

ALIMCO

Artificial Limbs Manufacturing Corporation of India (A GOVERNMENT OF INDIA UNDERTAKING) G.T. ROAD, KANPUR-U.P. 209217

TENDER NO.PT/OT/10/AW DATE – 18.12.2018

TENDER DOCUMENTS

FOR

"Design, Fabrication, Supply, Installation & Commissioning of Automatic Conveyorized Integrated Powder Coating Plant along with Pre-dip treatment Plant (On Turn Key Basis)"

Ref: TENDER NOTICE No-PT/OT/10/AW Dated-18.12..2018

Dear Sir,

1. Online tenders are invited for the "Design, Fabrication, Supply, Installation & Commissioning of Automatic Conveyorized Integrated Powder Coating Plant along with Pre-dip treatment Plant (On Turn Key Basis) to the following destination conforming strictly to ALIMCO Specifications enclosed at Annexure-A, against Purchase Orders to be placed on the successful Tenderer within specified period as per Purchase Order. The specific conditions of supply are enclosed at Annexure-D. Manual bids shall not be accepted.

Artificial Limbs Manufacturing Corporation of India G.T. ROAD, Kanpur-209217 (U.P.) Qty – 01 Set.

2. The specification of "Design, Fabrication, Supply, Installation & Commissioning of Automatic Conveyorized Integrated Powder Coating Plant along with Pre-dip treatment Plant (On Turn Key Basis)" and a tentative quantity likely to be covered by Purchase Order is indicated in the ANNEXURE- 'A'. The whole plant would be required to be supplied as per the delivery schedule specified in our Purchase Order or as indicated in the tender.

| Sr. No. | Description | Qty. | Estimated Cost (in Rs.) | EMD (in Rs.) |
|---------|---|-------------------|----------------------------|--------------|
| 1. | Design, Fabrication, Supply, Installation & Commissioning of Automatic Conveyorized Integrated Powder Coating Plant along with Pre-dip treatment Plant (On Turn Key Basis) | As per Annexure A | INR 12.9 Cr. | 1500000/- |

3. Tender documents may be downloaded from ALIMCO website <u>www.alimco.in(for reference only)</u> and CPPP website <u>https://eprocure.gov.in/eprocure/app</u> as per the schedule as given in CRITICAL DATE SHEET as under.

CRITICAL DATE SHEET

| Published Date | 2019 (10:00 AM) |
|----------------------------------|-----------------|
| Bid Document Download Start Date | 2019 (10:00 AM) |
| Bid Submission Start Date | 2019 (10:00 AM) |
| Bid Submission End Date | 2019 (02:00 PM) |
| Bid Opening Date | 2019 (3:30 PM) |

Bids shall be submitted online only at CPPP website: https://eprocure.gov.in/eprocure/app.

Tenderer/Contractorsare advised to follow the instructions provided in the 'Instructions to the Contractors/Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at <u>https://eprocure.gov.in/eprocure/app</u>.

Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

Part I ('TC' BID):

The tenderers are requested to submit the scan copy of following details/documents in their 'TC'-Bid.

Mandatory / Pre-Qualification Criteria):-

- Submit, scan copy of DD/Bankers cheque for Rs. 560/- (GST @ 12% Included) in favour of ALIMCO, payable at Kanpur towards cost of Tender documents, if down-loaded from the website of the Corporation/CPPP and original copy of the same should reach to the office of Senior Manager (SP&C), Artificial Limbs Manufacturing Corporation of India, G. T. Road, Kanpur 209 217 on or before dated -----.2019 (All SSI units/ MSE Vendors are exempted from Tender Cost).
- ii) Earnest Money:-Submit scan copy of Demand Draft or Pay Order or Bankers Cheque for Rs. 150000/in favour of ALIMCO, payable at KANPUR as Earnest Money Deposit along with 'TC' BID and original copy of the same should reach to the office of Senior Manager (SP&C), Artificial Limbs Manufacturing Corporation of India, G. T. Road, Kanpur – 209 217 on or before dated -----2019.Exemption from Earnest Money Deposit (EMD) will be allowed to all SSI units/ Micro & small enterprises (MSE) on submission of valid Udyog adhaar memorandum (UAM) against tender for the items/nature of business/ type of services specified there in the UAM.
- iii) The person signing the bid should be duly authorised representative of the firm/company whose signature should be verified and certificate of authority should be submitted. The poser or authorisation or any other document consisting of adequate proof of the ability of the signatory to bind the firm/company should be annexed to the bid.
- iv) Tender documents with proper seal and signature of authorised person on each page of the bid must be submitted.
- v) The Complete specifications, Make/Model/Brand consisting of whole plant & its accessories offered on parameters specified as per Annexure-A, must be mentioned. The details with values for individual specifications/parameters desired must be indicated at Annexure 'B2' to this tender document.
- vi) Copy of GST Registration Certificate, duly signed & stamped.
- vii) The tenderer should have an average annual turnover of not less than 30% of the over-all estimated value of tender during the last 03 financial years i.e. FY: 2015-16 2016-17 & 2017-18. In addition Tenderer should have net worth of at-least 2 crore rupees. In order to authenticate, certificates regarding average turnover and net worth from a qualified Chartered Accountant is required to be furnished along with 'TC-Bid'.
- viii) Copy of income tax return for the last three Assessment years, i.e. AY-2016-17, 2017-18 & 2018-19, duly signed & stamped.
- ix) Only the OEM is allowed to bid for the whole plant (on turn-key basis) mentioned in the tender document. The Authorisation letter from Principal/ OEM must be enclosed.
- x) The tenderer must have completed similar supply orders/contracts/agreements minimum 01 nos. If order value is 80% of the PO/WO value, 02 nos. if order value is 60% of the PO/WO value & 03 nos. if order value is 30% of the PO/WO value of any Govt./PSU/Govt. Aided Organization/Institution/Private Organization in last 05 years, or as specified at Annexure-A, ending -- 2019. Please enclose copy of such supply orders/contracts/agreements along with completion certificate/ proof of the same issued by the client.
- xi) Undertaking stating that "The delivery, installation and commissioning of the plant (on turn Key Basis) must be completed within the stipulated period as indicated in the tender or specified at Annexure-A, from the date of placement of PO/work contract" in the format enclosed at Appendix-1.
- xii) The tenderer should submit an undertaking that his/her firm has not been debarred/blacklisted/terminated/banned to participate in the tender by any Govt. Institution, PSUs, and State Govt. or Central Govt. Deptt. **in the format enclosed at Appendix-2**.
- xiii) The tenderer should submit an undertaking that his/her Offer is valid for acceptance for 90 days from the date of opening of TC Bids in the format enclosed at Appendix-3.

- xiv) Undertaking to the effect that all the tender terms & conditions are acceptable to the bidder in the format enclosed at Appendix-4.
- xv) Undertaking to the effect that a Performance Bank Guarantee (PBG) of 10% of the order value, valid for warranty/defect liability period& claim submission date within 3 months from the date of expiry of Bank Guaranty period will be submitted after the commissioning of the plant (on turn-key basis). The security deposit (including EMD) shall be released on receipt of 10% PBG valid for warranty period in the format enclosed at Appendix-5.
- xvi) Undertaking to the effect that a Advance Bank Guarantee (BG) of 110% of the advance value subject to maximum up to 100 Lakhs, valid for successful installation, commissioning & Prove out of whole plant & it's accessories & can be submitted within 1 months from the date of releasing the PO/Work Order of the plant (on turn-key basis) in the format enclosed at Appendix-6. The recovery of the advance will be done as adjustment @25% of advance value from the running bill. The Advance Bank Guarantee (BG) for advance shall only be released after successful installation, commissioning & Prove-out of whole plant & it's accessories and full recovery of the advance.
- xvii) The tenderer should submit an undertaking that his/her firm shall provide security deposit within 14 days of releasing PO in the format enclosed at Appendix-7.
- xviii) The tenderer should submit an undertaking that his/her firm shall provide the complete training regarding operation & maintenance of the Whole Plant (On turn-key Basis) & its accessories in the format enclosed at Appendix-8.
- xix) The tenderer should submit an undertaking for unconditional acceptance to replace the supplies if rejected at the destination **in the format enclosed at Appendix-9**.
- xx) Undertaking to be submitted by the tenderer that "payment terms mentioned at Para No-15 of this tender document (i.e. Terms of Payment) is acceptable" in the format enclosed at Appendix-10.
- xxi) The tenderer should submit an undertaking that his firm shall attach the proof regarding prior Experience of supplying such systems to manufacturers of M.S Pipe/ Tubular Structure Products/components, as specified in the Annexure-A of the Tender Document i.e. (Vendor must have done such installation at least 03 nos. such plants during last 05 years Vendor to provide valid details of such customer along with contact number for verification) in the format enclosed at Appendix-11.
- xxii) Tenderers are required to submit "Tender Acceptance Letter" in the format enclosed at Appendix-12.
- xxiii) Tenderers are required to submit "**Undertaking**" regarding availment of GST and matching of Input credit in the format enclosed at Appendix-13.
- xxiv) Tenderers are required to submit "**Undertaking**" regarding the material deliver in multi-stages and the payment of the same will be done on the basis of completion of stage wise work as given **in the format enclosed in Appendix-14.**
- xxv) Undertaking to be submitted by the tendered that "They should undertake that they will execute AMC for the period of 03 years after the expiry of warranty/defect liability period as per the requirement of ALIMCO and the AMC shall not exceed 0.5%, 1.5% &2.5% of basic value of the machine/plant during 3rd, 4th & 5th year respectively from the date of successful installation & commissioning of the machine/plant/item/equipment" in the format enclosed at Appendix-15.
- xxvi) Tenderers are required to submit duly filled **Annexure 'B1 & B2'**, enclosed herewith.
- xxvii) An affidavit to be sought from L1 party regarding:
 - a) The party has not been debarred/blacklisted/terminated/banned by any Govt. Institution, PSUs, and State Govt. or Central Govt. Deptt.
 - b) The party has not supplied the similar machine /system at a cost lower than the cost offered to ALIMCO to any government / semi-government / reputed private organisation in India.

(All these documents / details / conformation should necessarily be submitted specifically & in the same order.)

NOTE:

 Price bids of only those tenderers, who are assessed as technically qualified by the Corporation shall be opened & only Such parties shall be communicated regarding date & time of Price Bid opening requesting them to attend the Tender opening, if interested. Part II ('P'BID): shall consist of complete price details as under: -

P Bid offer shall be uploaded online. Rate should be quoted in Rupee per unit **as per format at Annexure-C (P-bid)**. Rate should be quoted for FREE DELIVERY at destination as indicated in Para 1 & should be without any price escalation clause. The following data shall be invariably furnished:-

- a) GSTIN No., HSN Code, GST in % &Rs.
- b) Packing & Forwarding charges, Installation charges, if any, in % &Rs.
- c) Freight charges in % &Rs. at FOR ALIMCO, HQ, Kanpur (destination as indicated in para-1).
- d) Charges for installation and commissioning (if any) may please be clearly indicated. Alternatively, rates quoted shall be considered to be inclusive of installation & commissioning charges.

THIS BREAKUP IS ESSENTIAL TO ENABLE PLACEMENT OF THE PURCHASE ORDERS AND PAYMENTS BY H.Q./AAPC'S AS THE CASE MAY BE AND KEEPING IN VIEW APPLICABILITY OF GST BY THE GOVERNMENT w.e.f. 1st July 2017

The L1 offer will be decided based on landed cost at ALIMCO (destination as indicated in para-1).

NOTE: ALIMCO GST Registration details are given below.

| | H.Q, Kanpur | AAPC, Jabalpur | AAPC, Bangalore | AAPC, Bhubaneswar | <mark>AAPC</mark> Ujjain |
|---------------|-----------------|-------------------|--------------------|----------------------|-----------------------------|
| GST Regd. No. | 09AABCA8899F1Z6 | | | | |

Variation Clause: - Any change (Increase / Decrease) in Govt. Duties / Levies / Taxes GST as amended made applicable by Govt. (State / Central) from time to time at the rate as will be applicable over & above the basic price/rate quoted by parties in their offer during the currency of Purchase Order/Contract shall be considered by the Corporation for amendment on party's request alongwith necessary documents in support of their claim/amendment.

- 4. <u>SITE INSPECTION</u>: The tenderers shall be deemed to have inspected and examined the site and its Surrounding and information available in connection therewith and to have satisfied himself, so far as is practicable, before submitting his tender, to the extent and nature of work and materials necessary for completion of works, availability of such materials, the means of access to the site and the accommodation that he may require and, in general, shall be deemed to have obtained all necessary information.
- 5. All the bids so received against the tender shall be scrutinized and assessed for the Plant suitability offered by you. Offers of only those tenderers whose bids are found conforming to laid-down specifications and qualifying our requirements shall be considered. Quotes with any variation in the specifications affecting functions of the Plant as specified are liable for outright rejection. Tenderers are therefore requested not to quote for nonconforming specifications. Plants as an alternative one or two otherwise, for which tenders are liable for rejection. Each value as specified is to be mentioned in tenders and words "as specified" or "same" shall not be considered valid at all.
- 6. No change in specifications by tenderers shall be permissible after submission of Technical Bids.

7. EARNEST MONEY DEPOSIT& SECURITY DEPOSIT:

All the Tenderer must submit Rs. 150000/- by **Demand Draft** or **Pay Order** or **Bankers Cheque** only in favour of **ALIMCO**, payable at **KANPUR** as **Earnest Money Deposit (EMD)**along with 'TC' BID. No other mode is acceptable. The EMD shall be released within 30 days of finalization of the purchase orders to the unsuccessful tenderers. No interest will be payable on the EMD.

All SSI units / Micro & Small Enterprises (MSE) will be issued Tender Documents free of cost & Exemption to submit Earnest Money Deposit (EMD) on submission of valid Udyog Aaadhar Memorandum (UAM) against Tender for the items/nature of business/ type of services specified therein in the UAM. The

amount of Earnest Money should be furnished in the form of Demand Draft or Pay Order or Bankers Cheque only. No interest shall be claimed/ payable on the bid- security/ EMD furnished to the Corporation.

The earnest money shall be forfeited if the tenderer withdraws his tender before the period of validity of the tender (i.e. minimum 90 days) and / or tenderers fails to furnish requisite security deposit within the specified period after the award of order/contract wherever applicable.

Subsequent to placement of Order / Contract, the successful tenderer will be required to deposit a sum equal to 10% of the Order/ Contract value subject to a maximum of Rs. 100.00 lakhs, within 14 days from the date of purchase order as **Security Deposit (SD)** in the form of 'Demand Draft'or 'Pay Order' or 'Bankers Cheque 'or 'Irrevocable Bank Guarantee' from any of Nationalized Bank in the prescribed format enclosed at **Annexure-E**'only in favour of **ALIMCO** payable at **Kanpur** for due discharge of the Purchase Order released on the basis of this tender. This will be retained till the expiry of warranty Period for the plant supplied. No interest will be payable on the Security Deposit. The earnest money already submitted with the tender may be adjusted towards Security Deposit. The Earnest Money deposit of the successful bidder will be returned / refundable only on receipt of valid & acceptable Security deposit. The successful vendor may also give their consent/request for retaining/converting their EMD into part of Security deposit & deposit the balance amount towards SD.

The Security deposit may be refunded/returned on submission of irrevocable, unconditional & acceptable Bank guarantee as performance guarantee by the party to cover its obligations to offer free of cost replacement under the warranty period from any nationalized bank. The corporation may also consider, at its discretion, acceptance of Corporate Guarantee given by Foreign Principal In lieu of Bank Guarantee in case of imported goods.

Security deposit shall be furnished within the time limit provided for in the Contract. Non submission of Security deposit within the time specified for the purpose shall amount to the breach of essential conditions of the Contract and shall render the Contract liable to cancellation& the contractor shall be liable for all consequence thereof or caused there by.

After Satisfactory installation and commissioning of the plant and on receipt of Performance Bank Guarantee equal to 10% of the PO/work contract Value, valid for the warranty period, the Security deposit amount (including of EMD) shall be released by ALIMCO.

The Corporation reserves the right to forfeit the earnest/security money deposit in case the supplier fails to make good losses on supplies, unable to replace supplies found unacceptable as well as losses on account of exceptional delays in supplies.

8. <u>Submission of Tender</u>

The tender shall be submitted online in two part, viz., technical bid and price bid

Technical Bid (TC Bid)

The following documents are to be furnished by the tenderer along with <u>Technical Bid</u> as per the tender document

- 1) Scanned copy of DD against tender document cost & EMD / Exemption Certificate.
- 2) Scanned copy of all relevant documents as per Tender.
- Original copy of DD against tender fees and EMD must reach ALIMCO, Kanpur on or before date -----2019

Please note that no indication of the rates/amounts be made in any of the documents submitted with the TC-BID

PRICE BID (P Bid)

(a) Schedule of price bid in the form of Annexure-C.

9. OPENING & EVALUATION OF TENDER:

- a) The tenders shall be opened online at <u>https://eprocure.gov.in/eprocure/app</u>at 15.30 hours on due date in presence of representatives of tenderers who may like to be present. Bidder can view live bid opening at their remote end also. Bids will be opened as per date/time as mentioned in the Tender Critical Date Sheet. After online opening of Technical-Bid the results of their qualification as well Price-Bid opening will be intimated latter.
- b) Only the 'TC-Bid' (Part I) of the tender will be opened online on-----2019.at 15.30 Hrs. by the Tender Opening Committee of ALIMCO in the presence of representatives of tenderers who may like to be present. <u>Tenders received late will not be considered</u>. If the due date happens to be a holiday the same stands extended to the date of next working day with time remaining the same. However, the Corporation has the right to alter the date & time of Tender closing & opening. The same shall be notified only on the website of the Corporation. The procedure will be as follows:
- c) Subsequent to opening of 'TC-BID' of all tenderers correspondence / discussion with regard to the conditions and other technical aspects may be held by the Technical Committee or by Officer(s) nominated by ALIMCO, if needed
- d) In case any tenderer submit only 'TC-BID' his tender shall not be considered and shall be treated as incomplete tender. Similarly, if any tenderer submit only 'P-BID', the same shall also be not considered.
- e) The technical bids will be evaluated to shortlist the eligible bidders. The technical bids of only the eligible bidders shall be considered for further processing (technical evaluation). Preliminary scrutiny of the proposal will be made to determine whether they are complete, required processing tender fee and EMD have been furnished whether the documents have been properly signed, and whether the bids are generally in order. Proposals not conforming to such preliminary requirements will be prima facie rejected.
- f) The ALIMCO has a right to seek clarification/ documents from the tenderer relating to TC-Bid of tenderers if such information is essential for evaluation of tender.
- g) Bidder whose technical bids found to be acceptable and meeting the Mandatory/Pre-qualification criteria as specified in this tender will only be informed about the date and time of the opening of the commercial bid (P-Bid).
- h) ALIMCO will open commercial bids of only the technically shortlisted bids, in the presence of the bidder or their-authorised representative who choose to attend the bid opening, at the time and date to be informed later.
- i) Commercial bids of only those bidders will be opened who are found to be technically qualified & acceptable and the work shall be awarded to the commercially lowest bidder. The comparative statement of quotations (CSQ) of the P-bid will be prepared on FOR ALIMCO(as per defined destination in Para 1) and evaluated on the basis of complete price FOR ALIMCO (as per defined destination in Para 1) of the Plant including basic price, packing & forwarding, freight, taxes, installation & commissioning charges, etc.

10. **REJECTION OF TENDER**:

- a) Tenders received without EMD are liable to be rejected as also indicated at Para 7.
- **b)** Conditional and unsigned tenders, tenders containing absurd or unworkable rates and amounts, tenders which are incomplete or otherwise considered defective and tenders not in accordance with the tender conditions, drawings/specifications etc. are liable to be rejected.
- c) Canvassing in any form in connection with the tender is strictly prohibited and the tenders submitted by the party who resort to canvassing are liable to be rejected.
- d) The acceptance of tender will rest with ALIMCO which does not bind itself to accept the lowest tender or any tender and reserves full rights for the rejection of any or all tenders without assigning any reasons whatsoever.

11. VALIDITY OF TENDER:

a) The tenders shall remain open for acceptance for a minimum period validity of 90 days from, the date of opening of tenders or till such period up to which the extension of validity is agreed to mutually. This may please be stipulated clearly in the Quotation.

- b) If notified within this period that the tender has been accepted, the tenderer shall be bound by the terms of the offer along with the terms that have been agreed mutually.
- c) All the tenders without PROPER SPECIFICATION / MAKE / BRAND / BROCHURE /CATALOUGE/ LEAFLET & TEST CERTIFICATES wherever required, are liable to be rejected. It shall be in the interest of the tenderer that complete offer is made for our consideration. It will be in the interest of the tenderer to submit details/values against each individual parameters mentioned at Annexure 'B2' and sample wherever possible along with the offer.

12. QUANTITY DISCOUNT:

In order to submit the most competitive offer, the Tenderer may indicate the quantity discounts as applicable on the price. However, the buyer reserves the right to accept the quantity discounts for lower quantities as well. The quantities indicated in the Annexure 'A' are liable to revision either upwards or downwards.

13. DELIVERY:

- a) The delivery, installation and commissioning of the whole plant and its accessories must be completed within the stipulated period specified at Annexure-A, from the date of placement/acceptance of PO/ work contract.
- b) The delivery of the plant shall be made strictly as per delivery schedule as stipulated in our Purchase Order/Work Contract or modified time to time by ALIMCO. In case of Failure to supply, install & commission/execution of work within the stipulated period will make the tenderers liable to an unconditional penalty. The penalty/Liquidated damages shall be levied at the rate of point five percent (i.e. 1/2 % or 0.5%) per week (or fraction of a week) subject to the maximum of 10% of the purchase order / work contract value.

14. INSPECTION:

- a) Inspection will be carried out at the Destination (refer Para 1) and unacceptable/ rejected Item will be returned to the supplier through bank at the supplier's risk and cost by road, only after receipt and acceptance of replacement supplies provided by the suppliers free of cost. Alternatively, all the tenderer will have to furnish their Banker's Name, Address including Code No. along with a declaration/undertaking to guarantee collection of the returned supplies documents negotiated through their bank within 07 days of its presentation.
- b) In case of local supplier, rejected Item shall be lifted from our stores within 15 days of our rejection advice after refunding the payment, if already made to them before collecting the supply. In case of failure to lift the rejected Item, we may dispose-off the rejected Item as deemed fit and no claim whatsoever shall be entertained in this respect and the tenderer shall be liable to pay amount paid by ALIMCO, if any.

15. TERMS OF PAYMENT:

- ALIMCO is a Schedule 'C' MiniRatna Category II Central Public Sector Enterprises, registered under Section 8 (Not for Profit motive) of the Companies Act, 2013, (corresponding to Section 25 of the Companies Act, 1956). The terms of payment shall be as follows:
- a) 60% material cost of invoice (exclude GST) on receipt of material at ALIMCO site.
- b) 30% material cost of invoice plus installation (exclude GST) total 90%, after completion of erection work of each item (exclude GST).
- c) Balance 10% (exclude GST) of work will be released after successful prove out and receipt of bank guarantee from a nationalized bank equal to 10% of PO/WO value.
- d) GST portion shall be paid on availment and matching of Input Credit.
- e) Supplier's Bank Charges/Draft making charges will have to be borne by the party only.
- f) The tenderer will be required to submit their RTGS details duly certified by the Bank along with a crossed/cancelled Cheque in support of the details, as all payments/refunds are preferably be made through RTGS.

16. RIGHT OF ACCEPTANCE:

ALIMCO reserves the right to reject any or all the tenders in part or full without assigning any reasons thereof. The Corporation also reserves the right to negotiate the rates and terms and conditions of supply with any or all the tenderers at its sole discretion as deemed fit without assigning any reasons thereof.

ARBITRATION

In case of any dispute, arising during the operation of the contract, efforts shall be made to resolve it by mutual discussions failing which the matter shall be referred to the Chairman & Managing Director of ALIMCO G.T.Road, Kanpur-209217 or his nominee whose decision shall be final and binding on both the parties. Arbitration proceedings shall be held at Kanpur as per provisions of the Arbitration & Conciliation Act 1996 and the Kanpur City Court shall have the jurisdiction in the matter.

Thanking you,

Yours faithfully, For Artificial Limbs Mfg. Corporation of India

Senior Manager (SP&C)

Encl: As Above

<u>SPECIFICATIONS</u> "Design, Fabrication, Supply, Installation & Commissioning of Automatic Conveyorised Integrated Powder Coating Plant along with Pre-dip treatment Plant (On Turn Key Basis)"

Code No. _____ Qty. – As mentioned

Description:

Automatic powder coating Plant with a feature of quick change of powder coating colors on various tubular frames & Sheet metal components. (refer attached drawings)

The System is automated from loading of frame on conveyor to final coating to unloading of frame. (Refer attached schematic diagram)

Offline degreasing system.

