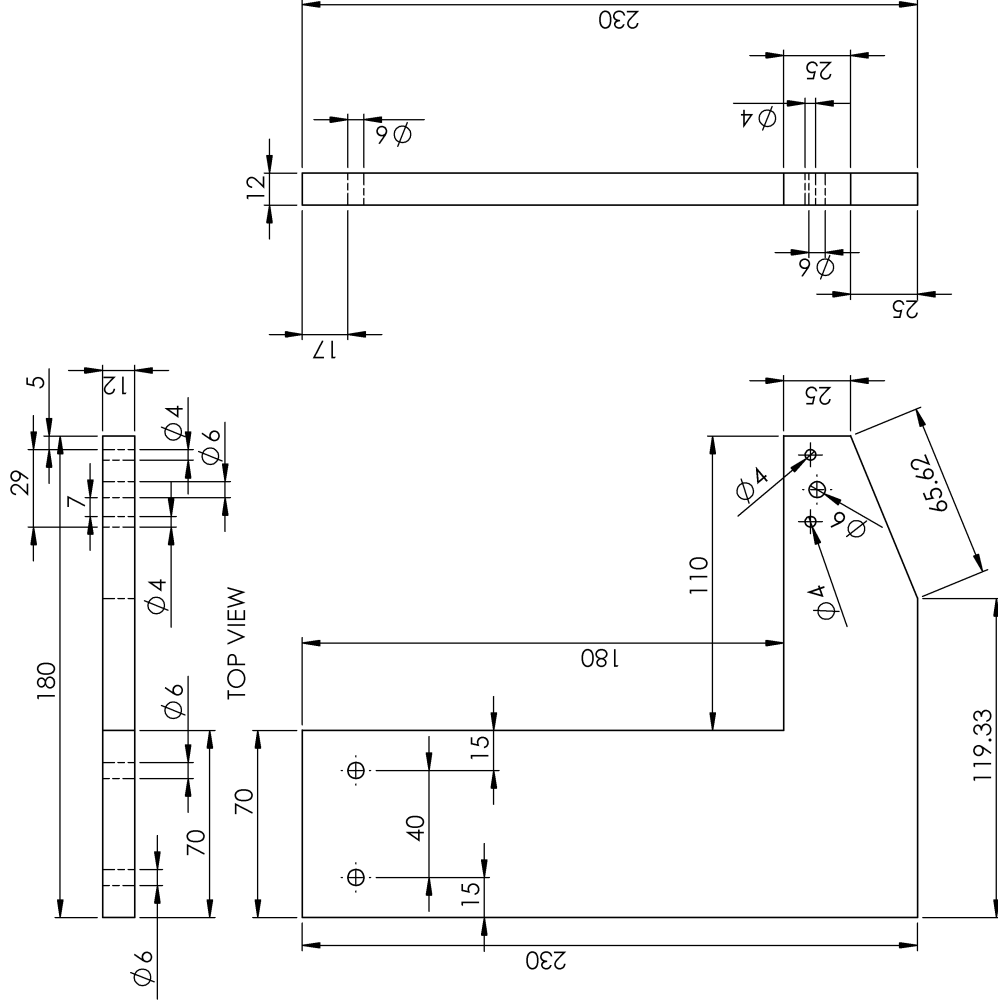


FRONT VIEW



ISO VIEW

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL ANGULAR:									
DRAWN	NAME	SIGNATURE	DATE	TITLE		BOTTOM FOIL CONNECTION CYLINDER JOINT ALIGNMENT LINK			
CHKD	RAJIBRANO		5-11-2015						
APPRD									
MFG									
Q.A.									
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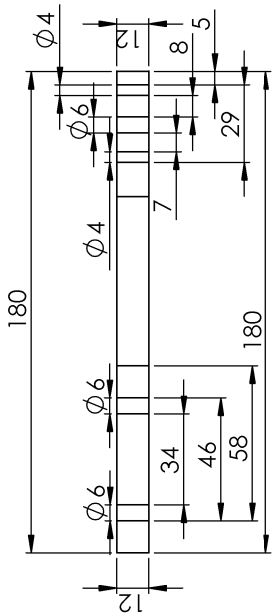
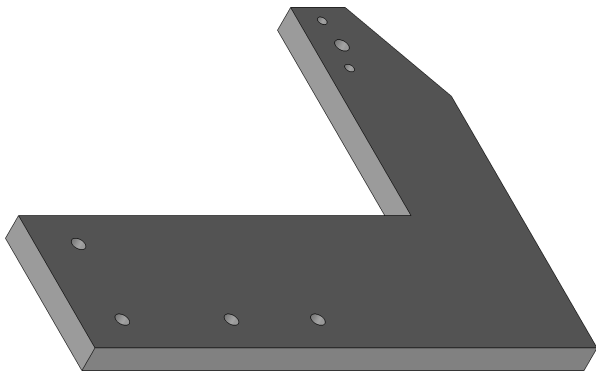