Overhead close-loop conveyor Plant used for movement of material across stations of powder coating line. Offline Strip-off System for hanging fixtures.

| Α | Scope of supply/work | |
|---------|---|--|
| 1 | Degrease & De-Rust system (Offline) for Rusted | Confirm |
| I | Component only | Committi |
| 2 | Fully automatic powder coating plant with over head | Confirm |
| 2 | Conveyorised dip pretreatment consisting: | Committe |
| 2.1 | Dip Pre-treatment Plant with Water Drying Oven (In | Confirm |
| 2.1 | line to Conveyor) | Committe |
| 2.2 | Powder Coating Booth with Guns (Automatic along with | Confirm |
| | Provision of touch up guns) | |
| 2.3 | Powder Curing Oven | Confirm |
| 2.4 | Continuous Over Head Conveyor | Confirm |
| 3 | PNG piping with all accessories | Confirm |
| 4 | Electrical Panel & Cabling | Confirm |
| 5 | Installation and successful commissioning with trials | Confirm |
| В | Technical Specification | |
| Sr. No. | Description of requirement | Required |
| I | Basics of Design | |
| 1 | Product size maximum (mm) | 900L x 900W x 1500H |
| 2 | Product Cutout Envelope Enclosure(mm) | 1100L x 1100W x 1700H |
| 2 | Material of component to be Dourder costed | MS/AL (Mild Steel tubular/Sheet, |
| 3 | Material of component to be Powder coated | Aluminum tubular/Sheet as per drawing) |
| 4 | Weight of Product (Largest) | 30 kg |
| 5 | Working Shift | 2 |
| 6 | Working Hours/Shift | 8 hrs/Shift |
| 7 | Productivity: No. of Products/year (in no.) | 360000 |
| 8 | Productivity: No. of Products /Month (in no.) | 30000 |
| 9 | Productivity: No. of Products /shift | 600/shift of 8 hours |
| 10 | Powder baking schedule | EMT 10-12 minute @ 180°C |
| П | Offline Degreasing & De-Rusting System (manual | |
| | with hoist dipping arrangement)- offline | |
| | Process | 6 Tank cleaning process Working |
| | | Dimension |
| 1 | Tank material as follows: | |
| 1.1 | Degreasing Tank | M.S. (Minimum 4 mm Thick) |
| | | Size: (2350L x 1300W x 2450H) mm |
| 1.2 | Water Rinse-1 Tank | M.S. (Minimum 4 mm Thick) |
| | | Size: (2350L x 1300W x 2450H) mm |
| 1.3 | De-Rusting Tank | SS 316 (Minimum 2.5 mm Thick) |
| | | Size: (2350L x 1300W x 2450H) mm |

| 1.4 | Water Rinse 2 Tank | MS 4mm Thick with inside FRP Minimum 4 mm Thick Size: (2350L x 1300W x 2450H) mm | |
|-----|---|--|--|
| 1.5 | Water Rinse 3 Tank | MS with inside FRP coating (Minimum 4 mm Thick) Size: (2350L x 1300W x 2450H) mm | |
| 1.6 | Rust Prevention Oil Tank | MS (Minimum 4 mm Thick) Size: (2350L x 1300W x 2450H) mm | |
| | Tank Heating System | For Degrease | |
| 1 | Fuel | PNG | |
| 2 | Initial Heating Time | 120 minute (maximum) | |
| 3 | Temperature | De-Grease: 55°C (maximum) | |
| IV | Accessories for Dip Pre-treatment offline Plant | | |
| 1 | Fume Extractor- for De-Grease (01 Set) minimum capacity | 2500m ³ /hr , 3 Phase 415 V A.C. | |
| 2 | Scrubber for De-Rusting Capacity – 3000 m ³ /hr. | Confirm | |
| 3 | Electrically Operated Hoist shall be capable of material movement in all tanks of offline De-greasing & De-rusting system. | 01No. capacity - 1000 kg | |
| 4 | Basket: Basket is used to transport material from one tank to another The same basket will keep small as well as large component of each product as per attached product drawings | Confirm | |
| 4.1 | Material of Basket | SS-316 | |
| 4.2 | No. Of Basket | Minimum 6 No. | |
| 4.3 | Basket Size (Minimum) | (2150L x 1000Wx 1950H) mm | |
| 4.4 | Weight Of Basket (Empty) | Minimum (120-140) Kg | |
| 4.5 | Weight Of Basket (With Component) | Minimum 250 Kg | |
| 5 | Air agitator for De-Rusting System: Agitator is consisting of 02 set of blowers connected parallel which is comprised of suction with filters & distribution ducting/piping through all pre-treatment tanks. (One blower will work at a time). | Twin-lobe Blower motor Capacity: (5 H.P.,200 m ³ /hr) (Minimum) each | |
| v | Pre-treatment Process (automatic with conveyors dipping arrangement)- Inline | | |
| 1 | Process | 6 Tanks cleaning process Working Dimension | |
| | Tank Material as follows: | | |
| 1.1 | KOD (Knock Off Degreasing) Tank | MS- 4 mm (Minimum) Size: (15345L x 1400W x 1925H) mm | |
| 1.2 | Degrease Tank | MS- 4 mm (Minimum) Size: (Size: 15345L x 1400W x 1925H) mm | |
| 1.3 | Water Rinse 1 Tank | MS- 4 mm (Minimum) Size: (12845L x 1400W x 1925H) mm | |
| 1.4 | Water Rinse 2 Tank | MS- 4 mm (Minimum) Size: (12845L x 1400W x 1925H) mm | |
| 1.5 | DM Rinse 1 Tank | SS 304 (Minimum 2.5 mm Thick) Size: (12845L x 1400W x 1925H) mm | |
| 1.6 | NANO Coating Tank | SS 304 (Minimum 2.5 mm Thick) Size: (15345L x 1400W x 1925H) mm | |

| 7 | DM Rinse 2 Tank | SS 304 (Minimum 2.5 mm Thick) Size: (12845L x 1400W x 1925H) mm | |
|------------|--|--|--|
| 8 | Air Blow Zone | After DM Rinse 2 | |
| 0 | | To blow off extra water from component | |
| 8.1 | Description | it is provided after all tanks with suitable | |
| 0.1 | | capacity blower. | |
| 0.0 | Air Blow off Zone blower capacity | | |
| 8.2 | (minimum) | 3 H.P. 1400 rpm, 6000 m ³ /hr | |
| | | 0.5-1 Minute @ 2.5 meter/ min conveyor | |
| 8.3 | Each Article travel time | speed. | |
| | | | |
| 8.4 | It may be ensured that 100% water is removed | Confirm | |
| | The tanks should have water inlets, | | |
| | overflow connection and drain | | |
| 9 | connections with valves and pipes | Confirm | |
| | along with pipes/ducts to blow air to all | | |
| | tanks of appropriate quality and length. | | |
| 9.1 | Tank Valve Size | | |
| <u>9.1</u> | Inlet Water (in mm) | 50 NB (minimum) | |
| 2 | Drain Water (in mm) | 100 NB (minimum) | |
| | | For KOD, Degrease & cleaning from | |
| VI | Tank Heating System | side of tank | |
| 1 | Fuel arrangement | PNG with suitable burner | |
| 2 | Initial Heating Time | 120 Minute. | |
| 3 | Temperature | 55°C max. | |
| VII | Accessories for Pretreatment-Inline | | |
| | Air agitator: | 02 nos. Required Twin lobe Blower | |
| 1 | Agitator is consisting of blower which is comprised of | motor Capacity: 30 H.P., 2100 m ³ /hr | |
| I | suction box with filters & distribution ducting/piping | (Minimum) | |
| | through all pre-treatment tanks. | | |
| | Nano Filter | | |
| 2 | Suitable 5 Micron Filter with SS housing & easy to | Confirm | |
| | clean/remove. | | |
| | Oil skimmer | | |
| 3 | Belt Type with Motor | Required Capacity of Motor: | |
| | Separate Tank & Pump for circulation with main | 90 W, 30 rpm (minimum) | |
| | process tank of De-grease. | | |
| 4 | DM Plant | 2000 L per hour | |
| 4.1 | Capacity (minimum) | 2000 L per hour | |
| 4.2 | DM Conductivity (minimum) PH value | 10 µSiemens 6.5-7 | |
| 4.3 | | Amit Aqua/Ion Exchange/Span | |
| 4.4 | DM Make | Hydrotech/Hi-Tech | |
| VIII | Water Drying Oven (WDO) | Conveyorised (Automatic) | |
| 1 | Fuel | PNG | |
| 2 | Max. Temp. | 140°C | |
| 3 | Initial Heating Time of oven | 60 Minute (maximum) | |
| 4 | Material of construction of Oven | CRCA and HR | |
| 5 | Insulation | Rock Wool Density 48 Kg/M ³ | |
| | | (Minimum) | |
| | | 0-2°C (minimum) | |
| 6 | WDO Heating System room Temperature | 0-2°C (minimum) | |
| 6 7 | WDO Heating System room Temperature Oven Over-All Dimension | (14715L x3130W x 5825H) mm | |

| 8 | Oven Working Dimension | (12615L x3030W x 2800H) mm | |
|------|---|--|--|
| 0 | | (minimum) | |
| | | 1100 mm(W) x 1700 mm (H) | |
| 9 | Article Entry & Exit Gate/Cut-out Size | (minimum) | |
| 10 | Article entry and exit | Conveyorised | |
| | | Inside Heat Resistant Aluminium paint, | |
| 11 | Finish Painting | Outside enamel paint | |
| 12 | Safety | | |
| 12.1 | Pressure control | Confirm | |
| 12.1 | Safety door: | | |
| | Which have Proper Provision to escape gases in case | | |
| 12.2 | of emergency with Pre-Define temperature and | Confirm | |
| | Pressure. | | |
| 12.3 | Inspection cum explosion door | Confirm | |
| 13 | Indication Lamps & Push Buttons | Confirm | |
| | Temperature Indicator and Controller for Oven | | |
| 14 | Temperature PT100 (Thermo-couple type) Sensors for | Confirm | |
| | Temperature | | |
| 15 | Temperature Indicator Cum Controller (TIC) | 02 no. (minimum) | |
| 16 | PT 100 Sensor | 01 no. (minimum) | |
| 17 | Vent for Oven (natural Exhaust for flue gas) | Confirm | |
| 18 | Moist Filter for burner in inlet manifold | Confirm | |
| 19 | Blower burner Interlock | Confirm | |
| 20 | Oven working | Auto cycle | |
| IX | Pressurization zone | | |
| | | To provide dust free atmosphere | |
| | | while powder coating, this chamber is | |
| 1 | Description | provided in which filtered air is | |
| | | delivered at top of booth through | |
| | | duct at specific air velocity. | |
| 2 | Blower Pressure | 60-65 mm WG | |
| 3 | Illumination in Zone | 400 to 600 lux | |
| | | Folded Panels fabricated out of 16 | |
| 4 | Material | SWG / 2 mm | |
| | | CRCA with View Glass | |
| | | Blower and suitable filters which will | |
| 5 | Air handling unit | positively deliver the air inside the | |
| | | zone. | |
| X | Powder Curing Oven (PCO) | | |
| 1 | Fuel | PNG | |
| 2 | Max. Temp. | 220.00 °C. at EMT | |
| 3 | Initial Heating Time of oven | Maximum 60 minutes | |
| 4 | Material of construction | CRCA and HR | |
| _ | Insulation to be designed in such a manner that | Rock Wool Density Approx. 48 Kg/M ³ . | |
| 5 | Outside surface temperature will be at room | (Minimum) | |
| | temperature | | |
| 6 | PCO Heating System room Temperature | 0-2°C (minimum) | |
| 7 | Finish Paint for Oven | Inside Heat Resistant Aluminum paint, | |
| | · · · · · · · · · · · · · · · · · · · | Outside Enamel paint | |
| 8 | Entry & Exit Gate Size | 1100 mm(W) x 1700 mm (H) | |
| ~ | . , | (minimum) | |
| 9 | Article Entry & Exit | On Conveyor along Camelback type to | |
| | | Prevent Heat Loss | |
| 10 | Oven Working Dimension | (15285L x6230W x 2700H) mm | |

| | | (Minimum) | |
|--------------------|--|--|--|
| 11 | Oven Overall Dimension | (15685L x6630W x 5825H) mm (Minimum) | |
| 12 | Safety | (| |
| 12.1 | Pressure control | Confirm | |
| | Safety door: | | |
| 12.2 | Which have Proper Provision to escape gases in case of emergency with Pre-Define temperature and Pressure. | | |
| 12.3 | Inspection cum explosion door | Confirm | |
| 13 | Indication Lamps & Push Buttons | Confirm | |
| 14 | Temperature Indicator Cum Controller for Oven Temperature PT100 (Thermo-couple type)Sensors for Temperature | Confirm | |
| 15 | Temperature cum indicator controller (TIC) | 02 no. (minimum) | |
| 16 | PT 100 Sensor | 01 no. (minimum) | |
| 17 | Vent for Oven (natural Exhaust for flue gas) | Confirm | |
| 18 | Moist Filter for burner in inlet manifold | Confirm | |
| 19 | Blower burner Interlock | Confirm | |
| 20 | Oven working | Auto cycle | |
| XI | Conveyor (All across the process) | | |
| 1 | Туре | 4-wheel open track | |
| 2 | Conveyor speed | 2.5 meter/minute | |
| 3 | Conveyor length | Minimum 475 meter | |
| 4 | Drive | Sprocket/caterpillar type | |
| 5 | Take up | Screw/dead weight type | |
| 6 | Point load | 40 Kg maximum | |
| XII | Powder coating booth | | |
| 1 | Description | Automatic booth consisting of reciprocator, auto guns, cyclone recovery system, post filter unit with pulsing and provision of two manual touch up stations with manual gun. | |
| 1.1 | No. of auto guns | Minimum 10 on booth (5 on each side) or better | |
| 1.2 | Construction of booth | SS-316 panels and MS structure. (With illumination of min. 400 Lux) | |
| 1.3 | Vendor to give total colour change time | 90 minute (Maximum) | |
| | | | |
| 1.4 | Powder Recovery System | Confirm | |
| | Powder Recovery System Height sensor (working: no object no spray) | | |
| 1.4 | Powder Recovery System | Confirm | |
| 1.4 1.5 | Powder Recovery SystemHeight sensor (working: no object no spray)SCADA (Supervisory Control and Data Acquisition)Based Centralized Control system (The panel bodyshould be Powder Coated) for Indication, Control &Monitoring for all heating tank temperature, pH Value,Level Indicator for solution of all tanks, Water dryingOven temperature, baking oven temperature, workingof all powder coating gun, Conveyor system.PC Based controlling the complete system along with Conveyor | Confirm Confirm | |
| 1.4 1.5 XIII | Powder Recovery SystemHeight sensor (working: no object no spray)SCADA (Supervisory Control and Data Acquisition)Based Centralized Control system (The panel bodyshould be Powder Coated) for Indication, Control &Monitoring for all heating tank temperature, pH Value,Level Indicator for solution of all tanks, Water dryingOven temperature, baking oven temperature, workingof all powder coating gun, Conveyor system.PC Based controlling the complete system along with | Confirm Confirm Confirm | |

| 3.1 | High configuration system (i7 Processor or higher) | Confirm | |
|-------|--|--|--|
| 3.2 | RAM | 4 GB (minimum) | |
| | Windows 10 Professional Operating System (Except | | |
| 3.3 | Windows Home) | Confirm | |
| | Monitor with suitable HDMI Cables & repeater size as | | |
| 3.4 | mentioned | 02 Set | |
| 3.5 | Monitor Size | | |
| 3.5.1 | 19" LED (01 Set) | Confirm | |
| 3.5.2 | 90" LED (01 Set) | Confirm | |
| 4 | Serial Ports/Serial PCIX Cards | 02 Set | |
| 5 | Wired Ethernet Port | Confirm | |
| 6 | Wi-Fi USB | Confirm | |
| 7 | Bluetooth USB | Confirm | |
| C | Component Hanging Fixtures | | |
| U. | | | |
| | Vendor to design manufacture & supply fixture for | As mention below Vendor to specify & | |
| | Pre-dip & Powder coating & Curing for the products | Confirm | |
| | Kit as per drawing (refer drawing Attached) Tricycle Family (Small Part Fixture other than main | | |
| | frame) (TD2C98, TD2C95/96, TD2C79, TD2C38/28 & | | |
| 1 | TD2A65,TD2C48) | 200 Nos | |
| 1 | (Vendor to design single fixture to accommodate all | 200 1003 | |
| | type of Product & its components as mention). | | |
| 2 | Wheel Chair Family | | |
| 2 | , , , , , , , , , , , , , , , , , , , | | |
| | TD2C51, TD2A06, TD2A26, TD2A02 & TD2B37 | 170.1 | |
| 2.1 | (Vendor to design single fixture to accommodate all | 150 Nos | |
| | type of Product & its components as mention). | | |
| 2.2 | Wheel Chair Rough Terrain (TD2C36) | 50 nos | |
| 2.2 | | 50 1103 | |
| | Tripod, Tetra Pod & Can etc. Drawing No. : TD 2P 02, | | |
| | TD 2P 04, TD2N82, TD2N85, TD2N86, TD1N70 | | |
| 3 | (Vendor to design single fixture to accommodate all | 60 nos | |
| | type of Product and its components as mention). | | |
| | Rollator(Size-I & Size-II), Walker, Drawing No.: | | |
| | TD2N85, TD2N86, TD2N82. | | |
| 4 | (Vendor to design single fixture to accommodate all | 40 nos | |
| | type of Product and its components as mention). | | |
| - | Vendor to ensure the fixtures are pre-coated to | | |
| 5 | avoid deposition during coating | Confirm | |
| | The Fixture should be made in such a manner that all | | |
| _ | components of single product may set up in single | Confirm | |
| 6 | fixture Vendor to refer attached product drawing for | | |
| | same. | | |
| | Vendor to refer attached fixture drawing for | | |
| 7 | reference and make its own drawing considering the | Vendor to give fixtures manufacturing | |
| 7 | envelope and over-all requirement for all family of | drawing for all product & Confirm | |
| | product. | · · · | |
| | Off-line Stripping Off Arrangement | O_{1} O_{2} O_{2 | |
| Л | After powder coating hanging Jigs & fixture will | Qty- 2 nos., MS- 4 mm (Minimum) | |
| D | manually dip into this tank to remove powder | (Vendor to confirm & Provide Details) | |
| | particles deposited on hanging Jigs & fixtures. | | |

| 1 | Cleaning Tank | Size: (2500L x 2600W x 2400H) mm , MS- 4 mm (Minimum) | |
|---------------|--|---|--|
| 2 | Water Rinse | Size: (2500L x 2600W x 2400H) mm , MS- 4 mm (Minimum) | |
| 3 | Tank Heating System | For Fixture cleaning tank from side of tank | |
| 3.1 | Fuel arrangement | PNG with suitable burner | |
| 3.2 | Initial Heating Time | 120 Minutes.(Maximum) | |
| 3.3 | Temperature | 80°C maximum | |
| E | Make Sheet | | |
| 1 | Burner | Ecoflam / Riello/FBR Burners/ELCO | |
| 2 | Twin-Lobe Blower | Nadi / Everest | |
| 3 | Motor | Crompton Greaves/ ABB /Bharat- Bijlee/ Siemens | |
| 4 | Powder coating booth with Powder Coating Gun | GEMA / Wagner / Ven Tec | |
| 5 | LED Display | Panasonic/LG/Samsung | |
| 6 | Main Switch, MCB, Contactor, Over Load Relay, PLC | Siemens/ C&S/L&T | |
| 7 | Sensors | Honeywell/Sparkfun/Sushant Enterprise | |
| 8 | Cable | Finolex/Havells/RR | |
| F | General | | |
| 1 | Other than mentioned any other Required Accessories for Plant (Vendor to provide list) | Specify & Confirm | |
| 2 | Cabling (All necessary cables of right size is in Vendor Scope) | From Bus Bar to all Equipment | |
| 3 | Exhaust Duct | Insulated till 2 metre from ground | |
| 4 | Water Inlet/outlet Piping (All necessary pipes of right size is in Vendor Scope) | At one point near to pre-treatment, further piping will be in supplier scope | |
| 5 | PNG Gas Consumption per hour (Piping from gas bank to system is in Vendor scope). For the System Vendor to calculate load as per his design and submit while filling bid. | Confirm | |
| G | Qualification Criteria | | |
| 1 | In house Installation/Commissioning Team with suitable staff | Confirm & Provide Details | |
| 2 | Prior Experience of supplying such systems to manufacturers of M.S. Pipe/ Tubular Structure components. Vendor must have done such installation at least 05 nos. such plants during last 05 years Vendor to provide details of such customer along with contact number. | cture ch uring last 05 | |
| Н | Documentation- | | |
| <u>п</u> 1 | Detailed layout plan and prospect to be given (Area of shop as per attached drawing) | | |
| 2 | 2 Operating instruction & Manual Each documentation three sets | | |
| 3 | Installation and Commissioning instructions | along with delivery | |
| 4 | Time Temperature Record Report | | |
| 5 | Preventive maintenance instructions | 1 | |

| | Instruction manual for supplied coolant concentrate | |
|-----|---|-------------------|
| 6 | and coolant | |
| | Detailed invoice and packing list of all items and devices | |
| 7 | and detailed prospect of machine and all other | |
| | accessories enclosed in. | |
| 8 | List of proposed powder & other consumable required | |
| 0 | to run the plant | |
| | The consumables for Initial fill, prove out are in vendor | |
| 9 | scope. Other than the consumables for initial fill the | |
| | following consumables need to be supplied. | |
| 0.1 | Chemical for KOD & De-greasing 6Tons along with plant | |
| 9.1 | (Vendor to give At-Least 3 make with similar chemical | |
| | properties) Chemical for De-Rusting 4.5 Tons along with plant | |
| 9.2 | (other than chemical require for prove out) Vendor to | |
| 7.2 | give At-Least 3 make with similar chemical properties) | |
| | Chemical for NANO coating – 3Ton (Vendor to give At- | |
| 9.3 | Least 3 make with similar chemical properties) | |
| | Powder for Powder Coating Plant 9 Ton along with | |
| 9.4 | plant (Vendor to give At-Least 3 make with similar | |
| | chemical properties) | |
| 9.5 | Chemical for Strip-off System-4.5 Ton (Vendor to give | |
| 7.0 | At-Least 3 make with similar chemical properties) | |
| 10 | List of necessary spares required to run the plant (Only | |
| | list is required, Rate not to be quoted in TC-Bid) | |
| I | Installation & commissioning- | |
| 1 | The complete installation and commissioning must be | Confirm |
| 1 | carried out by the supplier at the project site (ALIMCO- | Confirm |
| | Kanpur) | |
| 2 | Training to be provided during installation, | Confirm |
| 0.1 | commissioning and prove out at ALIMCO-Kanpur. | 00.0 |
| 2.1 | Operator training | 28 Days |
| 2.2 | Maintenance course all Inclusive (mechanical, electrical | 15 Days |
| | and electronics) Prove Out powder coating of 5 Days planned | |
| 3 | production of components to be done at ALIMCO | Confirm |
| 5 | Premises. (Refer Attached Product Drawings). | Commit |
| J | General operating condition | |
| 1 | 3 Phase 415V +/- 10% | Confirm |
| 2 | Frequency 50 Hz +/- 5% | Confirm |
| 3 | Protection level | IP54 or better |
| 3 | | |
| Λ | System should have capability to handle voltage, | Confirm |
| 4 | current and frequency fluctuation, necessary protection | COIMIN |
| | to be provided. | |
| | Complete electrical system should be tropicalized for | Confirm |
| 5 | Indian condition 5 to 50 degree centigrade temp and | Confirm |
| | RH 100% (Including additional accessories) | |
| K | Service | |
| | Detail of authorized Service Partners in India (Name & | |
| 1 | Address) must be certified by manufacturer and shown | Confirm |
| | in the quotation | |
| L | Warranty/defect Liability: | 2 years (Minimum) |
| | Vendor shall consider any other item, (other than | |
| 1 | | |
| М | mention in Annexure-A) necessary for successful | Confirm |
| М | mention in Annexure-A) necessary for successful operation & installation of plant, Vendor shall provide list. | Confirm |

DELIVERY PERIOD INCLUDING INSTALLATION & COMMISSIONING:

The delivery, installation & commissioning period of complete Powder Coating Plant at the destination mentioned in Para 1 on page no. 02 of the tender documents will be 10 months for delivery and installation, commissioning & Prove-Out from the date of placement of Purchase Order/work contract.

WARRANTY/Defect Liability:

The entire Powder Coating Plant inclusive of all system/accessories must be covered under warranty for a period of 24 months (minimum) from the date of successful Installation & commissioning.

NOTE:

- 1. Six month hand holding (Vendor to consider 3 days visit per month till 6 month, All expenses will be borne by Vendor)
- 2. Breakdown calls to be attended within 48 hrs.
- **3.** Supply to be done on Turnkey Basis. ALIMCO shall provide electrical supply point, air supply and water supply near to the place of installation. (Civil Layout will be provided)
- 4. Civil foundation details and drawings with specifications to be provided by the tenderer.
- 5. Total power Electrical power consumption (in KW) & Gas Power Consumption (in Kg/hr) to be provided by the tenderer.
- 6. Layout drawing should be provided in CAD format.
- 7. Visual control board to be provided for monitoring with alarm signals.
- 8. ALIMCO may at its discretion decide to visit & verify the facility and validate in case of discrepancy the vendor shall be technically disqualified.
- 9. All necessary Details as asked in Annexure-A to be duly full-filled failing which Bid shall be technically Rejected.
- 10. The Drawing/Layout attached along with details is for standard purpose and should be the minimum qualifying criteria in all aspect. However vendor is free to design its own plan & supply above standard inculcating minimum requirement of the plant and if any change should be submitted while filling bid.
- 11. Entire System shall be designed and commissioned for ease of access of all facilities and maintenance.
- 12. The Bus bar trunking (BBT) for electricity has been provided at 8.5 meter height. Sufficient suitable cable, cable tray, circuit breaker, fittings to connect the plant & it's accessories from power source is in vendor's scope.
- 13. Separate list of spares along with rate, required for smooth functioning of the plant & its accessories. The list is solely required with respect to future requirements/reference of Plant. Hence total cost of items from the list should not be the part of final price of tender quote.

APPENDIX-1

UNDERTAKING

We hereby undertake that The delivery, installation and commissioning of the whole plant & it's accessories (on turn Key Basis) must be completed within the stipulated period as indicated in the tender or specified at Annexure-A, from the date of placement of PO/work contract".

Dated:

Authorised Signatory :

Name :-

Designation :-

APPENDIX -2

UNDERTAKING

We hereby undertake that our Firm has not been debarred/blacklisted/terminated/banned to participate in the Tender by any Govt. Institution, PSU, State Govt. or Central Govt. Deptt.

Dated:

Authorised Signatory :

Name :-

Designation :-

APPENDIX -3

UNDERTAKING

We hereby undertake that our Offer is valid for acceptance for 90 days from the date of opening of Techno-Commercial Bid (TC-Bid).

Dated:

Authorised Signatory :

Name :-

Designation :-

APPENDIX -4

UNDERTAKING

We hereby undertake that all the tender terms & conditions are acceptable to us.

Dated:

Authorised Signatory :

Name :-

Designation :-

APPENDIX -5

UNDERTAKING

We hereby undertake that a Performance Bank Guarantee (PBG) of 10% of the order value, valid for warranty period & claim submission date within 3 months from the date of expiry of Bank Guarantee period will be submitted after the commissioning& Prove-out of the plant (on turn-key basis).

Dated:

Authorised Signatory :

Name :-

Designation :-

APPENDIX -6

UNDERTAKING

We hereby undertake to the effect that an Advance Bank Guarantee (BG) of 110% of the advance value subject to maximum upto 100 Lakhs, valid for successful installation, commissioning & Prove out of whole plant & its accessories can be submitted within 1 months from the date of releasing the PO/Work Order of the plant (on turn-key basis).

Dated:

Authorised Signatory :

Name :-

Designation :-

APPENDIX -7

UNDERTAKING

We hereby undertake that our firm shall submit the security deposit as per tender terms within 14 days of releasing PO/Work Order of the plant (on turn-key basis).

Dated:

Authorised Signatory :

Name :-

Designation :-Seal :-

APPENDIX -8

UNDERTAKING

We hereby undertake that our firm shall provide the complete training regarding operation & maintenance of the Whole Plant (On turn-key Basis) & its accessories.

Dated:

Authorised Signatory :

Name :-

Designation :-

APPENDIX -9

UNDERTAKING

We hereby undertake that we will unconditionally accept to replace the supplies if rejected at the destination.

Dated:

Authorised Signatory :

Name :-

Designation :-

APPENDIX -10

UNDERTAKING

We hereby undertake that payment terms mentioned at Para No-15 of this tender document (i.e. Terms of Payment) is acceptable to us.

Dated:

Authorised Signatory :

Name :-

Designation :-

APPENDIX -11

UNDERTAKING

We hereby undertake that our firm shall attach the proof regarding prior Experience of supplying such systems to manufacturers of Mild Steel Pipe/ Tubular Structure components. As specified in the Annexure-A of the Tender Document i.e. (Vendor must have done such installation at least 03 nos. such plants during last 05 years Vendor to provide valid details of such customer along with contact number for verification).

| SI. No. | Capability details | Details | Requirement | |
|------------|---|---|--------------------------------|--|
| 1 | In House manufacturing facility | Attached details of facility along with machine details | | |
| 2 | In House powder coating Design and Engineering Team | List of Designers with experience | Minimum team size of 6 | |
| 3 | In House installation and commissioning team | List of Installation and commissioning team | Minimum team size of 15 people | |
| 4 | Provide the details of 3 Customer where similar work has been executed in last 5 years. | and details of 3 Customer with | | |

Dated:

Authorised Signatory :

Name :-

Designation :-

TENDER ACCEPTANCE LETTER (To be given on Company Letter Head)

Date:

To,

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: _____

Name of Tender / Work: -

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:

as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. ______ to _____ (including all documents like annexure(s), schedule(s), etc .,), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation to have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted/ debarred/ terminated/ banned by any Govt. Department/Public sector undertaking.

6. I / We certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully, (Signature of the Bidder, with Official Seal)

APPENDIX -13

(On Letter Head of the Tenderer)

UNDERTAKING

We hereby confirm that payment of basic value within 30 days after supply & acceptance/approval of the whole plant & its accessories or Submission of bill, whichever is later, is acceptable to us. However, the GST portion shall be claimed only after submission of GST Return and Input credit appearing in corporation's GST portal, filed online by the tenderer clearly (duly highlighted) showing invoice/ bill number and amount to ALIMCO so as to enable the Corporation to avail GST input credit after matching of the GST return and Invoice submitted in the Corporation. No claim against the Corporation shall be made for non- matching of GST and the amount shall be credited back by us.

Dated:

Authorised Signatory:

Name:-

Designation

Seal:

UNDERTAKING

We hereby undertake that as follows:

- a) 60% of item value raised invoice (exclude GST) on receipt of material at ALIMCO site.
- b) 30% of item value raised invoice plus installation (exclude GST
- c) Balance 10% (exclude GST) of item value will be released after successful erection, commissioning & prove out and receipt of bank guarantee from a nationalized bank equal to 10% of PO/WO value.
- d) GST portion shall be paid on availment and matching of Input Credit.
- e) Supplier's Bank Charges/Draft making charges will have to be borne by the party only.
- f) The tenderer will be required to submit their RTGS details duly certified by the Bank along with a crossed/cancelled Cheque in support of the details, as all payments/refunds are preferably be made through RTGS..

Payment will be done on the basis of delivery of items as per below stages (not necessary in sequence).

- 1. Stage-I: Offline Pre-Dip Treatment Plant and its accessories
- 2. Stage-II: Inline Pre-Dip Treatment Plant and its accessories
- 3. Stage-III: Strip-Off Tanks and its accessories
- 4. Stage-IV: DM Plant & other necessary equipment required for proper functioning of Pre-Dip

Treatment Plant (Both Offline & In-line).

- 5. Stage V: Water Drying Oven and its accessories
- 6. Stage-VI: Powder Curing Oven and its accessories
- 7. Stage-VII: Powder Coating Booth and its accessories
- 8. Stage-VIII: Conveyor Systems of the Whole Plant and its accessories
- 9. Stage-IX: SCADA System and its accessories as asked in Annexure-A.
- 10. Stage X: Any other item for Collaboration of whole Plant (On turn Key Basis).
- 11. Stage XI: Chemicals & Consumables as asked in Annexure-A.
- 12. Stage XII: Jigs & Fixtures and its accessories

Dated:

Authorised Signatory :

Name :-

Designation :-Seal :-

UNDERTAKING

We hereby undertake that we will execute AMC for the period of 03 years after the expiry of warranty/defect liability period as per the requirement of ALIMCO and the AMC shall not exceed 0.5%, 1.5% & 2.5% of basic value of the machine/plant during 3rd, 4th & 5th year respectively from the date of successful installation & commissioning of the machine/plant/item/equipment.

Dated:

Authorised Signatory : Name :-Designation :-Seal :-

Instructions for Online Bid Submission:

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: https://eprocure.gov.in/eprocure/app.

Registration:

- 1. Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link "Online bidder Enrolment" on the CPP Portal which is free of charge
- 2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudra etc.), with their profile.
- 5. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6. Bidder then logs in to the site through the secured log-in by entering their user ID/Password and the password of the DSC/e-Token.

Searching For Tender Documents:

- There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2. Once the bidders have selected the tenders they are interested in, they may download the required documents/tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS/e-mail in case there is any corrigendum issued to the tender document.
- 3. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification/help from the Helpdesk.

Preparation of Bids:

- a. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- b. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

- c. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- d. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents and keep it as a repository.

Note: My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

Submission of Bids:

- 1. Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3. Bidder has to select the payment option as "offline" to pay the tender fee/EMD as applicable and enter details of the instrument.
- 4. Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/ couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 6. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers' public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

- 9. Upon the successful and timely submission of bids (ie after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 10. The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

Assistance to Bidders:

- 1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk Nos. 0120-4200462, 0120-4001002

| Sr. No. | Mandatory/Pre-Qualification Criteria | Complied / Not Complied | Provide details |
|------------|---|----------------------------|-----------------|
| B1 | | | |
| 1 | Submit, scan copy of DD/ Bankers cheque for Rs. 560/- (GST @ 12% Included) in favour of ALIMCO, payable at Kanpur towards cost of Tender documents, if down-loaded from the website of the Corporation/CPPP and original copy of the same should reach to the office of Senior Manager (SP&C), Artificial Limbs Manufacturing Corporation of India, G. T. Road, Kanpur – 209 217 on or before dated2019(All SSI units/ MSE Vendors are exempted from Tender Cost). | | |
| 2 | Earnest Money:- Submit scan copy of Demand Draft or Pay Order or Bankers Cheque for Rs. 1500000/-in favour of ALIMCO , payable at KANPUR as Earnest Money Deposit along with 'TC' BID and original copy of the same should reach to the office of Senior Manager (SP&C), Artificial Limbs Manufacturing Corporation of India, G. T. Road, Kanpur – 209 217 on or before dated2019. Exemption from Earnest Money Deposit (EMD) will be allowed to all SSI units/ Micro & small enterprises (MSE) on submission of valid Udyog adhaar memorandum (UAM) against tender for the items/nature of business/ type of services specified there in the UAM. | | |
| 3 | The person signing the bid should be duly authorised representative of the firm/company whose signature should be verified and certificate of authority should be submitted. The poser or authorisation or any other document consisting of adequate proof of the ability of the signatory to bind the firm/company should be annexed to the bid. | | |
| 4 | Tender documents with proper seal and signature of authorised person on each page of the bid must be submitted. | | |
| 5 | The Complete specifications, Make/Model/Brand of Machine/item/equipment consisting of whole plant & its accessories offered on parameters specified as per Annexure-A must be mentioned. The details with values for individual specifications/parameters desired must be indicated at Annexure 'B2' to this tender document. | | |
| 6 | Copy of GST Registration Certificate, duly signed & stamped. | | |
| 7 | The tenderer should have an average annual turnover of not less than 30% of the over- all estimated value of tender during the last 03 financial years i.e. FY: 2015-16 2016-17 & 2017-18. In addition Tenderer should have net worth of at-least 2 crore rupees In order to authenticate, certificates regarding average turnover and net worth from a qualified Chartered Accountant is required to be furnished along with 'TC-Bid'. | | |
| 8 | Copy of income tax return for the last three Assessment years, i.e. AY- 2016-17, 2017- 18 & 2018-19, duly signed & stamped. | | |
| 9 | Only OEM's with relevant expertise are allowed to bid for the whole plant (on turn-key basis) mentioned in the tender document. | | |
| 10 | The tenderer must have completed similar supply orders/contracts/agreements minimum 01 nos. If order value is 80% of the PO/WO value, 02 nos. if order value is 60% of the PO/WO value & 03 nos. if order value is 30% of the PO/WO value of any Govt./PSU/Govt. Aided Organization/Institution/Private Organization in last 05 years, or as specified at Annexure-A, ending 2019. Please enclose copy of such supply orders/contracts/agreements along with completion certificate/ proof of the same issued by the client. | | |
| 11 | Undertaking stating that "The delivery, installation and commissioning of the plant (on turn Key Basis) must be completed within the stipulated period as indicated in the tender or specified at Annexure-A, from the date of placement of PO/work contract" in the format enclosed at Appendix-1. | | |
| 12 | The tenderer should submit an undertaking that his/her firm has not been debarred/blacklisted/terminated/banned to participate in the tender by any Govt. Institution, PSUs, and State Govt. or Central Govt. Deptt. in the format enclosed at Appendix-2 . | | |
| 13 | The tenderer should submit an undertaking that his/her Offer is valid for acceptance for 90 days from the date of opening of TC Bids in the format enclosed at Appendix-3 . | | |

| 14 | Undertaking to the effect that all the tender terms & conditions are acceptable to the | |
|----|---|--|
| 15 | bidder in the format enclosed at Appendix-4. Undertaking to the effect that a Performance Bank Guarantee (PBG) of 10% of the order value, valid for warranty/defect liability period& claim submission date within 3 months from the date of expiry of Bank Guaranty period will be submitted after the commissioning of the plant (on turn-key basis). The security deposit (including EMD) shall be released on receipt of 10% PBG valid for warranty period in the format enclosed at Appendix-5. | |
| 16 | Undertaking to the effect that a Advance Bank Guarantee (BG) of 110% of the advance value subject to maximum up to 100 Lakhs, valid for successful installation, commissioning & Prove out of whole plant & it's accessories & can be submitted within 1 months from the date of releasing the PO/Work Order of the plant (on turn-key basis) in the format enclosed at Appendix-6 . The recovery of the advance will be done as adjustment @25% of advance value from the running bill. The Advance Bank Guarantee (BG) for advance shall only be released after successful installation, commissioning & Prove-out of whole plant & it's accessories and full recovery of the advance. | |
| 17 | The tenderer should submit an undertaking that his/her firm shall provide 10% of bank guarantee within 14 days of releasing PO in the format enclosed at Appendix-7 . | |
| 18 | The tenderer should submit an undertaking that his/her firm shall provide the complete training regarding operation & maintenance of the Whole Plant (On turn-key Basis)& its accessories in the format enclosed at Appendix-8. | |
| 19 | The tenderer should submit an undertaking for unconditional acceptance to replace the supplies if rejected at the destination in the format enclosed at Appendix-9 . | |
| 20 | Undertaking to be submitted by the tenderer that "payment terms mentioned at Para No-15 of this tender document (i.e. Terms of Payment) is acceptable" in the format enclosed at Appendix-10. | |
| 21 | The tenderer should submit an undertaking that his firm shall attach the proof regarding prior Experience of supplying such systems to manufacturers of MS Pipe/ Tubular Structure Products/components. As specified in the Annexure-A of the Tender Document i.e. (Vendor must have done such installation at least 05 nos. such plants during last 05 years Vendor to provide valid details of such customer along with contact number for verification) in the format enclosed at Appendix-11. | |
| 22 | Tenderers are required to submit "Tender Acceptance Letter" in the format enclosed at Appendix-12. | |
| 23 | Tenderers are required to submit " Undertaking " regarding availment of GST and matching of Input credit in the format enclosed at Appendix-13 . | |
| 24 | Tenderers are required to submit " Undertaking " regarding the material deliver in multi-stages and the payment of the same will be done on the basis of completion of stage wise work as given in the format enclosed in Appendix-14. | |
| 25 | Undertaking to be submitted by the tendered that "They should undertake that they will execute AMC for the period of 03 years after the expiry of warranty/defect liability period as per the requirement of ALIMCO and the AMC shall not exceed 0.5%, 1.5% & 2.5% of basic value of the machine/plant during 3 rd , 4 th & 5 th year respectively from the date of successful installation & commissioning of the machine/plant/item/equipment" in the format enclosed at Appendix-15. | |
| 26 | Tenderers are required to submit duly filled Annexure 'B1 & B2', enclosed herewith. | |
| 27 | An affidavit to be sought from L1 party regarding: | |
| a) | The party has not been debarred/blacklisted/terminated/banned by any Govt. Institution, PSUs, and State Govt. or Central Govt. Deptt. | |
| b) | The party has not supplied the similar machine /system at a cost lower than the cost offered to ALIMCO to any government / semi-government / reputed private organisation in India. | |

<u>SPECIFICATIONS</u> "Design, Fabrication, Supply, Installation & Commissioning of Automatic Conveyorised Integrated Powder Coating Plant along with Pre-dip treatment Plant (On Turn Key Basis)"

Code No.

Qty. – As mentioned

| Descript | tion | | | |
|----------------------|---|---|-----------------|--|
| | itic powder coating Plant with a feature of quick change of | nowdor coating colors on various | | |
| | frames & Sheet metal components. (refer attached drawin | | | |
| | | | | |
| | stem is automated from loading of frame on conveyor to fin | Complied/Not | Drovido Dotoilo | |
| | Ittached schematic diagram) | Complied | Provide Details | |
| | degreasing system. | | • | |
| | ad close-loop conveyor Plant used for movement of materia | al across stations of powder | | |
| coating Offline S | line. Strip-off System for hanging fixtures. | | | |
| A | Scope of supply/work | | | |
| 1 | Degrease & De-Rust system (Offline) for Rusted | Confine | | |
| 1 | Component only | Confirm | | |
| 0 | Fully automatic powder coating plant with over head | Que en Élemen | | |
| 2 | Conveyorised dip pretreatment consisting: | Confirm | | |
| | Dip Pre-treatment Plant with Water Drying Oven (In line | | | |
| 2.1 | to Conveyor) | Confirm | | |
| 0.0 | Powder Coating Booth with Guns (Automatic along with | | | |
| 2.2 | Provision of touch up guns) | Confirm | | |
| 2.3 | Powder Curing Oven | Confirm | | |
| 2.4 | Continuous Over Head Conveyor | Confirm | | |
| 3 | PNG piping with all accessories | Confirm | | |
| 4 | Electrical Panel & Cabling | Confirm | | |
| 5 | Installation and successful commissioning with trials | Confirm | | |
| B | Technical Specification | 0011111 | | |
| Sr. No. | Description of requirement | Required | | |
| | | Required | | |
| 1 | Basics of Design Product size maximum (mm) | 900L x 900W x 1500H | | |
| 1 | · · | | | |
| 2 | Product Cutout Envelope Enclosure(mm) | 1100L x 1100W x 1700H | | |
| 2 | Material of component to be Douglas control | MS/AL (Mild Steel tubular/Sheet, | | |
| 3 | Material of component to be Powder coated | Aluminum tubular/Sheet as per | | |
| 4 | Michaelet of Decidents (Lowerst) | drawing) | | |
| 4 | Weight of Product (Largest) | 30 kg | | |
| 5 | Working Shift | 2 | | |
| 6 | Working Hours/Shift | 8 hrs/Shift | | |
| 7 | Productivity: No. of Products/year (in no.) | 360000 | | |
| 8 | Productivity: No. of Products /Month (in no.) | 30000 | | |
| 9 | Productivity: No. of Products /shift | 600/shift of 8 hours | | |
| 10 | Powder baking schedule | EMT 10-12 minute @ 180°C | | |
| Ш | Offline Degreasing & De-Rusting System (manual with | | | |
| | hoist dipping arrangement)- offline | | | |
| | | 6 Tank cleaning process Working | | |
| | Process | Dimension | | |
| 1 | Process Tank material as follows: | | | |
| 1 | | | | |
| | Tank material as follows: | Dimension M.S. (Minimum 4 mm Thick) Size: (2350L x 1300W x 2450H) | | |

| | | Size: (2350L x 1300W x 2450H) | |
|-------|---|--|--|
| | | mm | |
| | | MS 4mm Thick with inside FRP | |
| 1.4 | Water Rinse 2 Tank | Minimum 4 mm Thick | |
| 1.4 | | Size: (2350L x 1300W x 2450H) | |
| | | mm | |
| | | MS with inside FRP coating | |
| 1.5 | Water Rinse 3 Tank | (Minimum 4 mm Thick) | |
| | | Size: (2350L x 1300W x 2450H) | |
| | | mm | |
| 1.6 | Rust Prevention Oil Tank | MS (Minimum 4 mm Thick) Size: (2350L x 1300W x 2450H) | |
| 1.0 | | mm | |
| Ш | Tank Heating System | For Degrease | |
| 1 | Fuel | PNG | |
| 2 | Initial Heating Time | 120 minute (maximum) | |
| 3 | Temperature | De-Grease: 55°C (maximum) | |
| IV | Accessories for Dip Pre-treatment | , , , | |
| | offline Plant | | |
| 1 | Fume Extractor- for De-Grease (01 Set) minimum | 2500m ³ /hr , 3 Phase 415 V A.C. | |
| | capacity | | |
| 2 | Scrubber for De-Rusting | Confirm | |
| | Capacity – 3000 m ³ /hr. Electrically Operated Hoist shall be capable of material | 01No. | |
| 3 | movement in all tanks of offline De-greasing & De- | capacity - 1000 kg | |
| 5 | rusting system. | capacity - 1000 kg | |
| | Basket: | | |
| | Basket is used to transport material from one tank to | | |
| 4 | another The same basket will keep small as well as | Confirm | |
| | large component of each product as per attached | | |
| | product drawings | | |
| 4.1 | Material of Basket | SS-316 | |
| 4.2 | No. Of Basket | Minimum 6 No. | |
| 4.3 | Basket Size (Minimum) | (2150L x 1000Wx 1950H) mm | |
| 4.4 | Weight Of Basket (Empty) | Minimum (120-140) Kg | |
| 4.5 | Weight Of Basket (With Component) | Minimum 250 Kg | |
| | Air agitator for De-Rusting System: Agitator is consisting of 02 set of blowers connected | Twin-lobe Blower motor Capacity: (5 H.P.,200 m³/hr) | |
| 5 | parallel which is comprised of suction with filters & | (Minimum) each | |
| 5 | distribution ducting/piping through all pre-treatment | | |
| | tanks. (One blower will work at a time). | | |
| | Pre-treatment Process (automatic with | | |
| v | conveyors dipping arrangement)- | | |
| | Inline | | |
| 1 | Process | 6 Tanks cleaning process Working | |
| · · · | | Dimension | |
| | Tank Material as follows: | MS- 4 mm (Minimum) | |
| 1.1 | KOD (Knock Off Degreasing) Tank | Size: (15345L x 1400W x 1925H) | |
| 1.1 | NOD (NINCK OIL DEGITASILIG) TALIK | SIZE: (15345L X 1400W X 1925H) mm | |
| | | MS- 4 mm (Minimum) | |
| 1.2 | Degrease Tank | Size: (Size: 15345L x 1400W x | |
| | | 1925H) mm | |
| | | MS- 4 mm (Minimum) | |
| 1.3 | Water Rinse 1 Tank | Size: (12845L x 1400W x 1925H) | |
| | | mm | |
| | | MS- 4 mm (Minimum) | |
| 1.4 | Water Rinse 2 Tank | Size: (12845L x 1400W x 1925H) | |
| 1 | | mm | |

| | | CC 204 (Minimum 2 E mm Thial) | |
|------|--|--|--|
| 1 Г | DNA Dines 1 Tank | SS 304 (Minimum 2.5 mm Thick) | |
| 1.5 | DM Rinse 1 Tank | Size: (12845L x 1400W x 1925H) | |
| | | mm | |
| i. | | SS 304 (Minimum 2.5 mm Thick) | |
| 1.6 | NANO Coating Tank | Size: (15345L x 1400W x 1925H) | |
| | | mm | |
| | | SS 304 (Minimum 2.5 mm Thick) | |
| 7 | DM Rinse 2 Tank | Size: (12845L x 1400W x 1925H) | |
| - | | mm | |
| 8 | Air Blow Zone | After DM Rinse 2 | |
| U | | To blow off extra water from | |
| | | | |
| 8.1 | Description | component it is provided after all | |
| | | tanks with suitable capacity | |
| | | blower. | |
| 8.2 | Air Blow off Zone blower capacity | 3 H.P. 1400 rpm, 6000 m ³ /hr | |
| 0.2 | (minimum) | | |
| | | 0.5-1 Minute @ 2.5 meter/ min | |
| 8.3 | Each Article travel time | conveyor speed. | |
| | | | |
| 8.4 | It may be ensured that 100% water is removed | Confirm | |
| | The tanks should have water inlets, | | |
| | overflow connection and drain | | |
| 9 | connections with valves and pipes | Confirm | |
| , | along with pipes/ducts to blow air to all | | |
| | tanks of appropriate quality and length. | | |
| 9.1 | Tank Valve Size | | |
| | | | |
| 1 | Inlet Water (in mm) | 50 NB (minimum) | |
| 2 | Drain Water (in mm) | 100 NB (minimum) | |
| VI | Tank Heating System | For KOD, Degrease & cleaning | |
| VI | runk neuting system | from side of tank | |
| 1 | Fuel arrangement | PNG with suitable burner | |
| 2 | Initial Heating Time | 120 Minute. | |
| 3 | Temperature | 55°C max. | |
| VII | Accessories for Pretreatment-Inline | | |
| | Air agitator: | 02 nos. Required Twin lobe | |
| | Agitator is consisting of blower which is comprised of | Blower motor Capacity: 30 H.P., | |
| 1 | | | |
| | suction box with filters & distribution ducting/piping | 2100 m ³ /hr (Minimum) | |
| | through all pre-treatment tanks. | | |
| - | Nano Filter | | |
| 2 | Suitable 5 Micron Filter with SS housing & easy to | Confirm | |
| | clean/remove. | | |
| | Oil skimmer | | |
| 3 | Belt Type with Motor | Required Capacity of Motor: | |
| ა | Separate Tank & Pump for circulation with main | 90 W, 30 rpm (minimum) | |
| | process tank of De-grease. | | |
| 4 | DM Plant | | |
| 4.1 | Capacity (minimum) | 2000 L per hour | |
| 4.2 | DM Conductivity (minimum) | 10 µSiemens | |
| 4.3 | PH value | 6.5-7 | |
| т.Ј | | Amit Aqua/Ion Exchange/Span | |
| 4.4 | DM Make | | |
| | | Hydrotech/Hi-Tech | |
| VIII | Water Drying Oven (WDO) | Conveyorised (Automatic) | |
| 1 | Fuel | PNG | |
| 2 | Max. Temp. | 140°C | |
| 3 | Initial Heating Time of oven | 60 Minute (maximum) | |
| 4 | Material of construction of Oven | CRCA and HR | |
| 5 | Insulation | Rock Wool Density 48 Kg/M ³ | |
| | | (Minimum) | |
| | | | |
| 6 | WDO Heating System room Temperature | 0-2°C (minimum) | |

| 7 | Oven Over-All Dimension | (14715L x3130W x 5825H) mm | |
|------|--|--|--|
| | | (minimum) | |
| 8 | Oven Working Dimension | (12615L x3030W x 2800H) mm (minimum) | |
| 9 | Article Entry & Exit Gate/Cut-out Size | 1100 mm(W) x 1700 mm (H) (minimum) | |
| 10 | Article entry and exit | Conveyorised | |
| 11 | Finish Painting | Inside Heat Resistant Aluminium paint, Outside enamel paint | |
| 12 | Safety | | |
| 12.1 | Pressure control | Confirm | |
| 12.1 | Safety door: | | |
| 12.2 | Which have Proper Provision to escape gases in case of emergency with Pre-Define temperature and Pressure. | Confirm | |
| 12.3 | Inspection cum explosion door | Confirm | |
| 13 | Indication Lamps & Push Buttons | Confirm | |
| 14 | Temperature Indicator and Controller for Oven Temperature PT100 (Thermo-couple type) Sensors for Temperature | Confirm | |
| 15 | Temperature Indicator Cum Controller (TIC) | 02 no. (minimum) | |
| 16 | PT 100 Sensor | 01 no. (minimum) | |
| 17 | Vent for Oven (natural Exhaust for flue gas) | Confirm | |
| 18 | Moist Filter for burner in inlet manifold | Confirm | |
| 19 | Blower burner Interlock | Confirm | |
| 20 | Oven working | Autocycle | |
| IX | Pressurization zone | | |
| 1 | Description | atmosphere while powder coating, this chamber is provided in which filtered air is delivered at top of booth through duct at specific air velocity. | |
| 2 | Blower Pressure | 60-65 mm WG | |
| 3 | Illumination in Zone | 400 to 600 lux | |
| 4 | Material | Folded Panels fabricated out of 16 SWG / 2 mm CRCA with View Glass | |
| 5 | Air handling unit | Blower and suitable filters which will positively deliver the air inside the zone. | |
| Х | Powder Curing Oven (PCO) | | |
| 1 | Fuel | PNG | |
| 2 | Max. Temp. | 220.00 °C. at EMT | |
| 3 | Initial Heating Time of oven | Maximum 60 minutes | |
| 4 | Material of construction | CRCA and HR | |
| 5 | Insulation to be designed in such a manner that Outside surface temperature will be at room temperature | Rock Wool Density Approx. 48 Kg/M ³ . (Minimum) | |
| 6 | PCO Heating System room Temperature | 0-2°C (minimum) | |
| 7 | Finish Paint for Oven | Inside Heat Resistant Aluminum paint, Outside Enamel paint | |
| 8 | Entry & Exit Gate Size | 1100 mm(W) x 1700 mm (H) (minimum) | |
| 9 | Article Entry & Exit | On Conveyor along Camelback type to Prevent Heat Loss | |
| 10 | Oven Working Dimension | (15285L x6230W x 2700H) mm (Minimum) | |

| 11 | Oven Overall Dimension | (15685L x6630W x 5825H) mm (Minimum) | |
|------|--|---|---|
| 12 | Safety | | |
| 12.1 | Pressure control | Confirm | |
| 12.2 | Safety door: Which have Proper Provision to escape gases in case of emergency with Pre-Define temperature and Pressure. | Confirm | |
| 12.3 | Inspection cum explosion door | Confirm | |
| 13 | Indication Lamps & Push Buttons | Confirm | |
| 14 | Temperature Indicator Cum Controller for Oven Temperature PT100 (Thermo-couple type)Sensors for Temperature | Confirm | |
| 15 | Temperature cum indicator controller (TIC) | 02 no. (minimum) | |
| 16 | PT 100 Sensor | 01 no. (minimum) | |
| 17 | Vent for Oven (natural Exhaust for flue gas) | Confirm | |
| 18 | Moist Filter for burner in inlet manifold | Confirm | |
| 19 | Blower burner Interlock | Confirm | |
| 20 | Oven working | Autocycle | |
| XI | Conveyor (All across the process) | | |
| 1 | Type | 4-wheel open track | |
| 2 | | 2.5 meter/minute | |
| 2 | Conveyor speed | Minimum 475 meter | |
| | Conveyor length | | |
| 4 | Drive | Sprocket/caterpillar type | |
| 5 | Take up | Screw/dead weight type | |
| 6 | Point load | 40 Kg maximum | |
| XII | Powder coating booth | | |
| 1 | Description | Automatic booth consisting of reciprocator, auto guns, cyclone recovery system, post filter unit with pulsing and provision of two manual touch up stations with manual gun. | |
| 1.1 | No. of auto guns | Minimum 10 on booth (5 on each side) or better | |
| 1.2 | Construction of booth | SS-316 panels and MS structure. (With illumination of min. 400 Lux) | |
| 1.3 | Vendor to give total colour change time | 90 minute (Maximum) | |
| 1.4 | Powder Recovery System | Confirm | |
| 1.5 | Height sensor (working: no object no spray) | Confirm | |
| XIII | SCADA (Supervisory Control and Data Acquisition) Based Centralized Control system (The panel body should be Powder Coated) for Indication, Control & Monitoring for all heating tank temperature, pH Value, Level Indicator for solution of all tanks, Water drying Oven temperature, baking oven temperature, working of all powder coating gun, Conveyor system. | Confirm | |
| 1 | PC Based controlling the complete system along with Conveyor | Confirm | |
| 2 | Other than offline Pre-dip treatment plant, Centralized PC Base Control System should provide single point control to operate all plant activities such as conveyor, ovens, all type of sensors, alarms, blowers. | Confirm | |
| 3 | PC Configuration | Confirm | |
| 3.1 | High configuration system (i7 Processor or higher) | Confirm | |
| 3.2 | RAM | 4 GB (minimum) | |
| 3.3 | Windows 10 Professional Operating System (Except Windows Home) | Confirm | |
| | Monitor with suitable HDMI Cables & repeater size as | 02 Set | i |