ISO VIEW

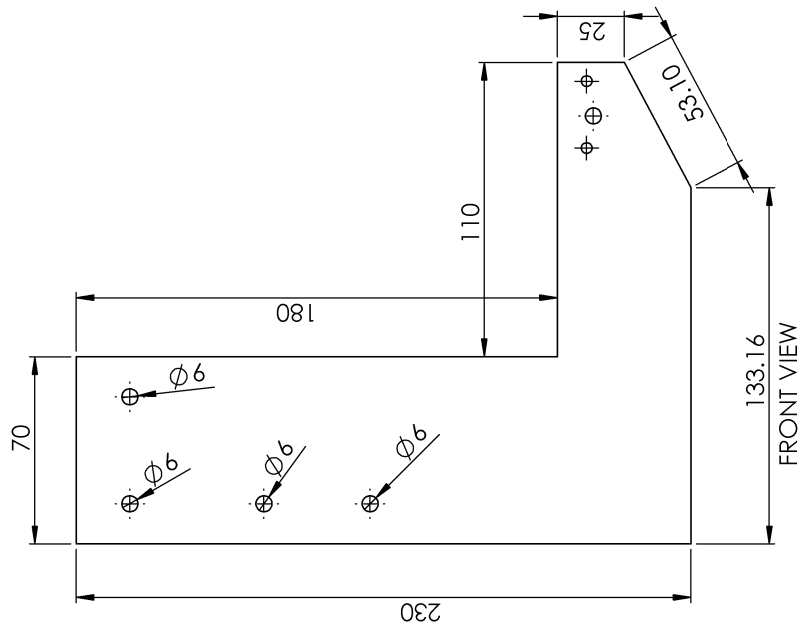
SIDE VIEW

FRONT VIEW

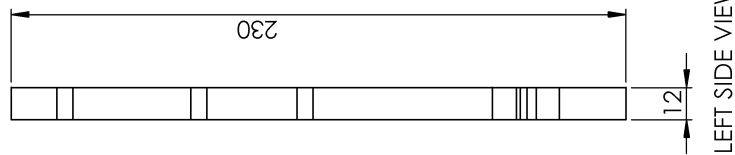
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL DECIMAL ANGULAR:									
DRAWN	NAME	SIGNATURE	DATE						
CHKD	RAJIBRANO		5-11-2015						
APPVD									
MFG									
Q.A.									
				MATERIAL:		SS 304		TITLE	
								BOTTOM FOIL CONNECTING PLATE(RIGHT SIDE)	
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								HLL-CED-TPM-02-00	
								A3	
								SCALE:1/2	
								SHEET 1 OF 1	



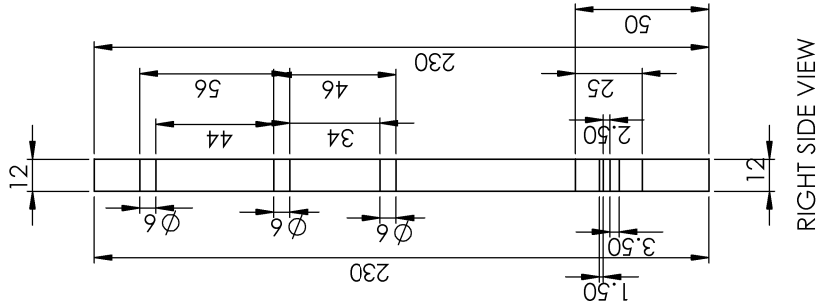
TOP VIEW



FRONT VIEW



LEFT SIDE VIEW



RIGHT SIDE VIEW

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
TOLERANCES: FRACTIONAL DECIMAL ANGULAR:									
DRAWN	NAME	SIGNATURE	DATE						
CHKD	RAJIBRAND		5-11-2015						
APPVD									
MFG									
Q.A.									
				MATERIAL:		SS 304		TITLE:	
								BOTTOM FOIL CONNECTION PLATE(LEFT SIDE)	
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								HILL-CED-TPM-01-00	
								A3	
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								SHEET 1 OF 1	