| | mentioned | | |
|-------|---|---|--|
| 3.5 | Monitor Size | | |
| 3.5.1 | 19" LED (01 Set) | Confirm | |
| 3.5.2 | 90" LED (01 Set) | Confirm | |
| 4 | Serial Ports/Serial PCIX Cards | 02 Set | |
| 5 | Wired Ethernet Port | Confirm | |
| 6 | Wi-Fi USB | Confirm | |
| 7 | Bluetooth USB | Confirm | |
| C | Component Hanging Fixtures | | |
| | Vendor to design manufacture & supply fixture for Pre-dip & Powder coating & Curing for the products Kit as per drawing (refer drawing Attached) | As mention below Vendor to specify & Confirm | |
| 1 | Tricycle Family (Small Part Fixture other than main frame) (TD2C98, TD2C95/96, TD2C79, TD2C38/28 & TD2A65,TD2C48) (Vendor to design single fixture to accommodate all type of Product & its components as mention). | 200 Nos | |
| 2 | Wheel Chair Family | | |
| 2.1 | TD2C51, TD2A06, TD2A26, TD2A02 & TD2B37 (Vendor to design single fixture to accommodate all type of Product & its components as mention). | 150 Nos | |
| 2.2 | Wheel Chair Rough Terrain (TD2C36) | 50 nos | |
| 3 | Tripod, Tetra Pod & Can etc. Drawing No. : TD 2P 02, TD 2P 04, TD2N82, TD2N85, TD2N86, TD1N70 (Vendor to design single fixture to accommodate all type of Product and its components as mention). | 60 nos | |
| 4 | Rollator(Size-I & Size-II), Walker, Drawing No.: TD2N85, TD2N86, TD2N82. (Vendor to design single fixture to accommodate all type of Product and its components as mention). | 40 nos | |
| 5 | Vendor to ensure the fixtures are pre-coated to avoid deposition during coating | Confirm | |
| 6 | The Fixture should be made in such a manner that all components of single product may set up in single fixture Vendor to refer attached product drawing for same. | Confirm | |
| 7 | Vendor to refer attached fixture drawing for reference and make its own drawing considering the envelope and over-all requirement for all family of product. | Vendor to give fixtures manufacturing drawing for all product & Confirm | |
| D | Off-line Stripping Off Arrangement After powder coating hanging Jigs & fixture will manually dip into this tank to remove powder particles deposited on hanging Jigs & fixtures. | Oty- 2 nos., MS- 4 mm (Minimum) (Vendor to confirm & Provide Details) | |
| 1 | Cleaning Tank | Size: (2500L x 2600W x 2400H) mm , MS- 4 mm (Minimum) | |
| 2 | Water Rinse | Size: (2500L x 2600W x 2400H) mm , MS- 4 mm (Minimum) | |
| 3 | Tank Heating System | For Fixture cleaning tank from side of tank | |

| 3.1 | Fuel arrangement | PNG with suitable burner | | | | | |
|-----|--|---|--|---|--|--|--|
| 3.2 | Initial Heating Time | 120 Minutes.(Maximum) | | | | | |
| 3.3 | Temperature | 80°C maximum | | | | | |
| E | Make Sheet | | | | | | |
| 1 | Burner | Ecoflam / Riello/FBR | | | | | |
| | | Burners/ELCO | | | | | |
| 2 | Twin-Lobe Blower | Nadi / Everest | | | | | |
| 3 | Motor | Crompton Greaves/ ABB /Bharat-Bijlee/ Siemens | | | | | |
| 4 | Powder coating booth with Powder Coating Gun | GEMA / Wagner / Ven Tec | | | | | |
| 5 | LED Display | Panasonic/LG/Samsung | | | | | |
| 6 | Main Switch, MCB, Contactor, Over Load Relay, PLC | Siemens/ C&S/L&T | | | | | |
| - | | Honeywell/Sparkfun/Sushant | | | | | |
| 7 | Sensors | Enterprise | | | | | |
| 8 | Cable | Finolex/Havells/RR | | | | | |
| F | General | | | | | | |
| 1 | Other than mentioned any other Required Accessories for Plant (Vendor to provide list) | Specify & Confirm | | | | | |
| 2 | Cabling (All necessary cables of right size is in Vendor Scope) | From Bus Bar to all Equipment | | | | | |
| 3 | Exhaust Duct | Insulated till 2 metre from ground | | | | | |
| | Water Inlet/outlet Dining (All percessary pipes of right | At one point near to pre- | | | | | |
| 4 | Water Inlet/outlet Piping (All necessary pipes of right size is in Vendor Scope) | treatment, further piping will be in supplier scope | | | | | |
| 5 | PNG Gas Consumption per hour (Piping from gas bank to system is in Vendor scope).For the System Vendor to calculate load as per his design and submit while filling bid. | Confirm | | | | | |
| G | Qualification Criteria | | | | | | |
| 1 | In house Installation/Commissioning Team with suitable staff | Confirm & Provide Details | | | | | |
| 2 | Prior Experience of supplying such systems to manufacturers of M.S. Pipe/ Tubular Structure components. Vendor must have done such installation at least 05 nos. such plants during last 05 years Vendor to provide details of such customer along with contact number. | Confirm & Provide Details | | | | | |
| Н | Documentation- | | | | | | |
| 1 | Detailed layout plan and prospect to be given (Area of shop as per attached drawing) | | | | | | |
| 2 | Operating instruction& Manual | | | 1 | | | |
| 3 | Installation and Commissioning instructions | | | | | | |
| 4 | Time Temperature Record Report | | | | | | |
| 5 | Preventive maintenance instructions | | | | | | |
| 6 | Instruction manual for supplied coolant concentrate and coolant | Each documentation three sets in | | | | | |
| 7 | Detailed invoice and packing list of all items and devices and detailed prospect of machine and all other accessories enclosed in. | English along with delivery | | | | | |
| 8 | List of proposed powder & other consumable required to run the plant | | | | | | |
| 9 | The consumables for Initial fill, prove out are in vendor scope. Other than the consumables for initial fill the following consumables need to be supplied. | | | | | | |

| | Chemical for KOD & De-greasing 6Tons along with plant | |
|-----|---|-------------------|
| 9.1 | (Vendor to give At-Least 3 make with similar chemical | |
| | properties) | |
| | Chemical for De-Rusting 4.5 Tons along with plant (other | |
| 9.2 | than chemical require for prove out) Vendor to give At- | |
| 7.2 | Least 3 make with similar chemical properties) | |
| | | |
| 9.3 | Chemical for NANO coating – 3Ton (Vendor to give At- | |
| | Least 3 make with similar chemical properties) | |
| | Powder for Powder Coating Plant 9 Ton along with plant | |
| 9.4 | (Vendor to give At-Least 3 make with similar chemical | |
| | properties) | |
| 0.5 | Chemical for Strip-off System-4.5 Ton (Vendor to give At- | |
| 9.5 | Least 3 make with similar chemical properties) | |
| | List of necessary spares required to run the plant (Only | |
| 10 | list is required, Rate not to be quoted in TC-Bid) | |
| 1 | Installation & commissioning- | |
| 1 | | |
| | The complete installation and commissioning must be | |
| 1 | carried out by the supplier at the project site (ALIMCO- | Confirm |
| | Kanpur) | |
| 2 | Training to be provided during installation, | Confirm |
| 2 | commissioning and prove out at ALIMCO-Kanpur. | Confirm |
| 2.1 | Operator training | 28 Days |
| | * | 20 5 4 3 5 |
| 2.2 | Maintenance course all Inclusive (mechanical, electrical | 15 Days |
| | and electronics) | |
| | Prove Out powder coating of 5 Days planned production | |
| 3 | of components to be done at ALIMCO Premises. (Refer | Confirm |
| | Attached Product Drawings). | |
| J | General operating condition | |
| 1 | 3 Phase 415V +/- 10% | Confirm |
| - | | |
| 2 | Frequency 50 Hz +/- 5% | Confirm |
| 3 | Protection level | IP54 or better |
| | System should have capability to handle voltage, current | |
| 4 | and frequency fluctuation, necessary protection to be | Confirm |
| | provided. | |
| | Complete electrical system should be tropicalized for | |
| 5 | Indian condition 5 to 50 degree centigrade temp and RH | Confirm |
| - | 100% (Including additional accessories) | |
| К | Service | |
| ĸ | | |
| | Detail of authorized Service Partners in India (Name & | 0 - of low |
| 1 | Address) must be certified by manufacturer and shown in | Confirm |
| | the quotation | |
| L | Warranty/defect Liability: | 2 years (Minimum) |
| | Vendor shall consider any other item, (other than | |
| | mention in Annexure-A) necessary for successful | |
| М | operation & installation of plant, Vendor shall provide | Confirm |
| | list. | |
| | DELIVERY PERIOD INCLUDING INSTALLATION & | |
| | | |
| | COMMISSIONING: | |
| | The delivery, installation & commissioning period of | |
| Ν | complete Powder Coating Plant at the destination | Confirm |
| | mentioned in Para 1 on page no. 02 of the tender | |
| | documents will be 10 months for delivery and | |
| | installation, commissioning & Prove-Out from the date of | |
| | placement of Purchase Order/work contract. | |
| | | |
| | WARRANTY/defect Liability: | |
| _ | The entire Powder Coating Plant inclusive of all | |
| 0 | system/accessories must be covered under warranty for | Confirm |
| | a period of 24 months (minimum) from the date of | |
| | successful Installation & commissioning. | |
| | | |

| | NOTE: | |
|-----|--|---------|
| 1. | Six month hand holding (Vendor to consider 3 days visit per month till 6 month, All expenses will be borne by Vendor) | |
| 2. | Breakdown calls to be attended within 48 hrs. | |
| 3. | Supply to be done on Turnkey Basis. ALIMCO shall provide electrical supply point, air supply and water supply near to the place of installation. (Civil Layout will be provided) | Confirm |
| 4. | Civil foundation details and drawings with specifications to be provided by the tenderer. | Confirm |
| 5. | Total power Electrical power consumption (in KW) & Gas Power Consumption (in Kg/hr) to be provided by the tenderer. | Confirm |
| 6. | Layout drawing should be provided in CAD format. | Confirm |
| 7. | Visual control board to be provided for monitoring with alarm signals. | Confirm |
| 8. | ALIMCO may at its discretion decide to visit & verify the facility and validate in case of discrepancy the vendor shall be technically disqualified. | Confirm |
| 9. | All necessary Details as asked in Annexure-A to be duly full-filled failing which Bid shall be technically Rejected. | Confirm |
| 10. | The Drawing/Layout attached along with details is for standard purpose and should be the minimum qualifying criteria in all aspect. However vendor is free to design its own plan & supply above standard inculcating minimum requirement of the plant and if any change should be submitted while filling bid. | Confirm |
| 11. | Entire System shall be designed and commissioned for ease of access of all facilities and maintenance. | Confirm |
| 12. | The Bus bar trunking (BBT) for electricity has been provided at 8.5 meter height. Sufficient suitable cable, cable tray, circuit breaker, fittings to connect the plant & it's accessories from power source is in vendor's scope. | Confirm |
| 13. | Separate list of spares along with rate, required for smooth functioning of the plant & its accessories. The list is solely required with respect to future requirements/reference of Plant. Hence total cost of items from the list should not be the part of final price of tender quote. | Confirm |

SPECIFIC CONDITIONS OF SUPPLY:

The tenderer should clearly indicate the following in their offer:

- 1) Installation/Commissioning details,
- 4). Whether DGS&D or any other State/Central Rate Contract exists for the item offered. Please enclose copy.
- 5). Tenders are required to provide address, e-mail, contact person of local service centre/Nearest Service centre from where service support shall be provided.
- 6). Any other relevant technical details of the offered Plant & its accessories.
- Complete details of infrastructural requirement for the Offered Plant & its accessories i.e. Ambient working atmosphere requirement Power connections requirement.
- 8) Tenderer is required to provide a list of parties with their complete postal address with telephone / e-mail. To whom they have supplied similar Plant over the last 5-8 years. The list should clearly indicate the quantity and the model of the Plant to such customers.
- 9) Tenderer is required to give complete details of the training facilities, if available, with their organization for training our technicians and engineers on the use and maintenance of the Whole Plant & its accessories. <u>Details of complimentary training should also be indicated in the offer</u>.
- 10) Tenderer is required to clearly indicate the details of infrastructure of after sales service facility with its location together with the anticipated time of attending complaints after their receipt of complaint in their service center.
- 11) Tenderer should clearly indicate the reasons as to why they consider their Plant &it's accessories and their offer to be best for supply to the Corporation. The tenderer should enclose all documentary evidence in support of their claim along with their offer.
- 12) The Plant & it's accessories would be required to be supplied and installed in the company premises as specified in Para 1 of the tender document. As such the tenderers should clearly confirm their acceptance to deliver / install and provide after sales service during the warranty period and afterwards at Corporation premises or as the location as specified in the tender document. They are also required to indicate the nearest service point location with address for providing services in respect of the offered Plant &it's accessories.
- 13) In case the tenderer desires to provide supplies of add on optional accessories for the effective functioning of the system on complimentary / chargeable basis, he should clearly indicate items along with the terms of supply. The value of the complimentary supplies proposed should be clearly indicated in the offer.
- 14) The tenderer should **necessarily enclose the complete exhaustive literature / Printed catalogue of their offered Plants & its Accessories** indicating full technical details/specifications and special features of their Plants &it's accessories together with their make & model, etc.
- 15) In case of existence of a DGS&D /GEMrate contract or a State/Central Govt. Rate Contract in respect of the supply of the offered Plants &it's accessories, an authenticated copy of the

same should also be enclosed along with the offer. The enclosing of a copy of the relevant rate contract would still permit the tenderer to submit a lower competitive offer in which case the corporation would consider only the lower offer for comparison and analysis.

- 16) The tenderers are required to submit exhaustive (anticipated) list of spares likely to be used on chargeable basis during the period of 03 years together with their prices indicating validity period of each spares for our necessary reference and records.
- 18) In case of any problem / trouble / defect after commissioning the local service provider is required to respond / attend the problem within 48 Hrs.
- 19) The repeat orders may be placed up to 100% of quantity of original order where the original order was placed on the supplier selected on the basis of OT only for ordering additional quantity. The repeat order will be placed on same rates and terms as mentioned in initial order.

FORMAT FOR BANK GUARANTEE TOWARDS SECURITY DEPOSIT/PERFORMANCE GUARANTEE

(To be executed by any Nationalised Bank in India, on a Rs. 200 non-judicial stamp paper under bank's covering letter mentioning address of the bank)

In consideration of M/s Artificial Limbs Manufacturing Corporation of India, hereinafter referred to as 'ALIMCO', which expression unless repugnant to the context and meaning thereof shall include its successors and assigns having agreed to exempt M/s _______ (Name of the vender/supplier/contractor) hereinafter referred to as supplier/contractor which expression unless repugnant to the context and meaning thereof shall include its successors and assigns] from depositing with ALIMCO a sum of Rs.______ towards security / performance guarantee in lieu of the said supplier/contractor having agreed to furnish a bank guarantee for the said sum of Rs. _______ as required under the terms and conditions of contract / work order / purchase order no. ______ dated ______ [hereinafter referred as the order'] placed by ALIMCO on the said supplier / contractor.

We, ______ the bank [hereinafter referred to as 'the bank' which expression shall include Its successors and assigns] do hereby undertake to pay ALIMCO an amount not exceeding Rs. ______ on the demand made by ALIMCO on us due to a breach committed by the said supplier / contractor of the terms and conditions of the order.

We ______ the bank hereby undertakes to pay the amount under the guarantee without any demur merely on a demand from ALIMCO stating that there is a breach by the supplier / contractor of any of the terms and conditions contained in the order or by the reasons of the supplier's / contractor's failure to comply with the terms and conditions as stipulated in the order or amendment(s) thereto.

The demand made on the bank shall be conclusive as to the breach of the terms and conditions of the order and as regard to the amount due and payable by the bank under this guarantee, notwithstanding any dispute or disputes raised by the said supplier / contractor regarding the validity of such breach and we agree to pay the amount so demanded by ALIMCO without any demur. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. ______.

We, ________ the bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said order and that it shall continue to be enforceable till the dues of ALIMCO under or by virtue of the said order have been fully paid and its claim satisfied or discharged or till ALIMCO certifies that the terms and conditions of the order have been fully and properly carried out by the supplier / contractor and accordingly discharge the guarantee.

We ______ the bank, undertake to pay to ALIMCO any money so demanded notwithstanding any dispute or disputes raised by the said supplier / contractor in any suit or proceedings pending before any court or tribunal relating thereto as our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the said supplier / contractor shall have no claim against us for making such payment.

We ________ the bank further agree that ALIMCO shall have full liberty, without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the order or to extend time of performance by the said supplier / contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the ALIMCO against the said supplier / contractor and to forbear or enforce any of the terms and conditions relating to the order and shall not be relieved from our liability by reason of any such variation or extension being granted to the said supplier / contractor or for any forbearance, act or omission on the part of ALIMCO or any indulgence by ALIMCO to the supplier / contractor or by any such matter or thing whatsoever which under the law relating to sureties would but for this provisions have effect of so relieving us. Our liability under this guarantee is restricted to Rs. ______ and shall remain in force up to _______ unless demand or claim under this guarantee is made on us in writing within 3 months from the date of expiry viz. ______. We shall be discharged from all liabilities under this guarantee thereafter.

This guarantee will not discharged due to change in the constitution in the bank or the said supplier / contractor.

The bank hereby agrees to address all the future correspondence in regard to this bank guarantee to Chairman & Managing Director, Artificial Limbs Manufacturing Corporation of India.

We, ______ the bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of ALIMCO in writing.

Signed on the _____ day of

Witness

Signature For the Bank

FORMAT FOR BANK GUARANTEE TOWARDS SECURITY DEPOSIT/ADVANCE

(To be executed by any Nationalised Bank in India, on a Rs. 200 non-judicial stamp paper under bank's covering letter mentioning address of the bank)

In consideration of M/s Artificial Limbs Manufacturing Corporation of India, hereinafter referred to as 'ALIMCO', which expression unless repugnant to the context and meaning thereof shall include its successors and assigns having agreed to exempt M/s _______ (Name of the vender/supplier/contractor) hereinafter referred to as supplier/contractor which expression unless repugnant to the context and meaning thereof shall include its successors and assigns] from depositing with ALIMCO a sum of Rs.______ towards security / performance guarantee in lieu of the said supplier/contractor having agreed to furnish a bank guarantee for the said sum of Rs. ______ as required under the terms and conditions of contract / work order / purchase order no. ______ dated ______ [hereinafter referred as the order'] placed by ALIMCO on the said supplier / contractor.

We, _______ the bank [hereinafter referred to as 'the bank' which expression shall include Its successors and assigns] do hereby undertake to pay ALIMCO an amount not exceeding Rs. ______ on the demand made by ALIMCO on us due to a breach committed by the said supplier / contractor of the terms and conditions of the order.

We ______ the bank hereby undertakes to pay the amount under the guarantee without any demur merely on a demand from ALIMCO stating that there is a breach by the supplier / contractor of any of the terms and conditions contained in the order or by the reasons of the supplier's / contractor's failure to comply with the terms and conditions as stipulated in the order or amendment(s) thereto.

The demand made on the bank shall be conclusive as to the breach of the terms and conditions of the order and as regard to the amount due and payable by the bank under this guarantee, notwithstanding any dispute or disputes raised by the said supplier / contractor regarding the validity of such breach and we agree to pay the amount so demanded by ALIMCO without any demur. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. ______.

We, ________ the bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said order and that it shall continue to be enforceable till the dues of ALIMCO under or by virtue of the said order have been fully paid and its claim satisfied or discharged or till ALIMCO certifies that the terms and conditions of the order have been fully and properly carried out by the supplier / contractor and accordingly discharge the guarantee.

We ______ the bank, undertake to pay to ALIMCO any money so demanded notwithstanding any dispute or disputes raised by the said supplier / contractor in any suit or proceedings pending before any court or tribunal relating thereto as our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the said supplier / contractor shall have no claim against us for making such payment.

We ______ the bank further agree that ALIMCO shall have full liberty, without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the order or to extend time of performance by the said supplier / contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the ALIMCO against the said supplier / contractor and to forbear or enforce any of the terms and conditions relating to the order and shall not be relieved from our liability by reason of any such variation or extension being granted to the said supplier / contractor or for any forbearance, act or omission on the part of ALIMCO or any indulgence by ALIMCO to the supplier / contractor or by any such matter or thing whatsoever which under the law relating to sureties would but for this provisions have effect of so relieving us. Our liability under this guarantee is restricted to Rs. ______ and shall remain in force up to ______ unless demand or claim under this guarantee is made on us in writing within 3 months from the date of expiry viz. ______. We shall be discharged from all liabilities under this guarantee thereafter.

This guarantee will not discharged due to change in the constitution in the bank or the said supplier / contractor.

The bank hereby agrees to address all the future correspondence in regard to this bank guarantee to Chairman & Managing Director, Artificial Limbs Manufacturing Corporation of India.

We, ______ the bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of ALIMCO in writing.

Signed on the _____ day of

Witness

Signature For the Bank

ANNEXURE-C

Tender Inviting Authority: ALIMCO, Kanpur

Tender No: PT/OT/10/AW, dated 18.12.2018, Regarding Design, Fabrication, Supply, Installation & Commissioning of "Automatic Conveyorised Integrated Powder Coating Plant along with Pre-dip treatment Plant" on Turnkey Basis

Name of Firm:

| | | | | | | RICE BIQ (P-BI | u) | | - | | | - | | |
|------------|--|----------|-----------|---------------------|-------|---|---------|-----------------|--------|-----------------------------|---|--------|-----------|---|
| SI. No. | Item Description | HSN Code | GSTIN No. | Quantity in Nos. | Units | BASIC RATE In Figures To be entered by the Bidder in Rs. P B | • | tt Charges C | | king & ling Charges D | Sub Total Amount in Rs. E=B+C+D | | GST | Item wise Billing Price to Alimco (in Rs.) |
| | | | | | | В | (In %) | (In Rs.) | (In %) | (In Rs.) | E-D+C+D | (In %) | (In Rs.) | G=E+F |
| A | Supply of ",Design, Fabrication, Supply, Installation & Commissioning of Automatic Conveyorised Integrated Powder Coating Plant along with Pre-dip treatment Plant (On Turn Key Basis)" as per the details enclosed at Annexure-A | | | 1 | Set | | (117/6) | (III KS.) | | (1111(3.) | | | (111 KS.) | |
| 1 | Offline Pre-Dip Treatment Plant and its accessories | | | 1 | Set | | | | | | | | | |
| 2 | Conveyrised Inline Pre-Dip Treatment Plant and its accessories | | | 1 | Set | | | | | | | | | |
| 3 | Off-line Strip-Off Tanks and its accessories | | | 1 | Set | | | | | | | | | |
| | DM Plant & other necessary equipment required for proper functioning of Pre-Dip Treatment Plant (Both Offline & In-line). | | | 1 | Set | | | | | | | | | |
| 5 | Water Drying Oven & it's accessories | | | 1 | Set | | | | | | | | | |
| 6 | Powder Curing Oven & it's accessories | | | 1 | Set | | | | | | | | | |
| 7 | Powder Coating Booth & it's Accessories | | | 1 | Set | | | | | | | | | |
| 8 | Conveyor Systems of the Whole Plant and its accessories | | | 1 | Set | | | | | | | | | |
| 9 | SCADA System and its accessories as asked in Annexure-A. | | | 1 | Set | | | | | | | | | |
| 10 | Chemicals & Consumables as asked in Annexure-A. | | | 1 | Set | | | | | | | | | |
| 11 | Jigs & Fixtures and its accessories | | | 1 | Set | | | | | | | | | |
| | Installation & Commissioning Charges including Civil, Electrical work on turnkey basis for satisfactory commissioning of the whole plant (if any) | | | 1 | Set | | | | | | | | | |

PRICE Bid (P-Bid)

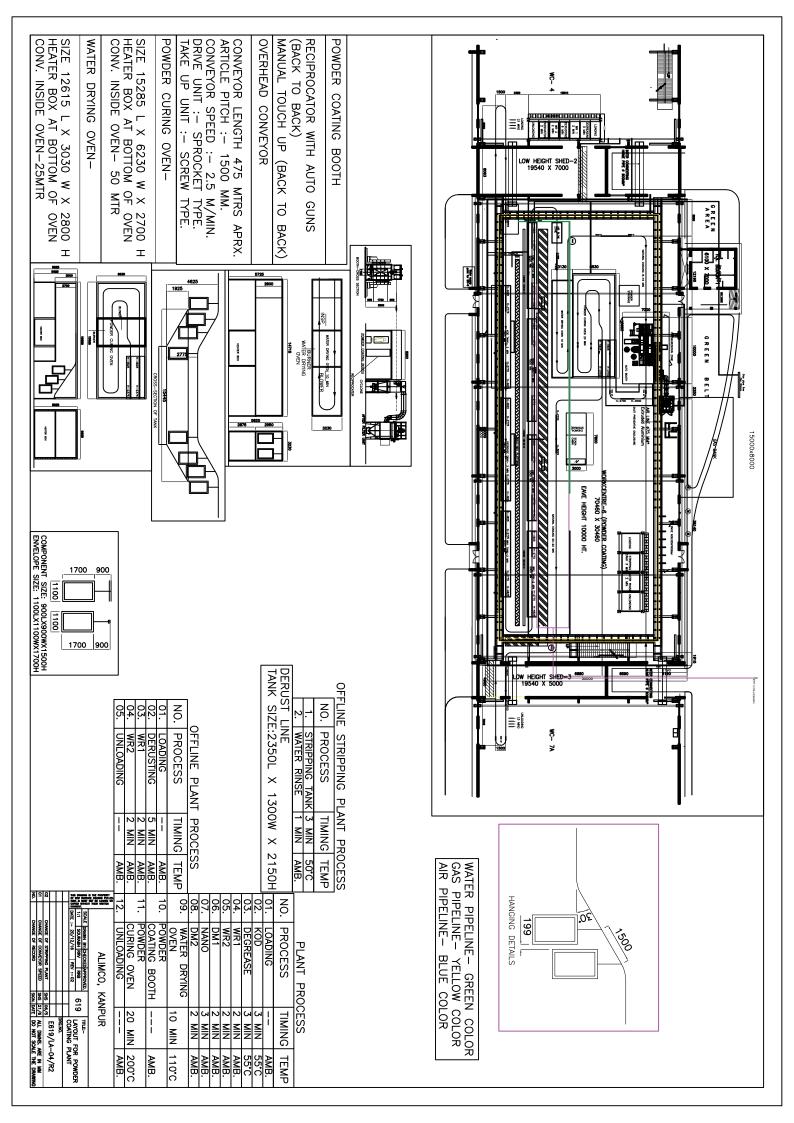
| 13 | Supply of any other additional items (other than specified at Annexure-A) which are necessarily required for satisfactory operation of the whole plant | | 1 | Set | | | | | |
|------------|---|--|---|-----|--|--|--|--|--|
| Total (in | Total (in Rs.) F.O.R ALIMCO,Kanpur | | | | | | | | |
| Total in V | Vords | | | | | | | | |

Note:

1. The rates should be seprately quoted for supplies to ALIMCO HQ or to its others units, as the case may be,

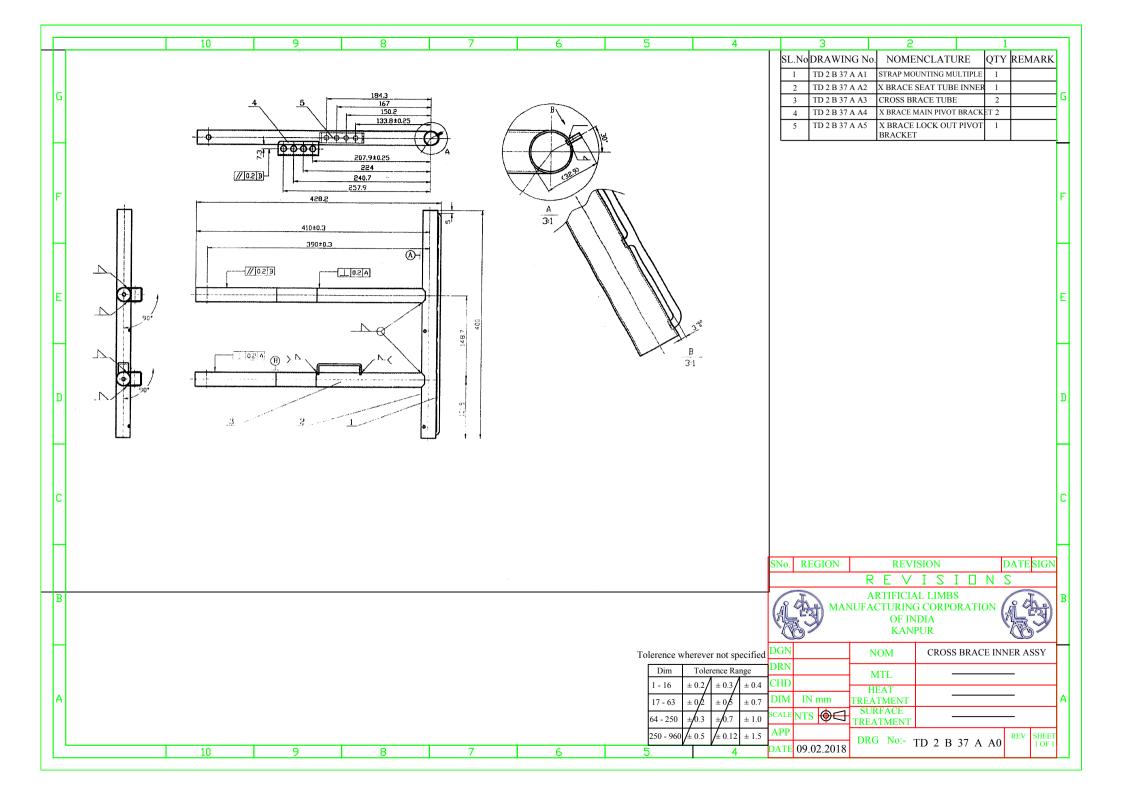
2. Giving HSN Code is mandatory and the the bills after placement of order should mention the same HSN Code.

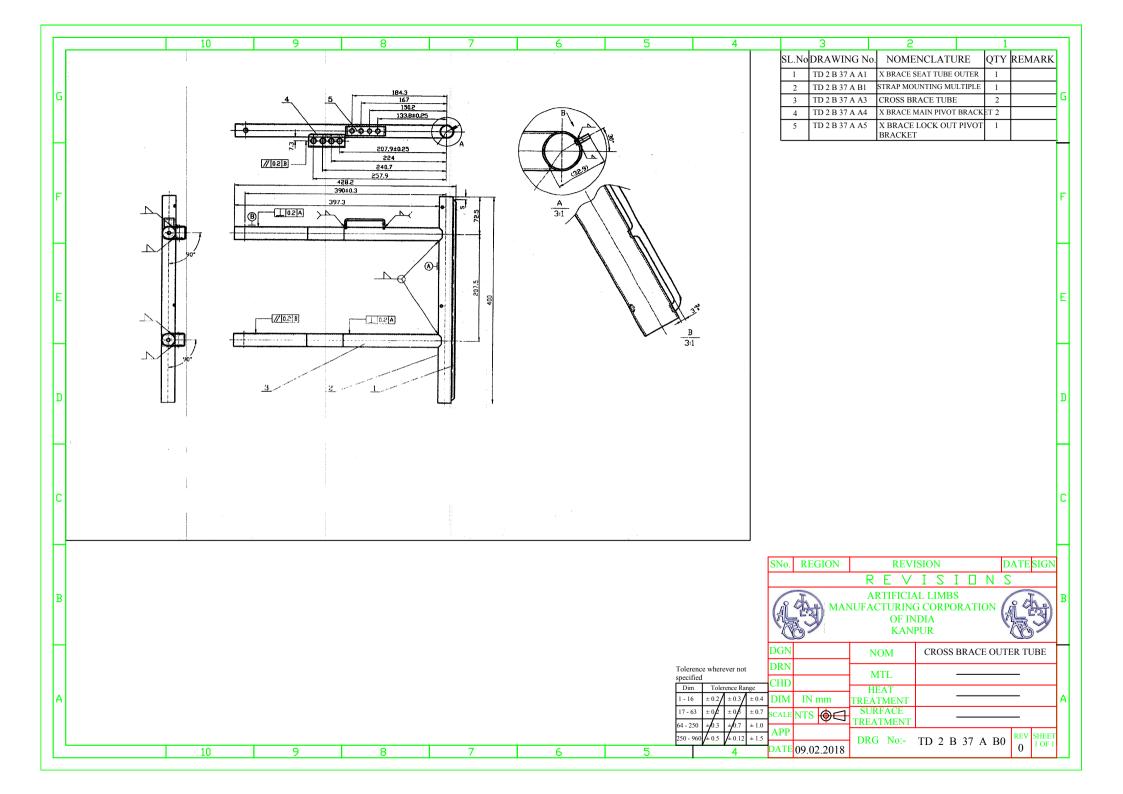
3. Providing correct HSN Code is the responsibility of the vendor and ALIMCO is no way responsible for any subsequent interpretation/order by the Tax authorities.

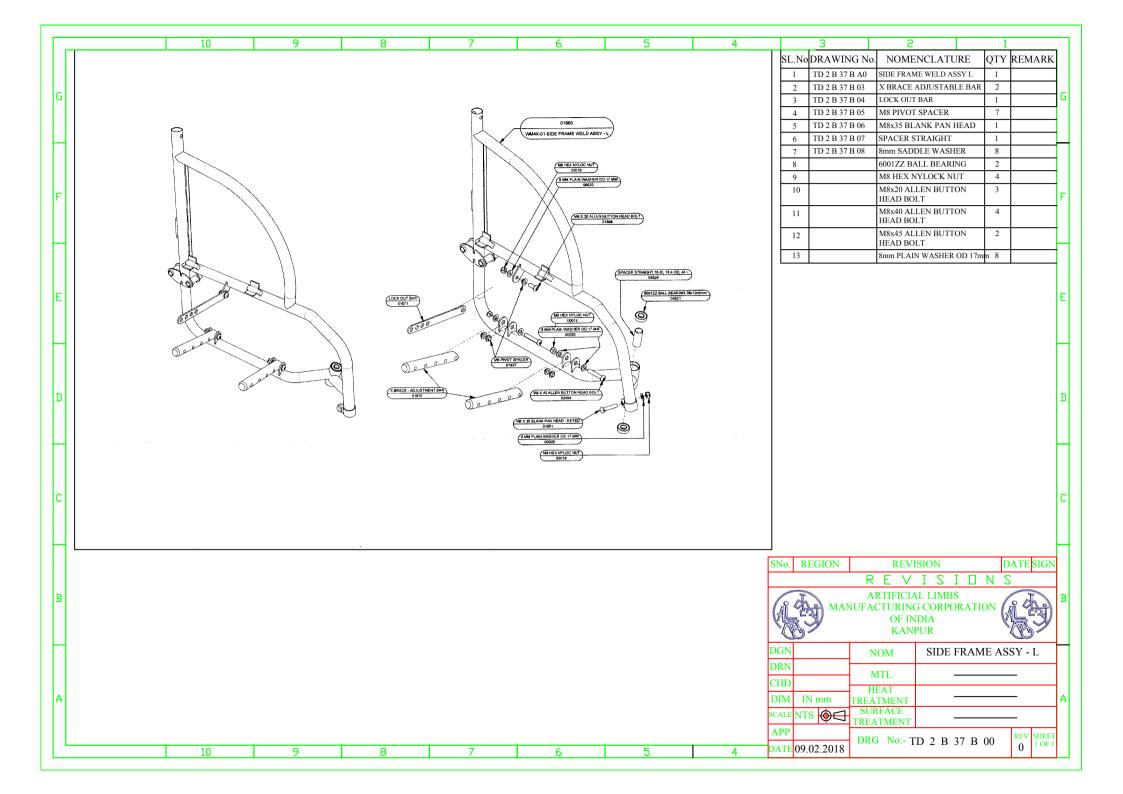


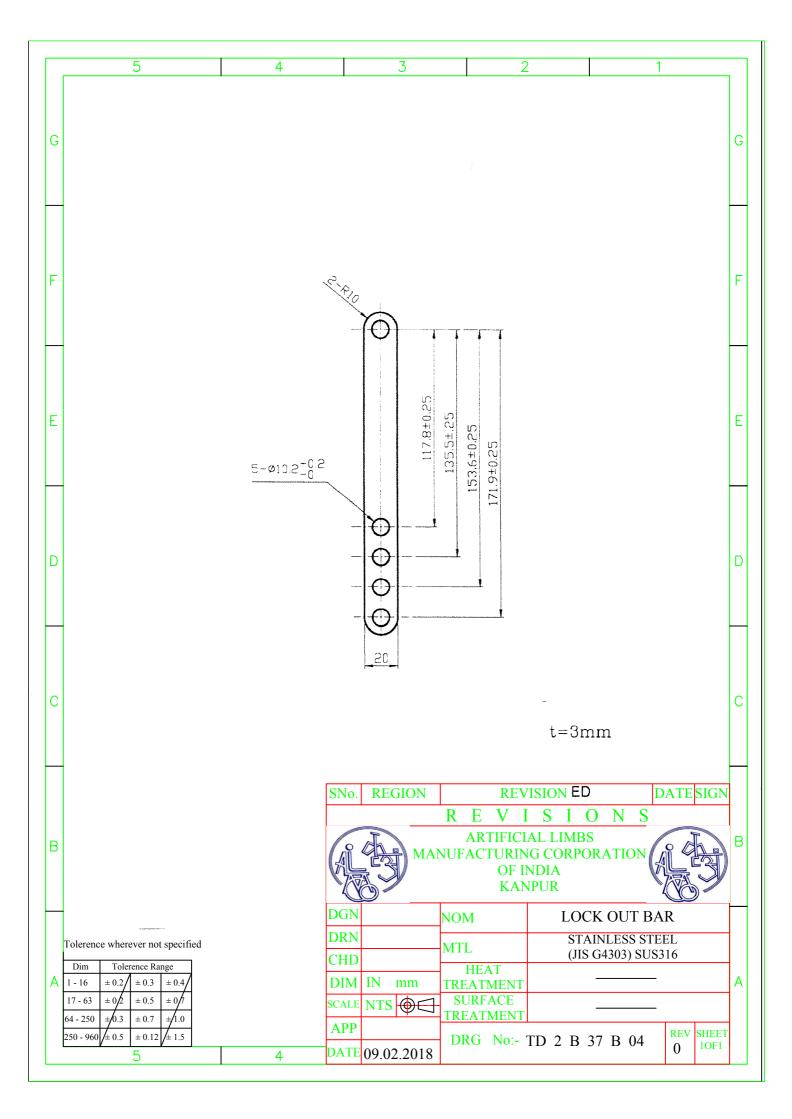
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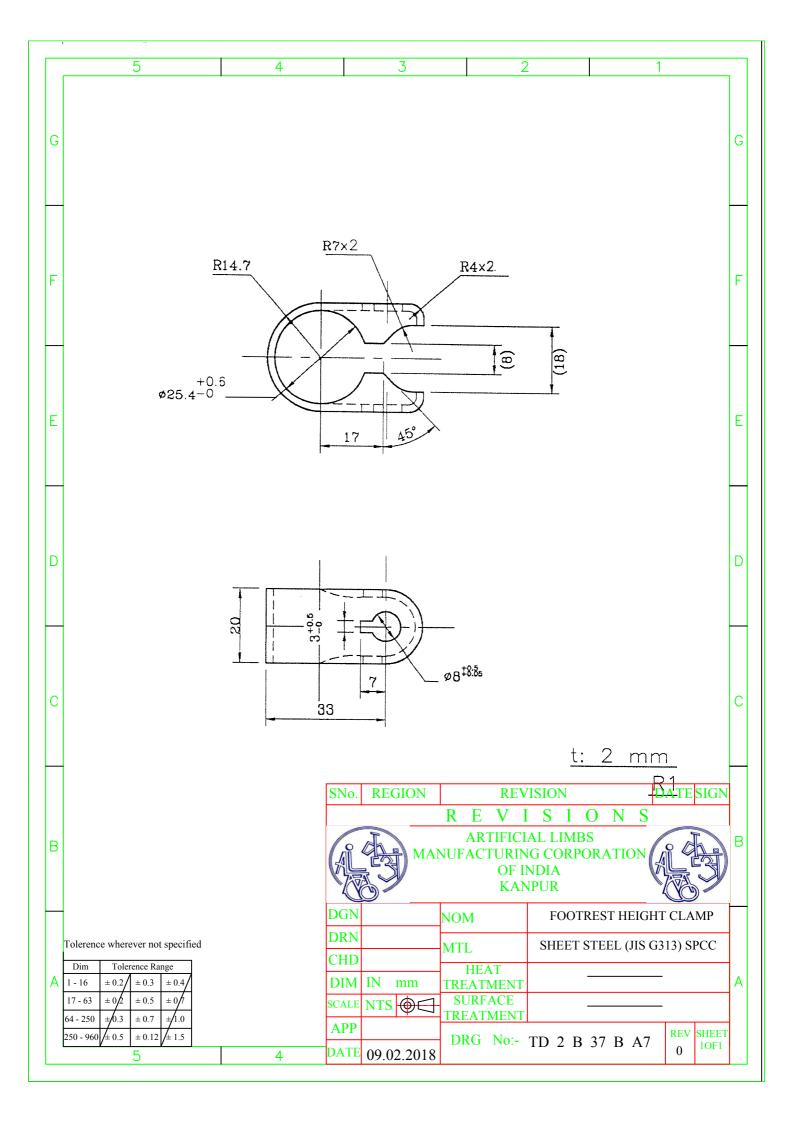


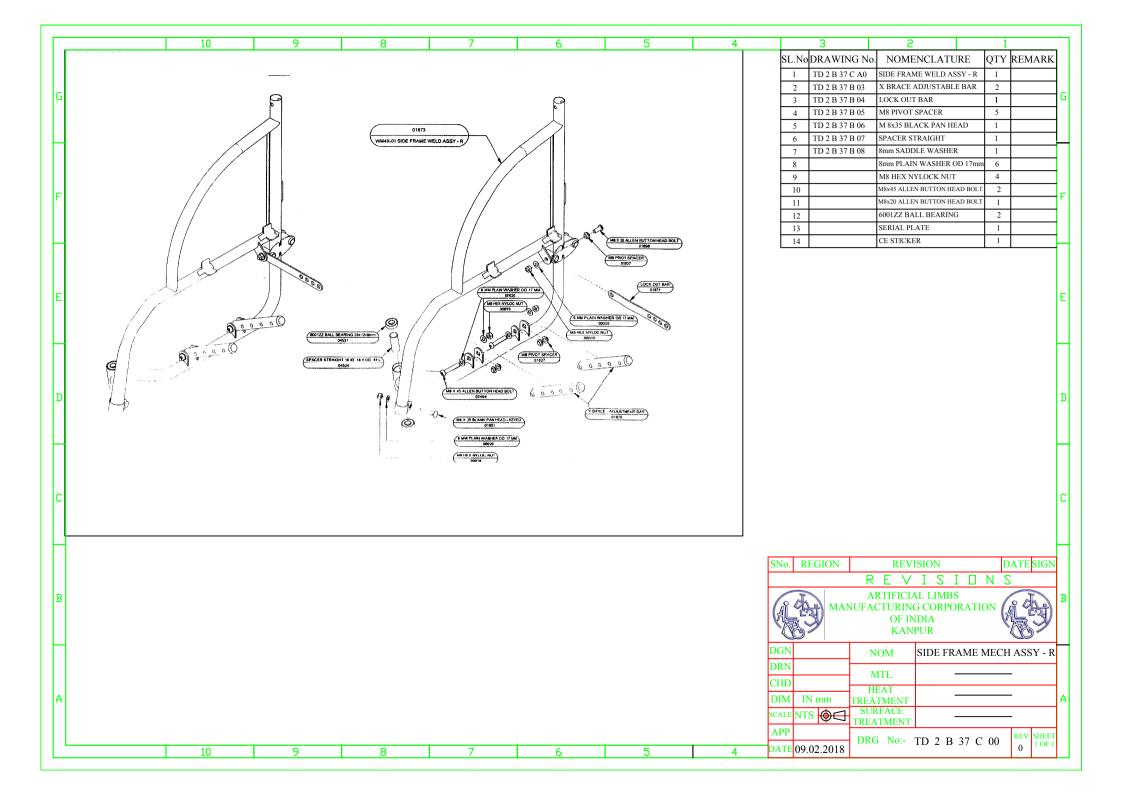




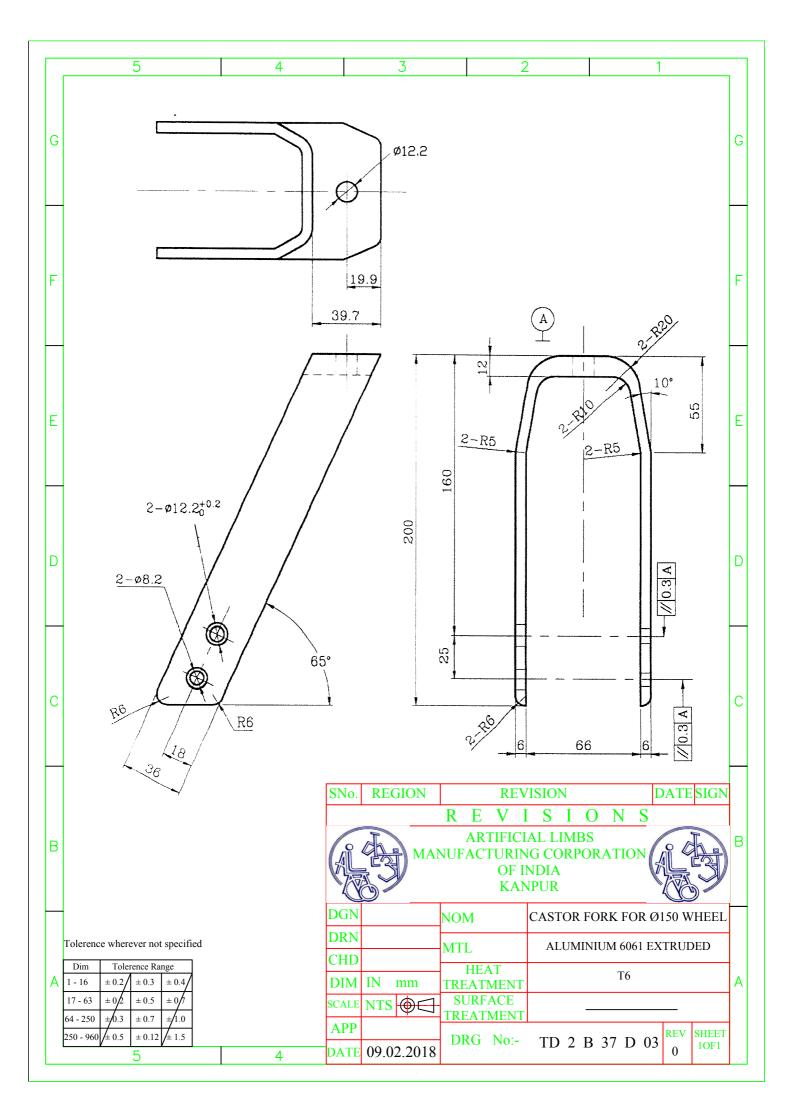


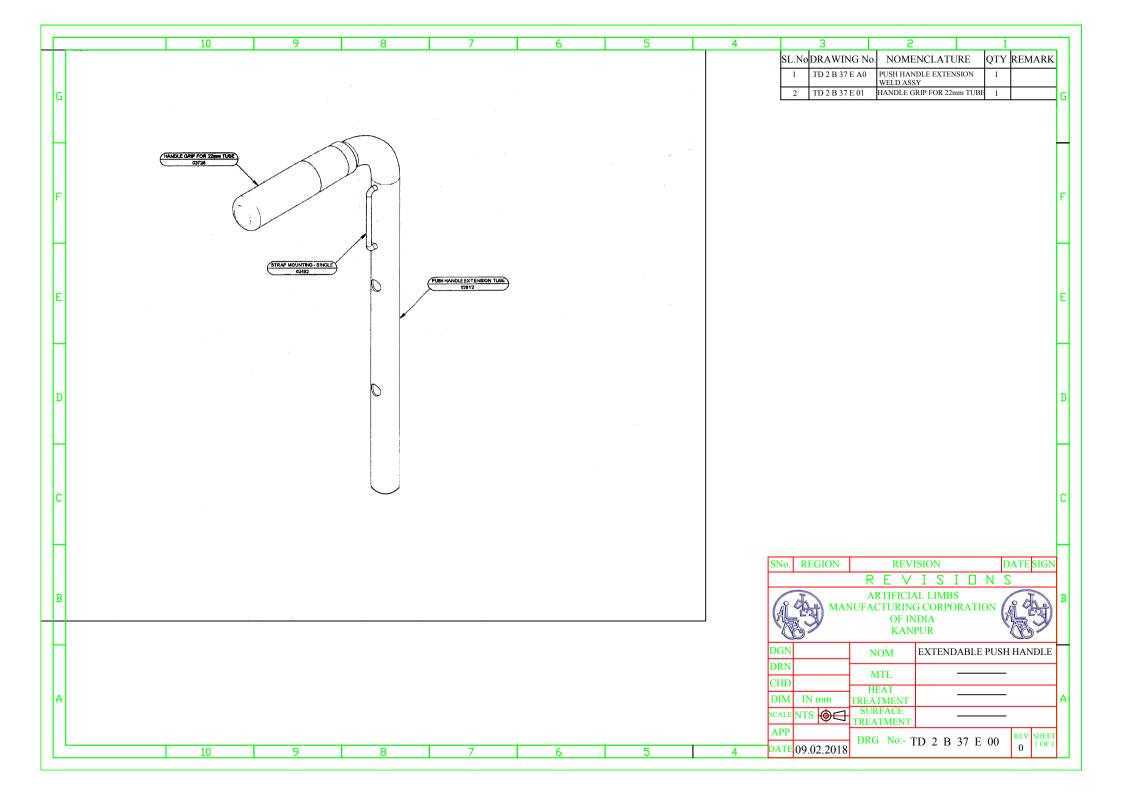
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| | | | | 1 TD 2 B 37 B A1 BACK REST TUBE 1 |
| G | | 8 | | 2 TD 2 B 37 B A2 ARM REST TUBE 1 |
| G | | K | | 3 TD 2 B 37 B A3 SIDE GUARD - L 1 U 4 TD 2 B 37 B A4 LOCKOUT BAR/FRAME PIVOT 1 |
| | 573.9 | | | 4 TD 2 B 37 B A4 LOCKOUT BAR/FRAME PIVOT 1 5 TD 2 B 37 B A5 SUPPORT CUP GENERIC 2 |
| | | $\frac{A-A}{1:4}$ | В | 6 TD 2 B 37 B A6 TOP TUBE SIDE FRAME - L 1 |
| | | | <u>B</u> 1:2 | 7 TD 2 B 37 B A7 FOOT REST HEIGHT CLAMP 1 |
| | | | 20. | 8 TD 2 B 37 B A8 CASTOR MOUNT TUBE 1 9 TD 2 B 37 B A9 CASTOR BARREL TWO HOLES 1 |
| | | A a a | | 10 TD 2 B 37 B 01 X-BRACE/FRAME PIVOT 4 |
| | | H S | <u>C-C</u> | 11 TD 2 B 37 B B0 AXLE MOUNTING WELDMENT-L 1 |
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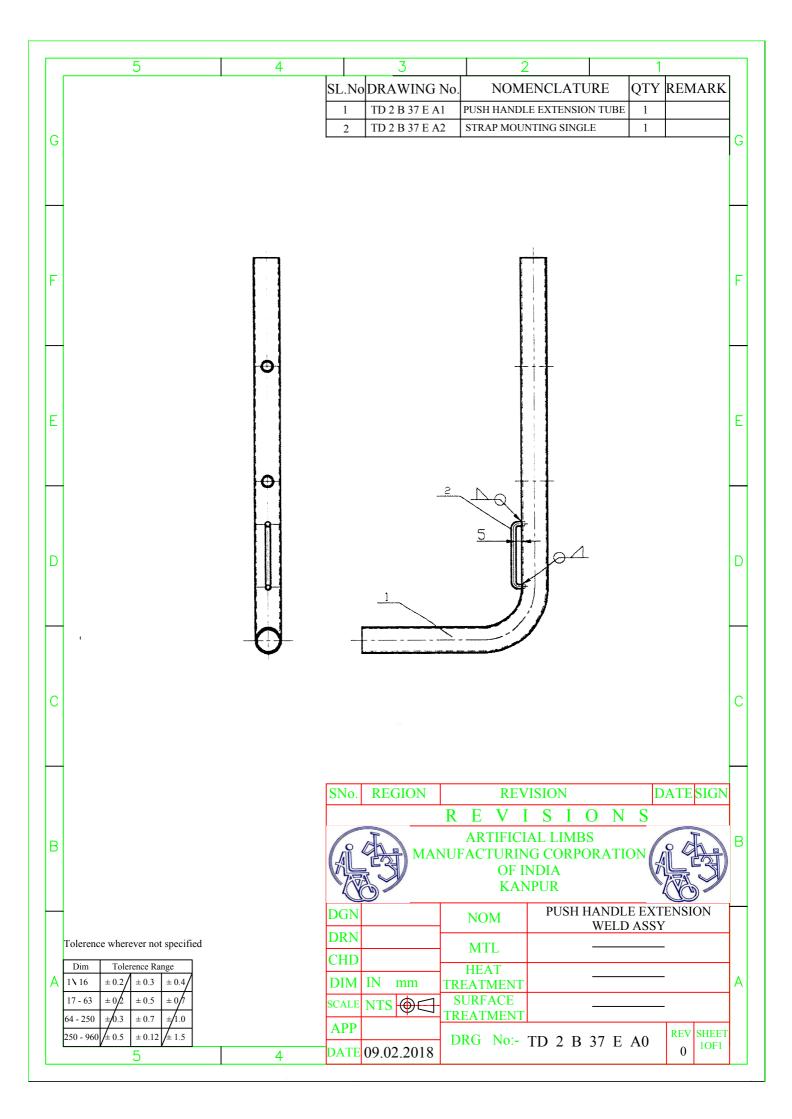


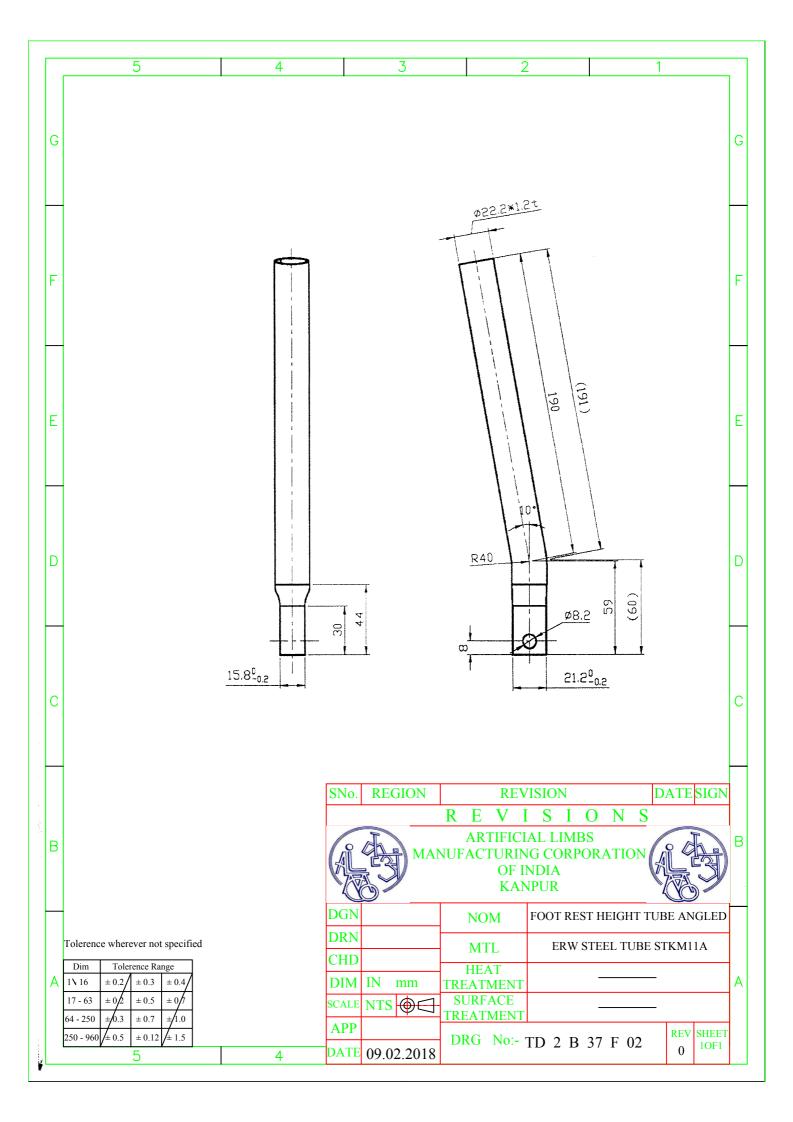


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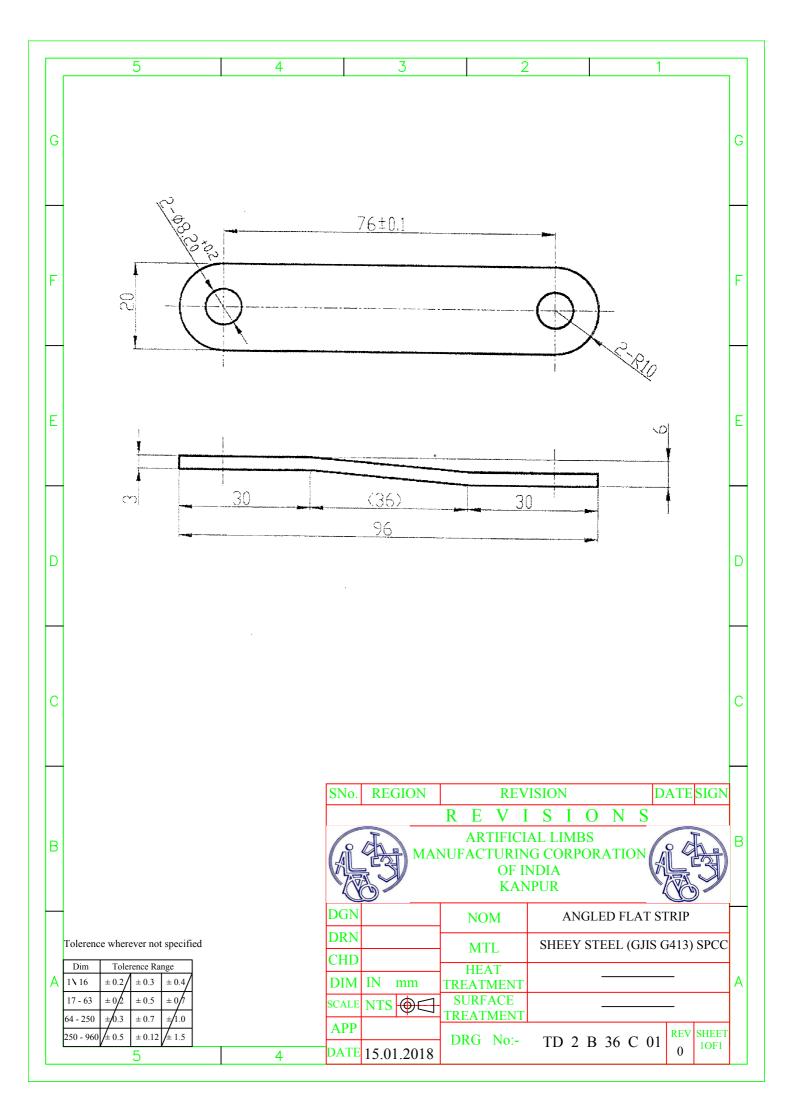


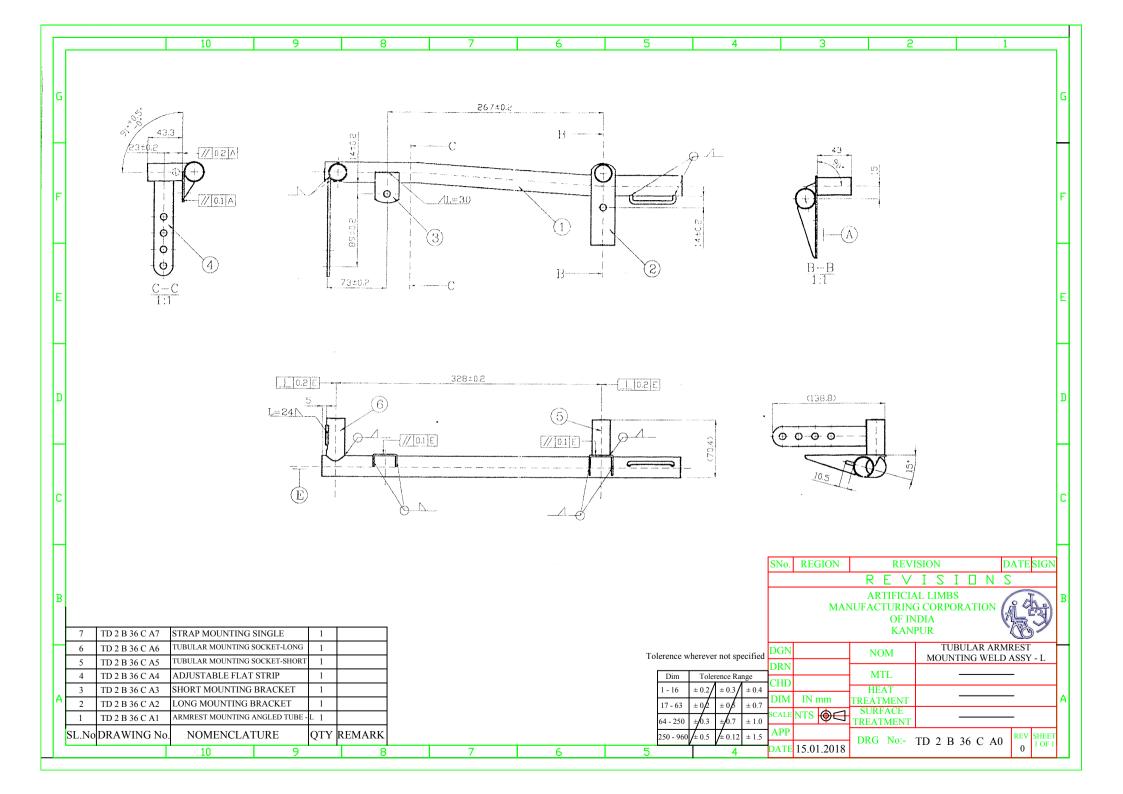


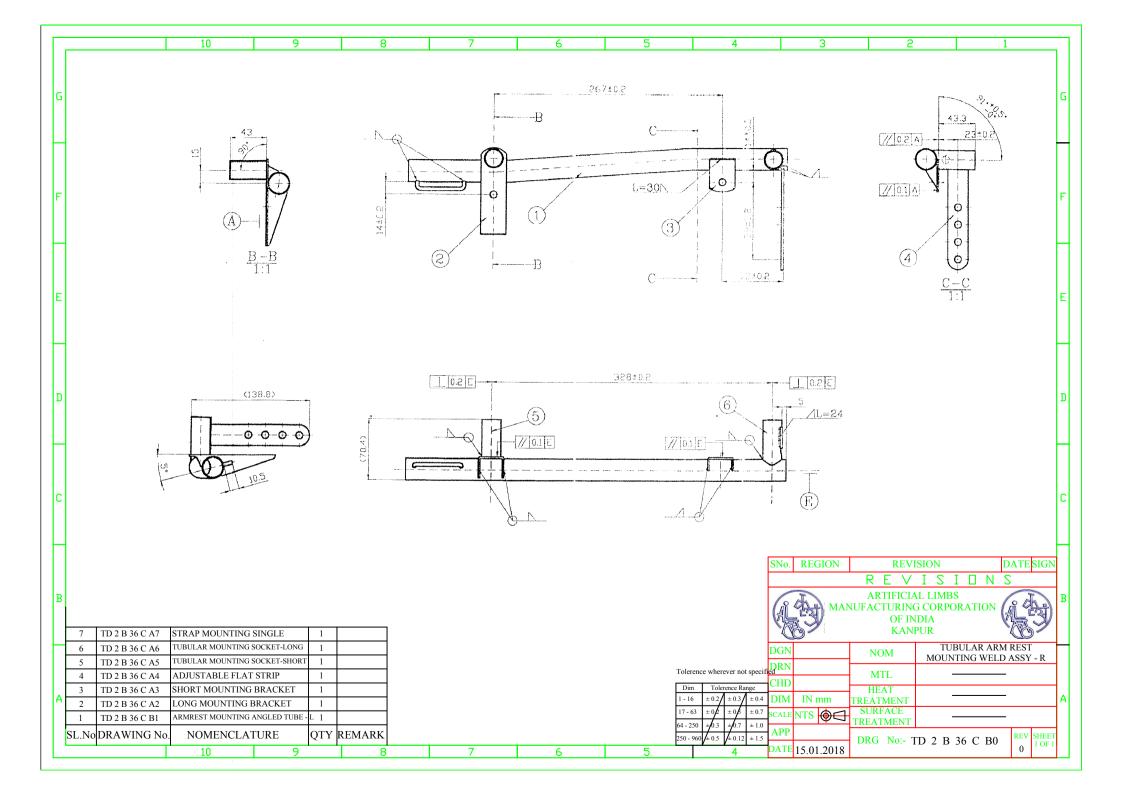
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| | 4 TD 2 B 36 A 02 SPACER STRAIGHT 1 5 TD 2 B 36 A 03 SERIAL PLATE 1 |
| | 6 TD 2 B 36 A 04 CE STICKER 1 |
| | 7 TD 2 B 36 A 05 REFLECTIVE STICKER - RED 2 |
| F | 8 TD 2 B 36 A 06 MOTIVATION STICKER 1 F |
| | 9 TD 2 B 36 A 07 REFLECTIVE STICKER - WHITE 1 |
| REAF ACLE BLOCK. DE CAST | 10 6001ZZ BALL BEARING 28x12x8 2 |
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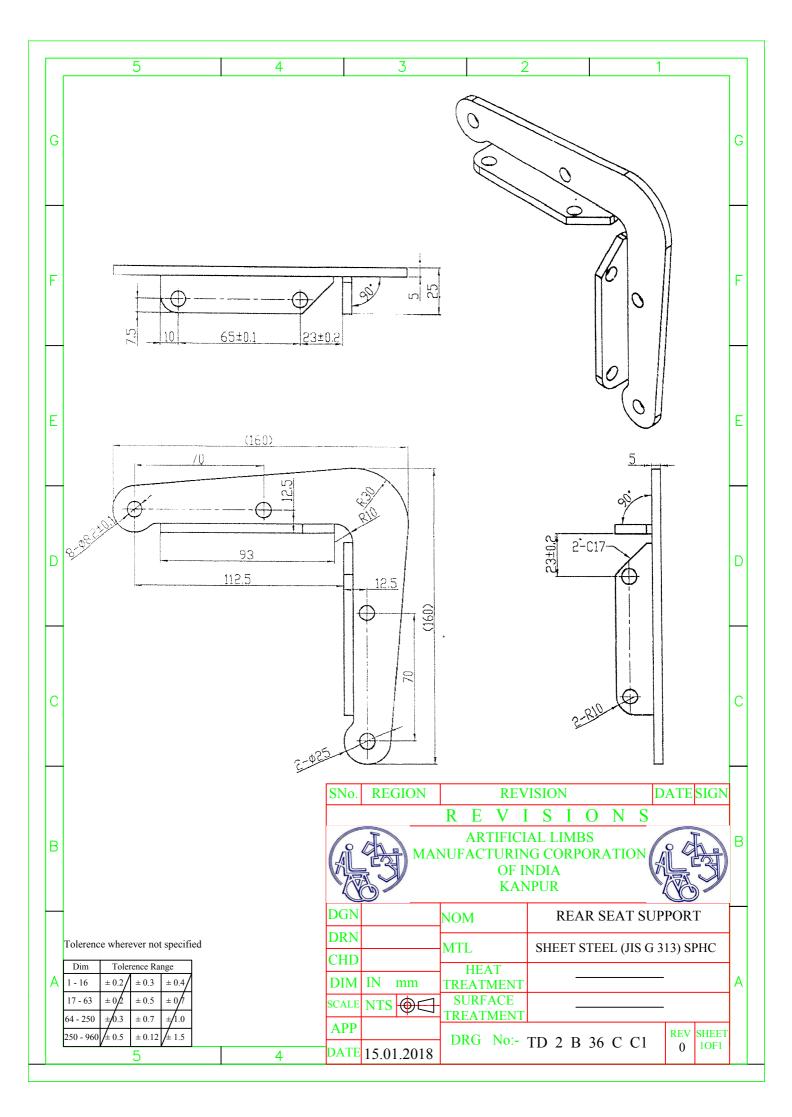
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| 3 | (4) | 1 TD 2 B 36 A A1 CASTOR BARREL 1 |
| G | | 2 TD 2 B 36 A A2 MAIN TUBE - FRAME 1 |
| | <u>↓</u> | 4 TD 2 B 36 A A4 REAR BRACKET FRAME 2 |
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| | $17 - 63 \pm 0/2 \pm 0/5 \pm 0.5$ | 7 HEAT |
| | $64 - 250 \pm 0.3 \pm 0.7 \pm 1.00$ | DIM IN MM TREATMENT F |
| | $250 - 960 \pm 0.5 \pm 0.12 \pm 1.$ | TREATMENT |
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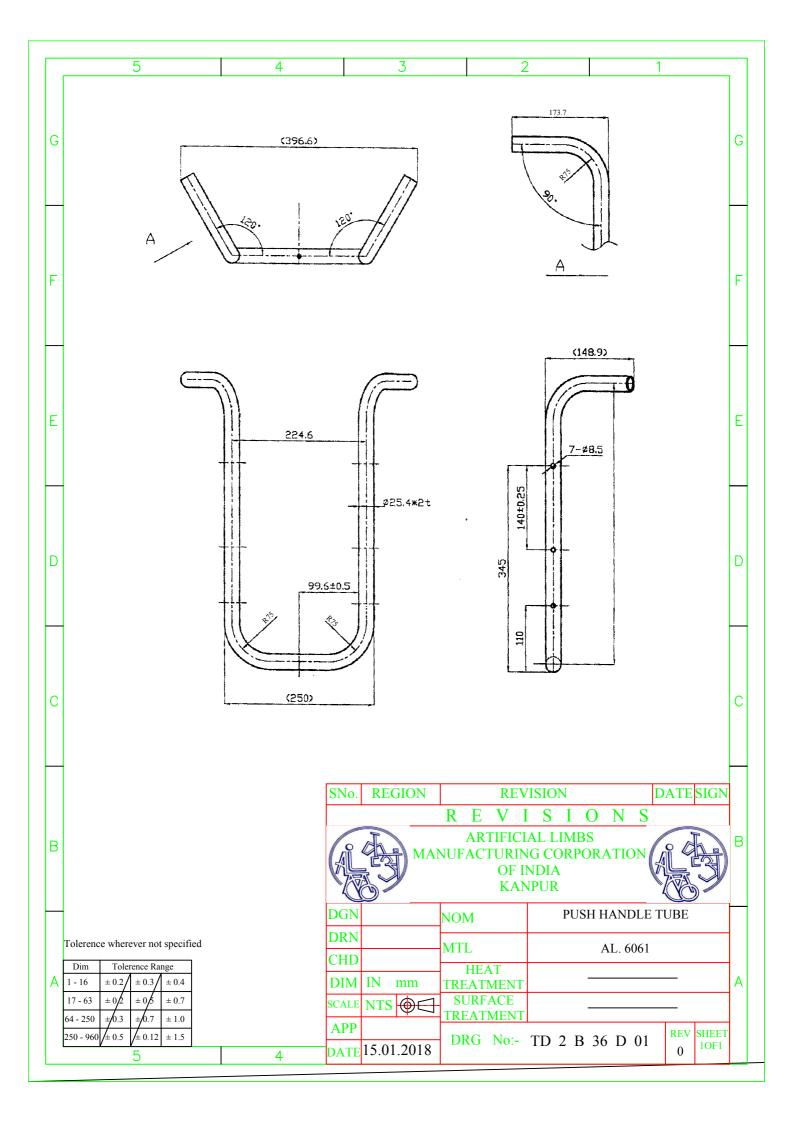


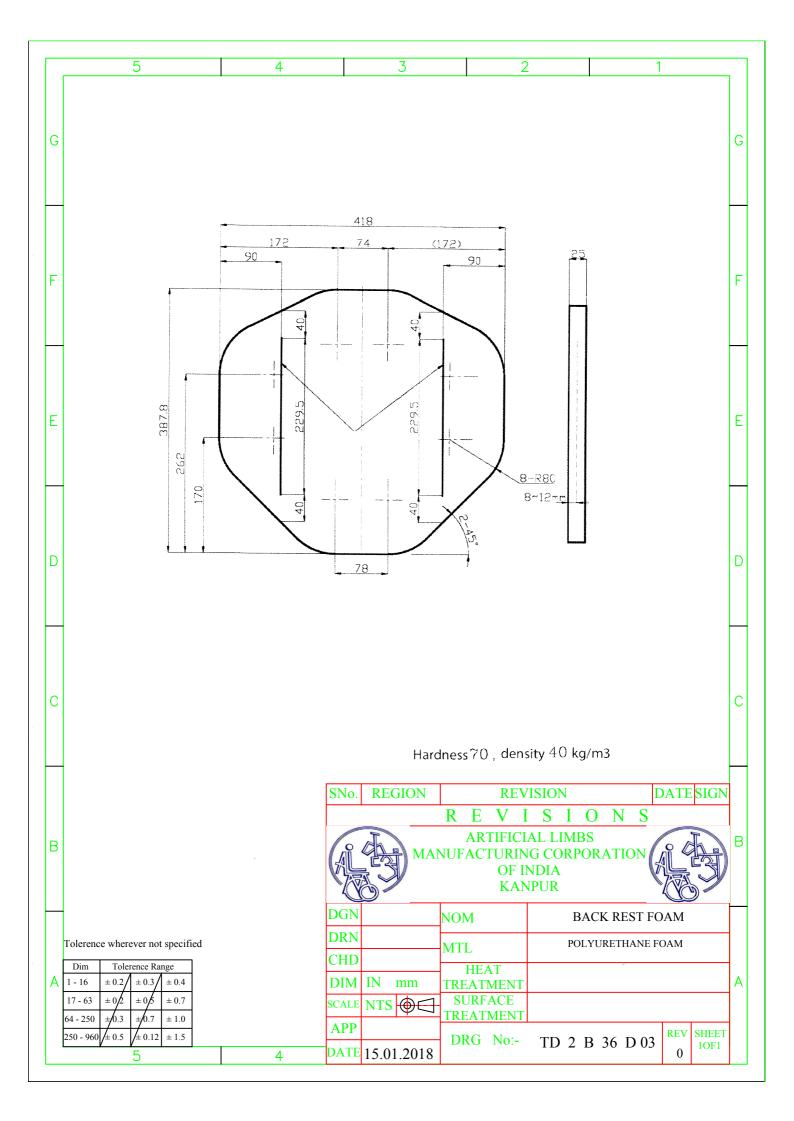


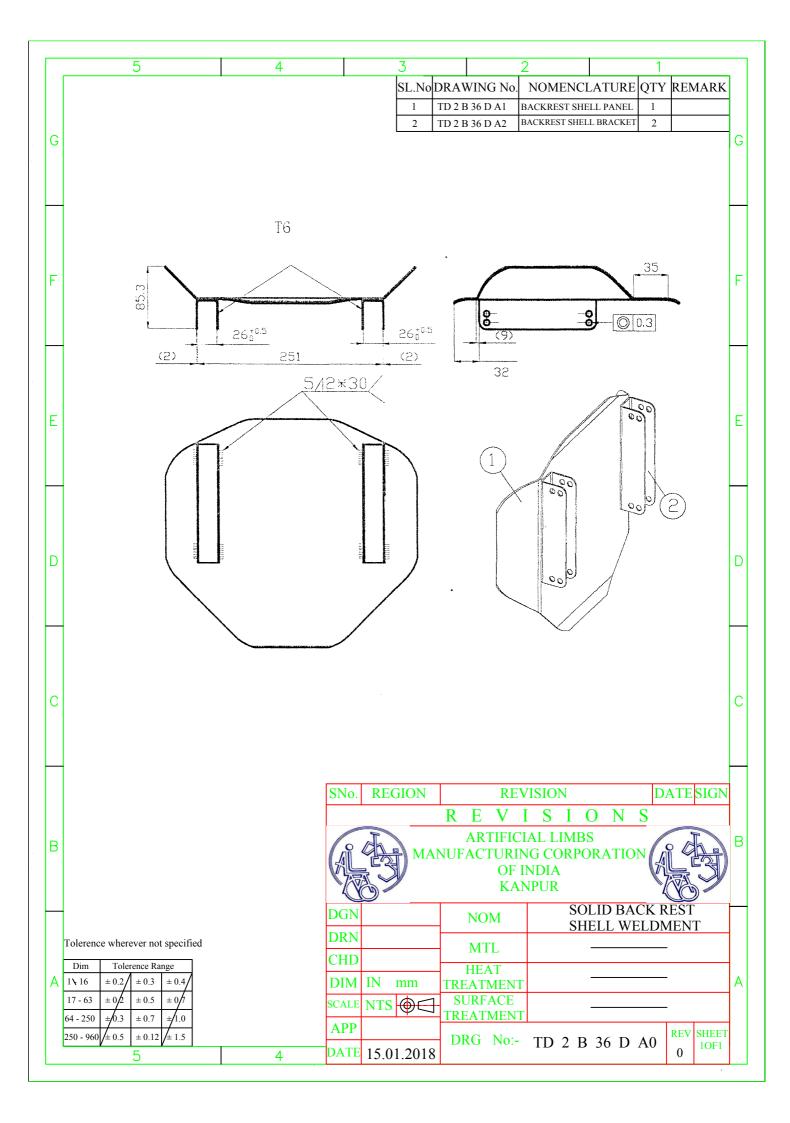


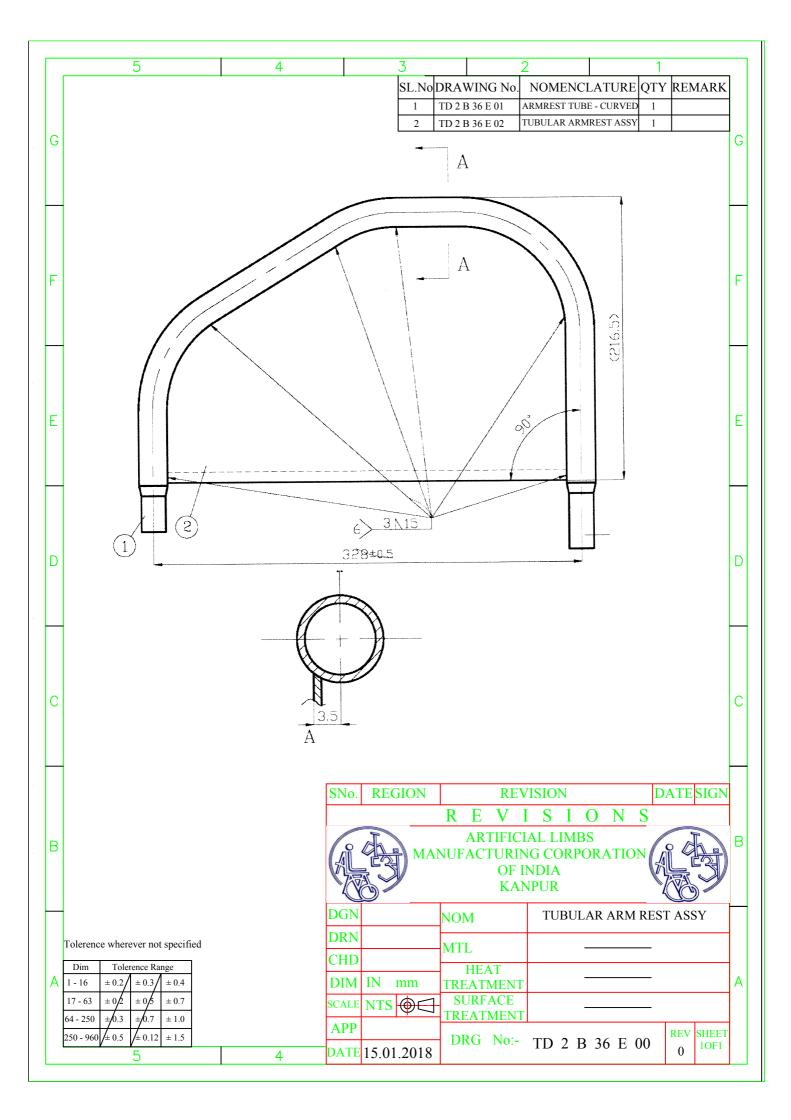
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| | SL.NoDRAWING No. NOMENCLATURE QTY REMARK |
| | 1 TD 2 B 36 C C1 REAR SEAT SUPPORT 1 |
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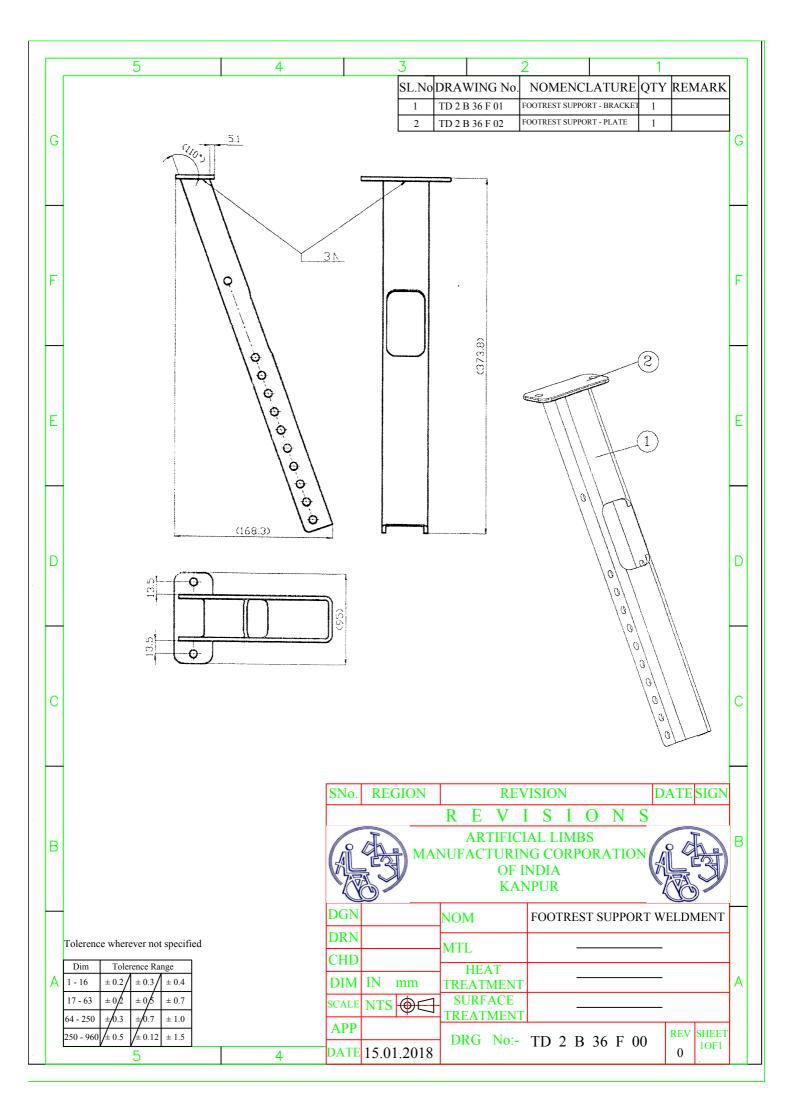


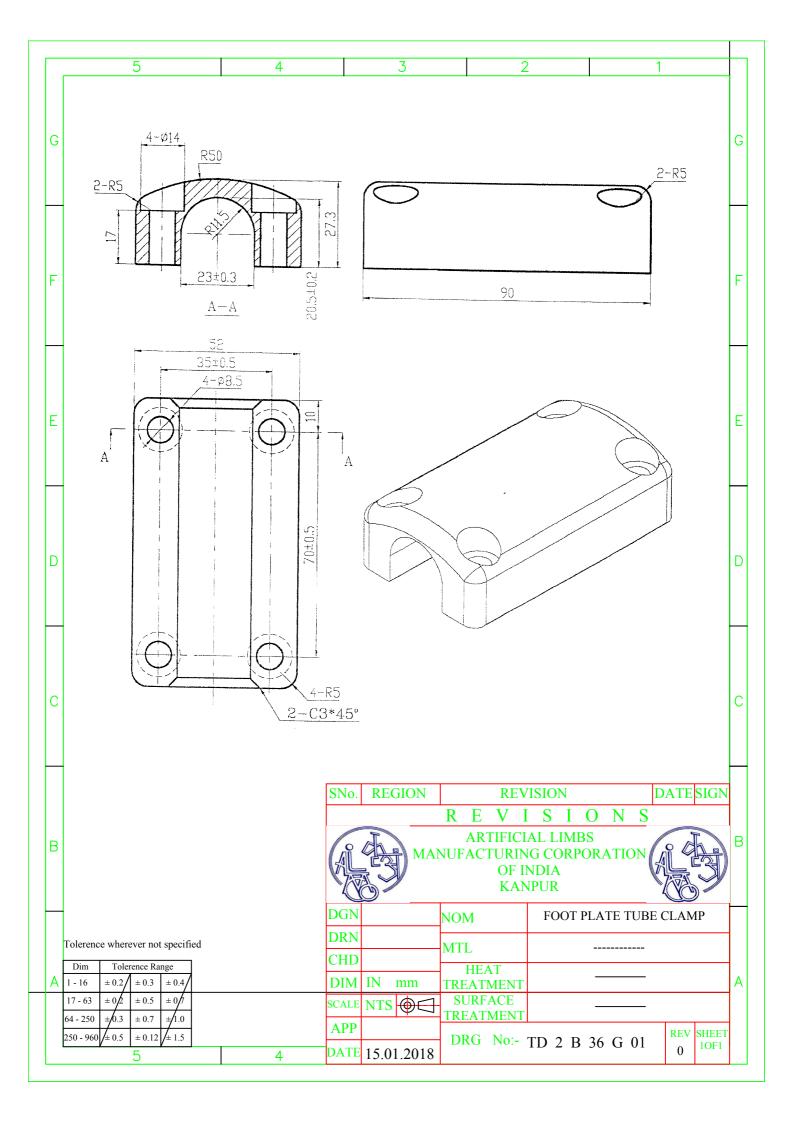




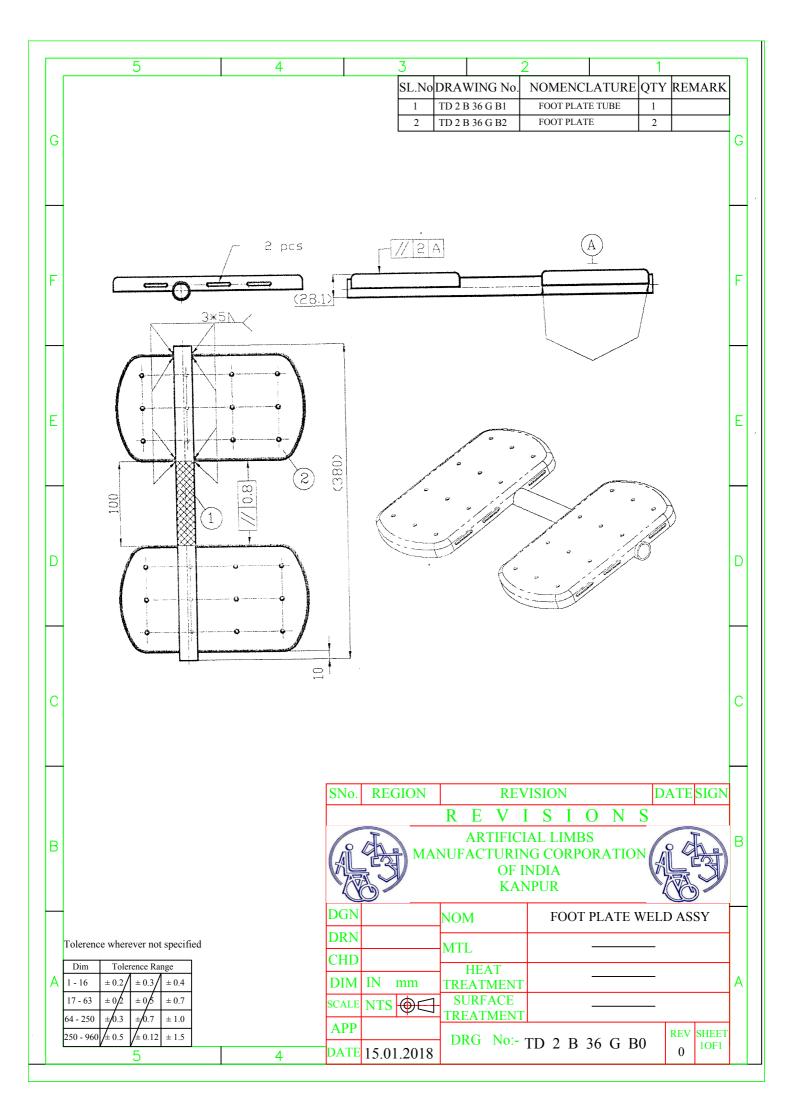


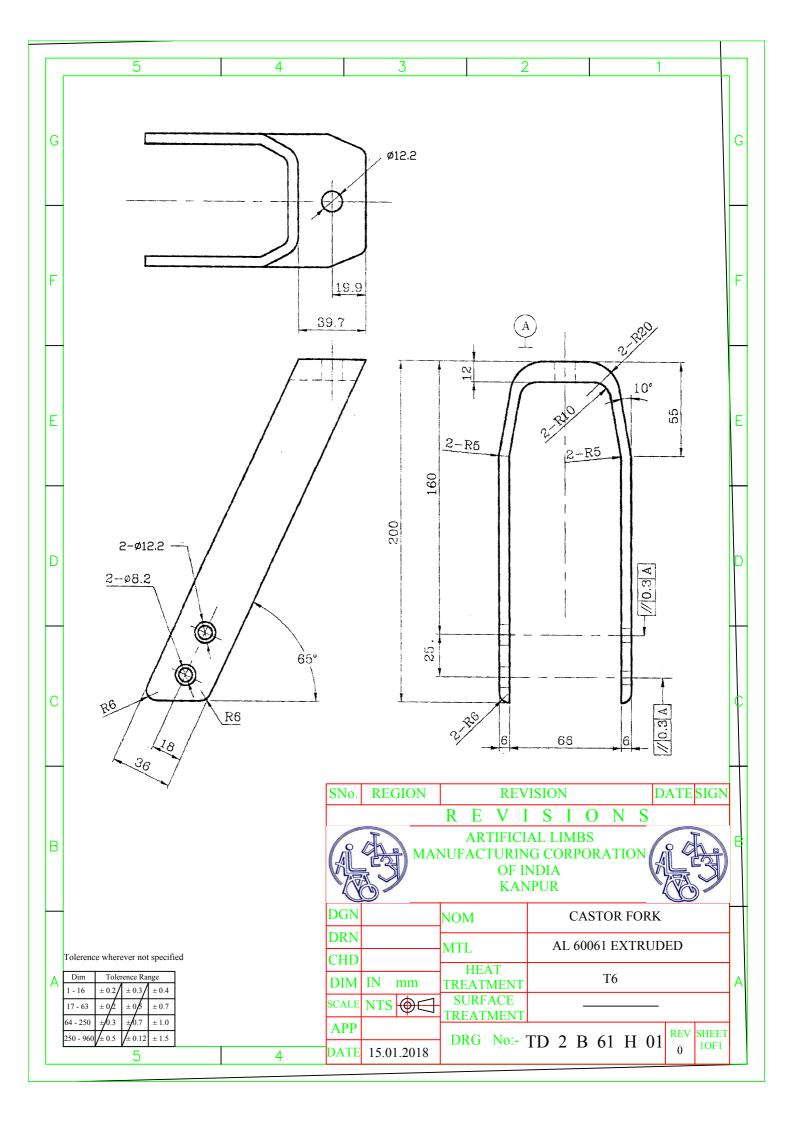


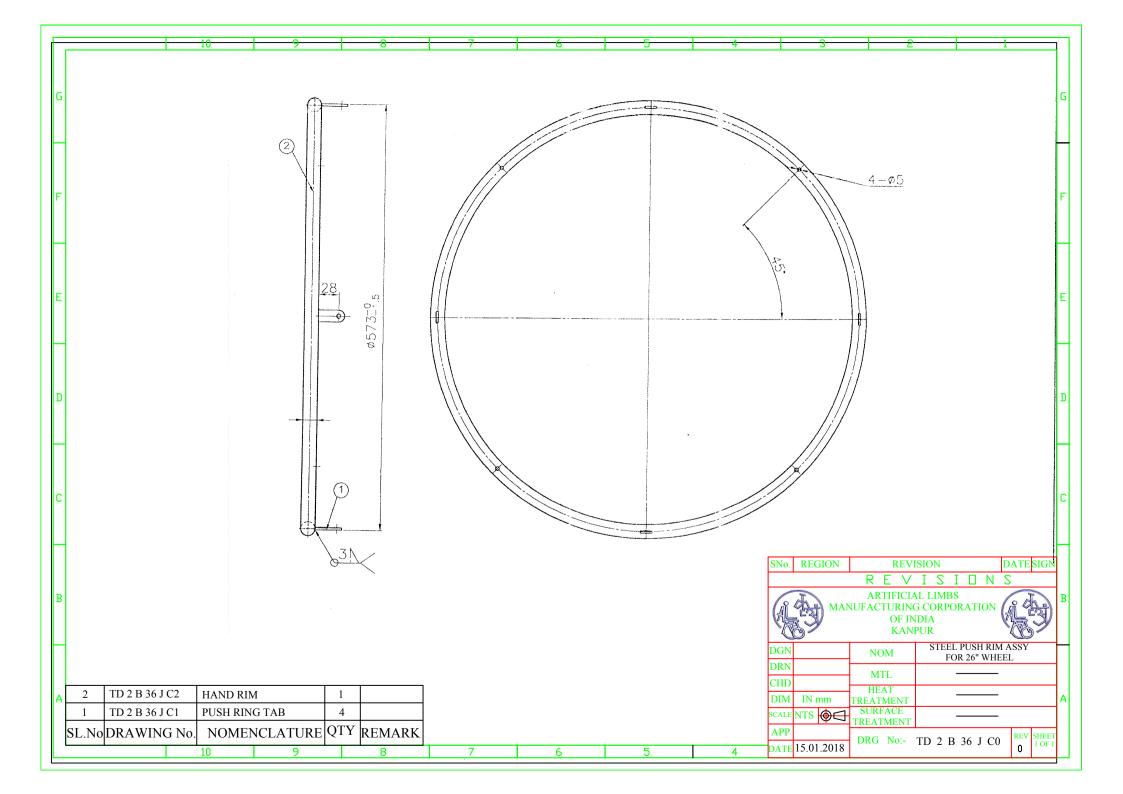




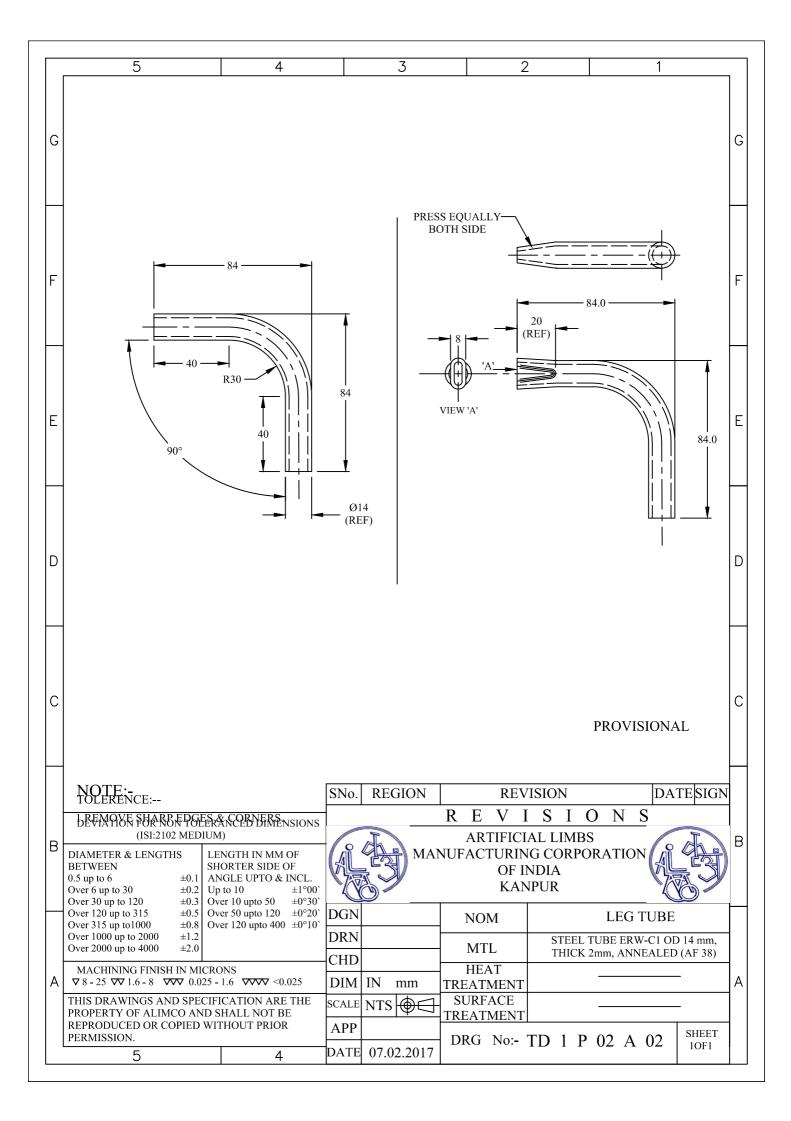
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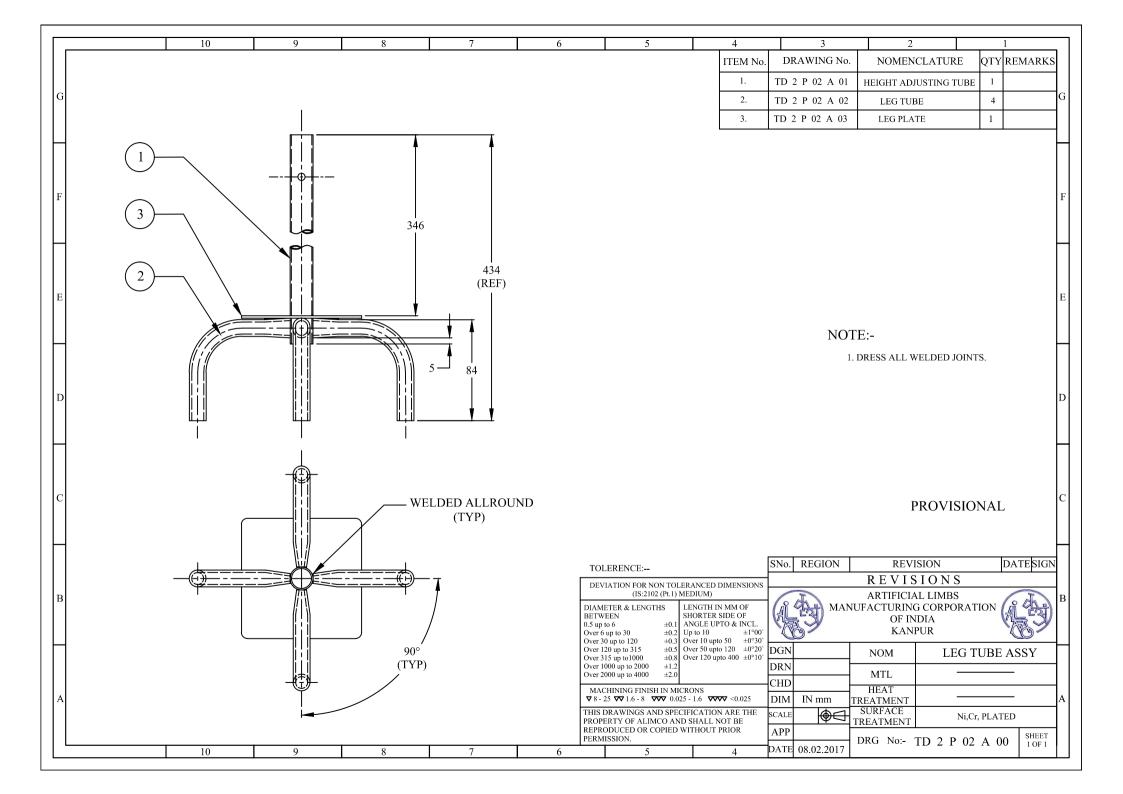


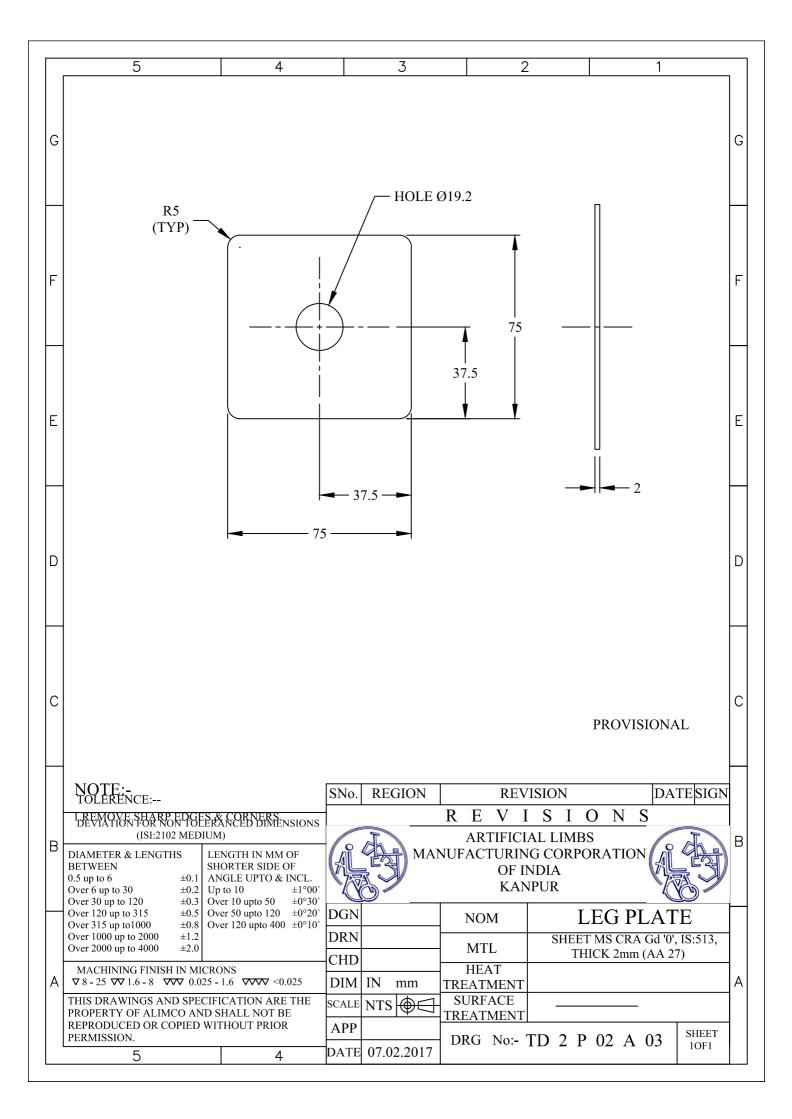


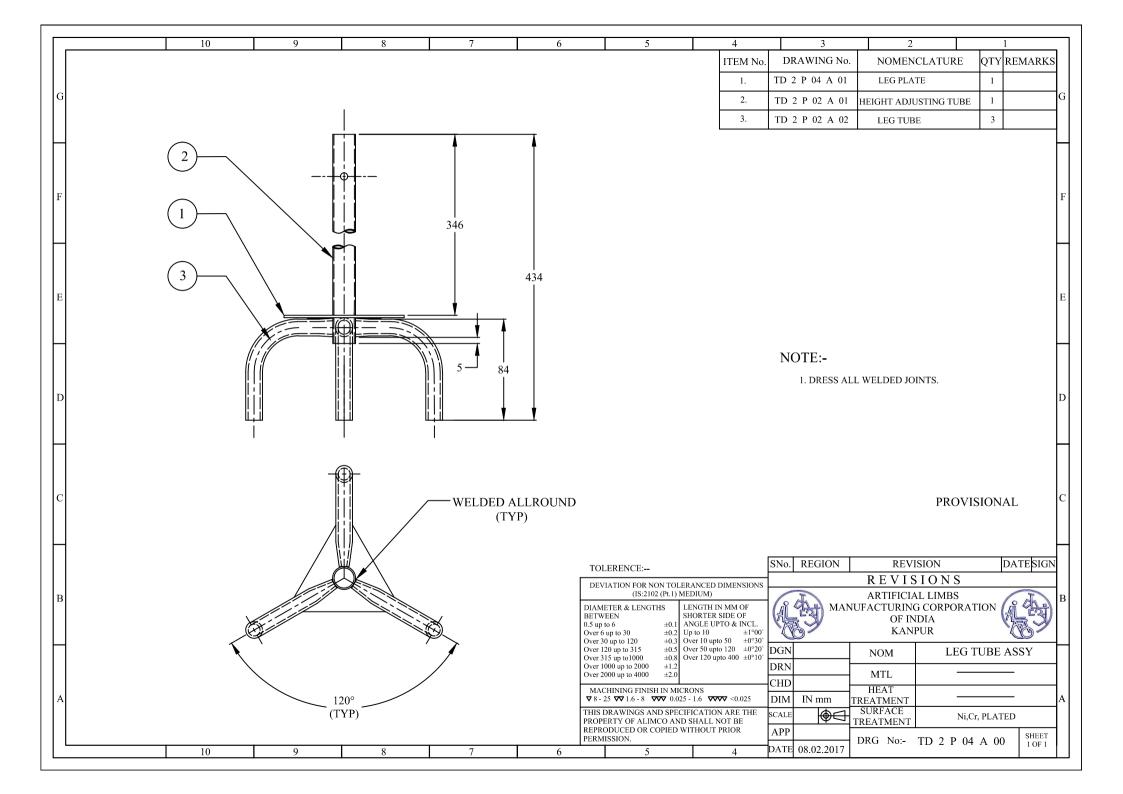


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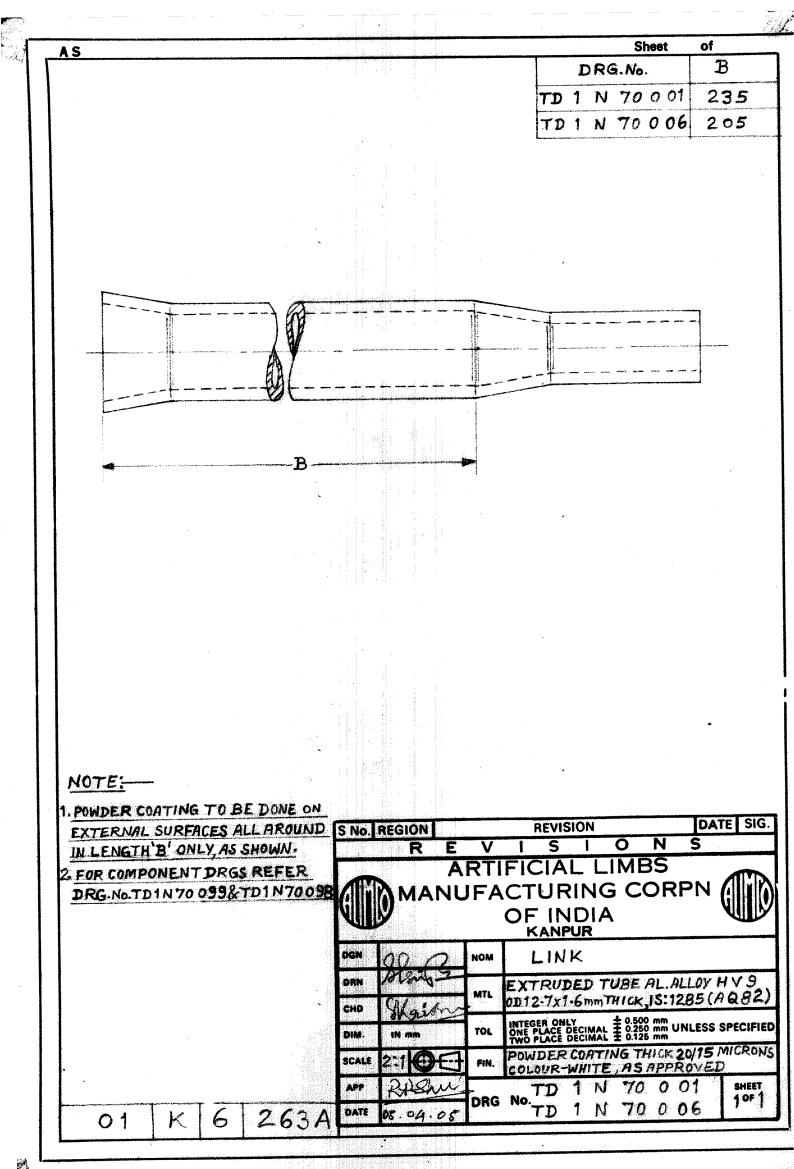




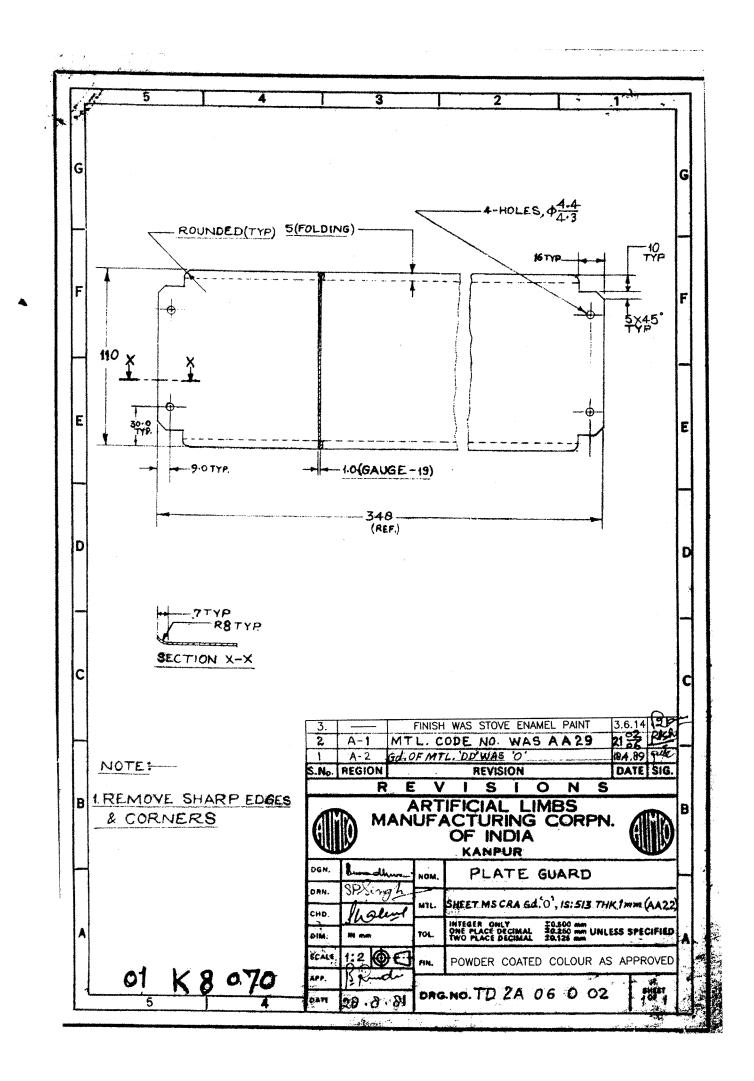


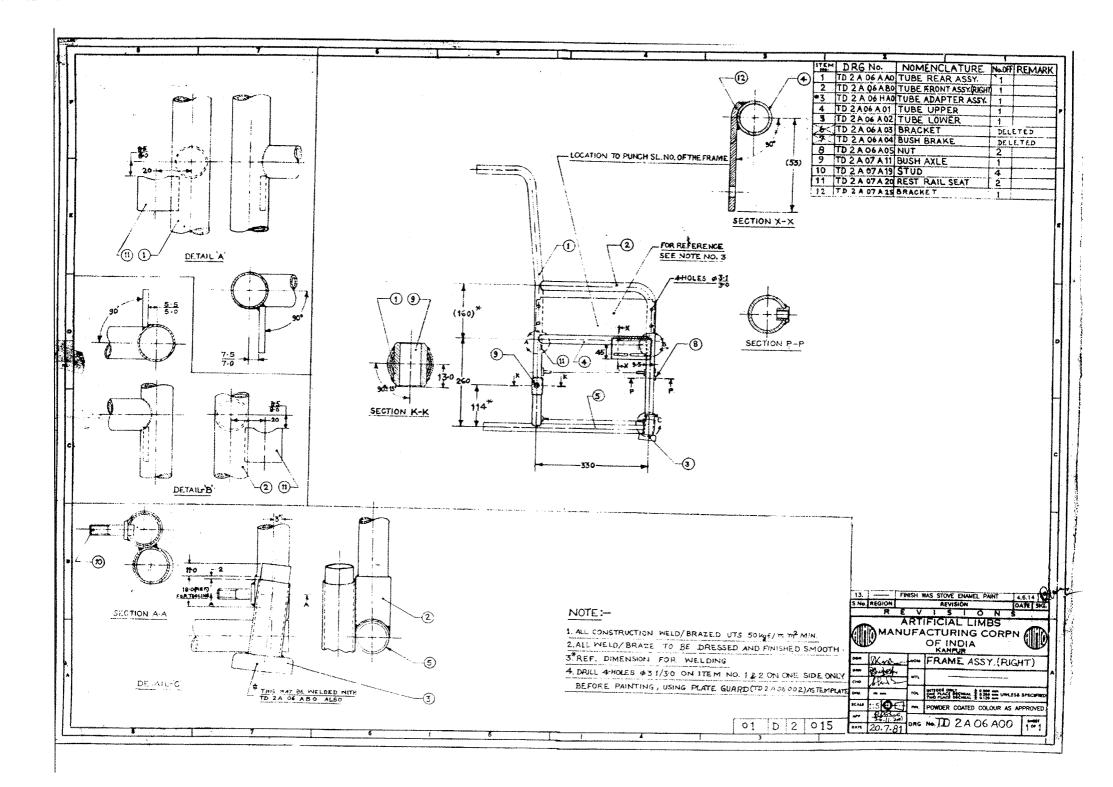


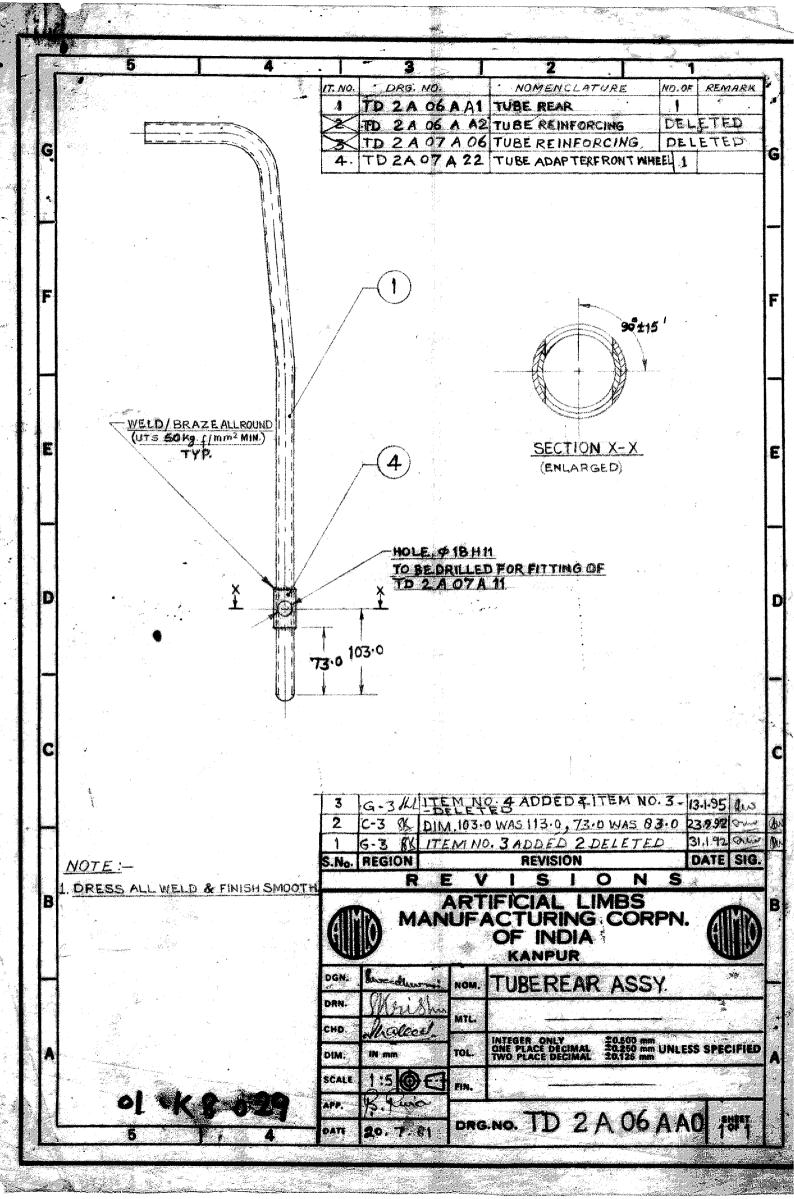
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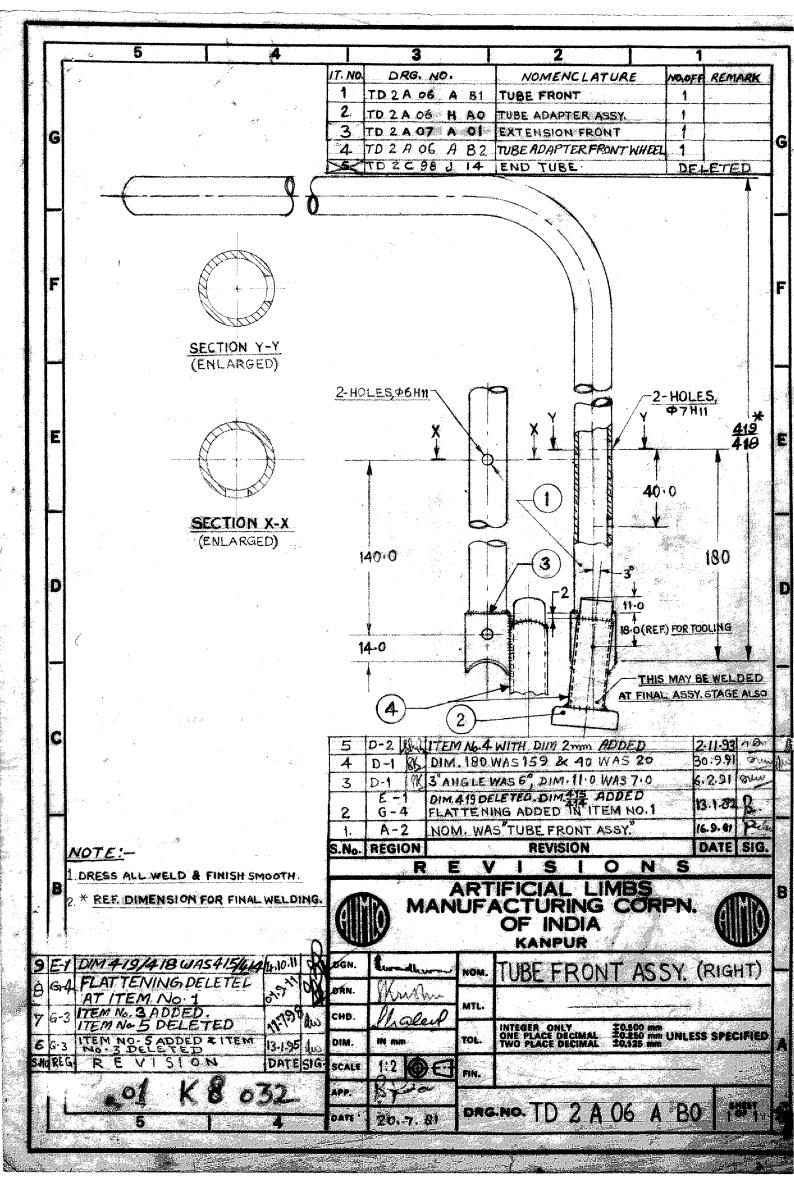


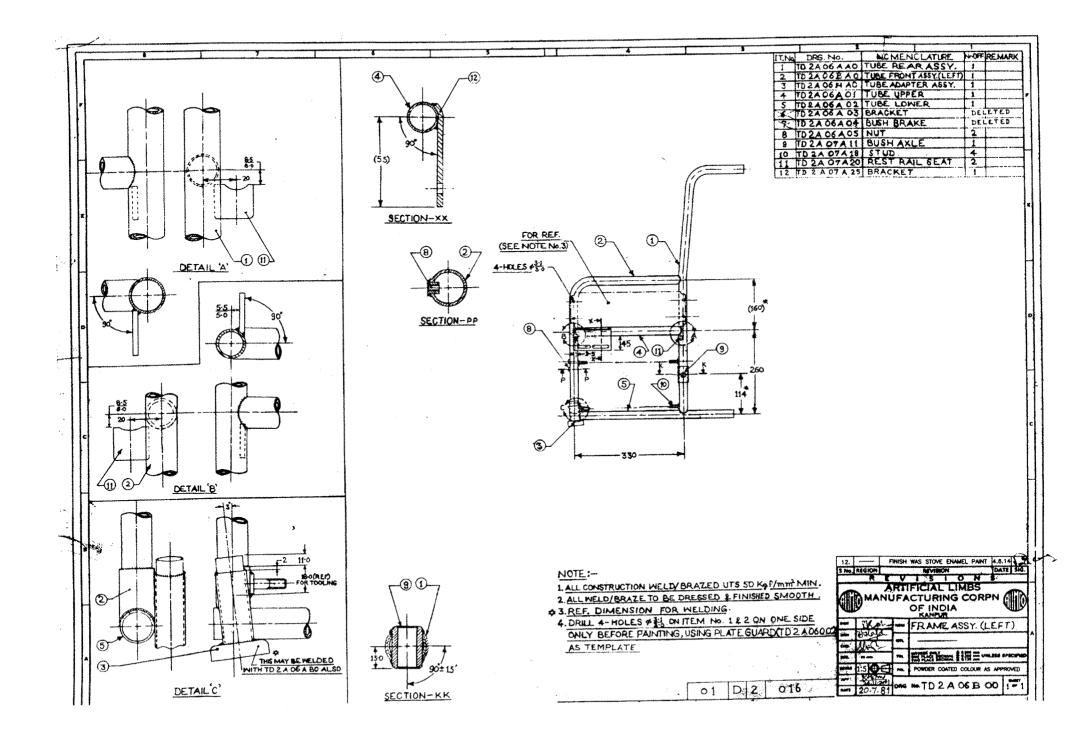
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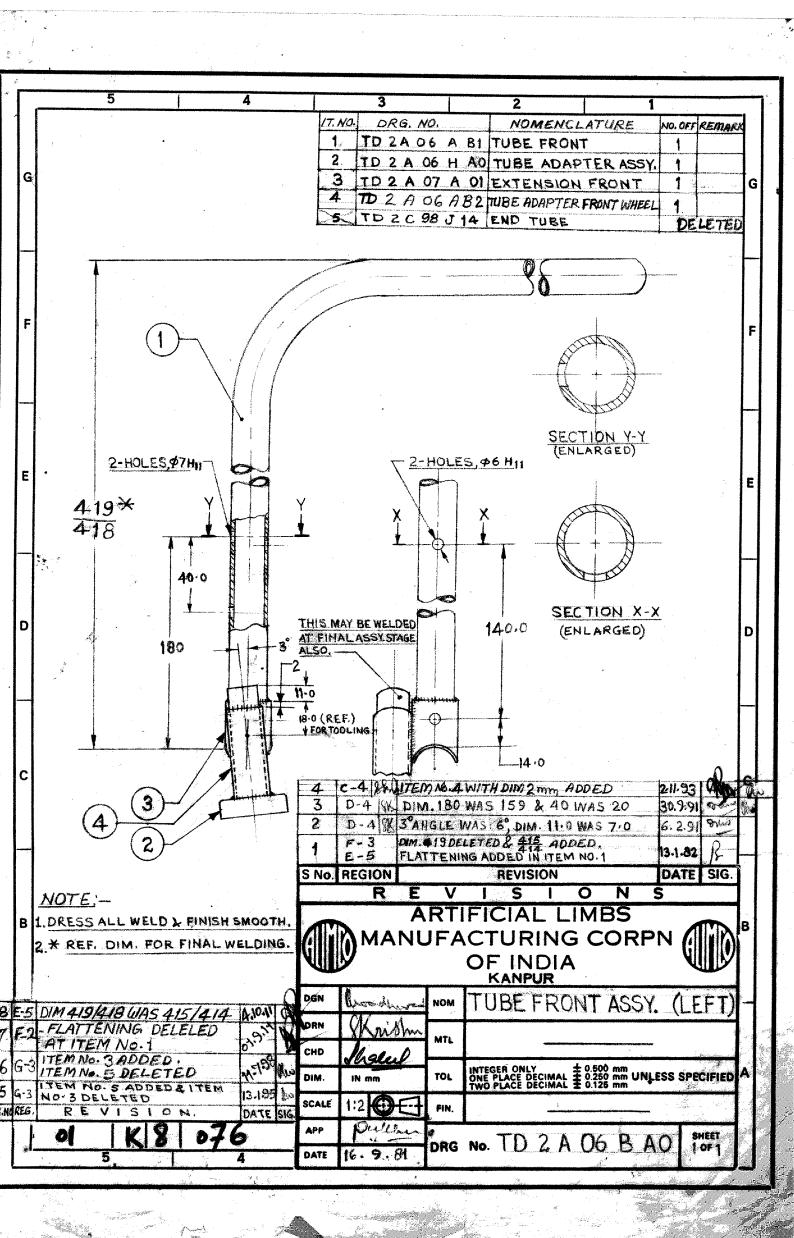


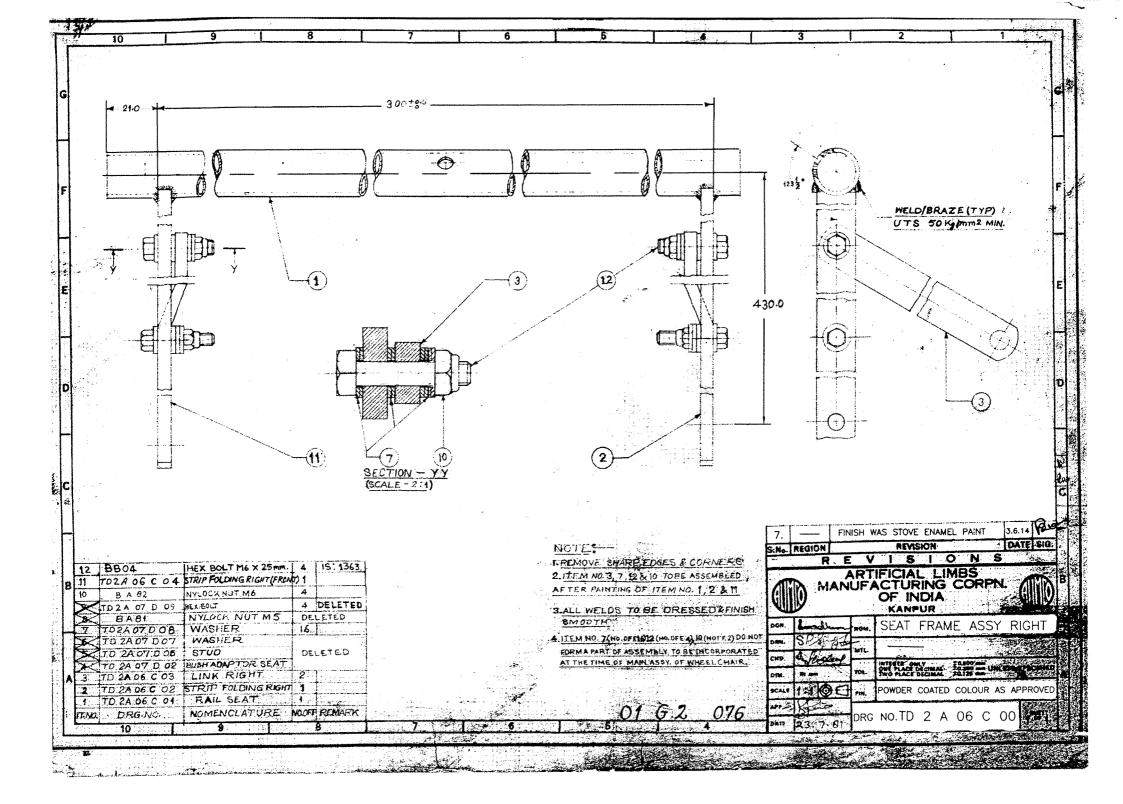


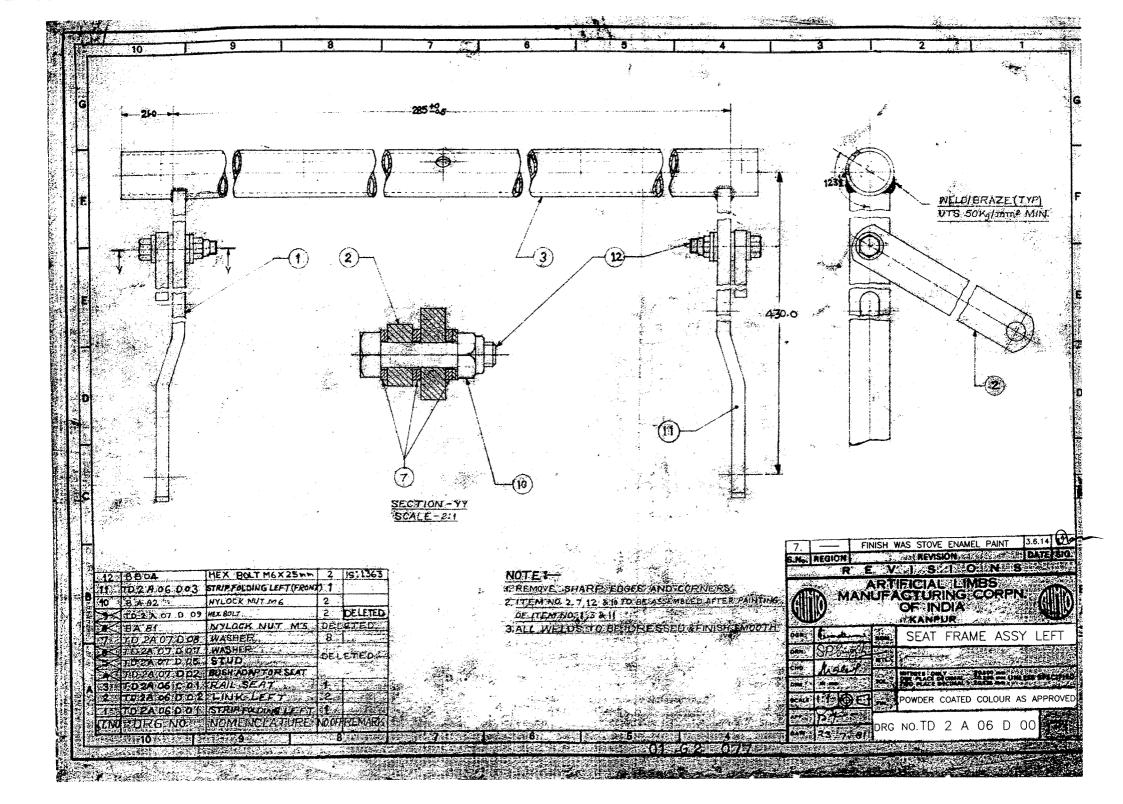


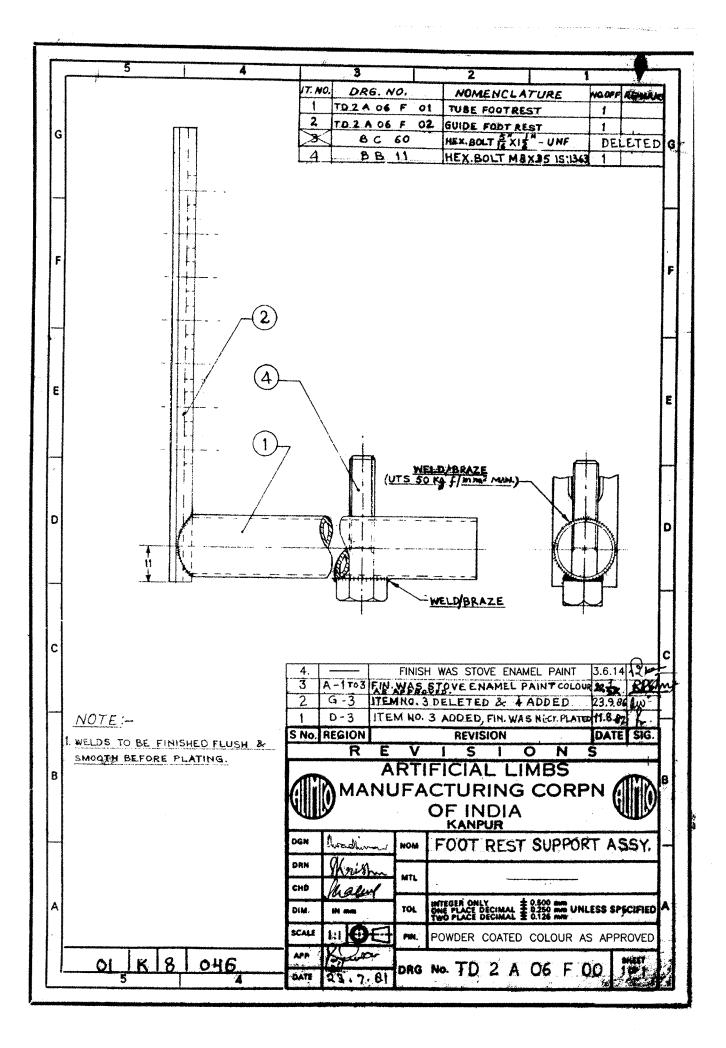




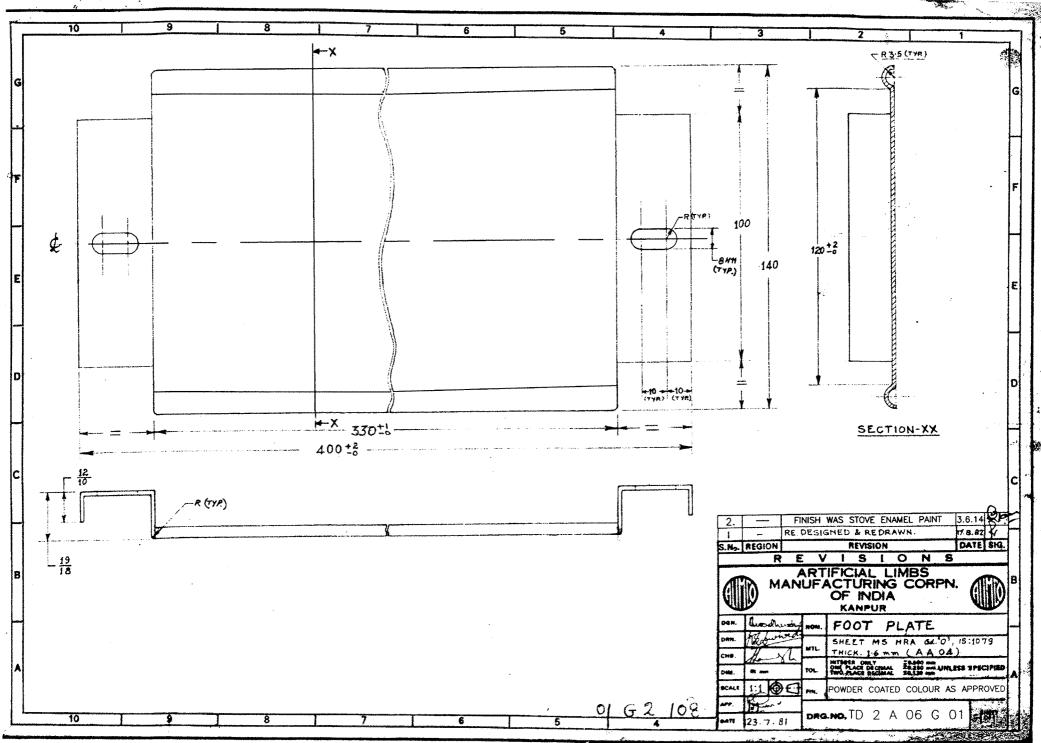


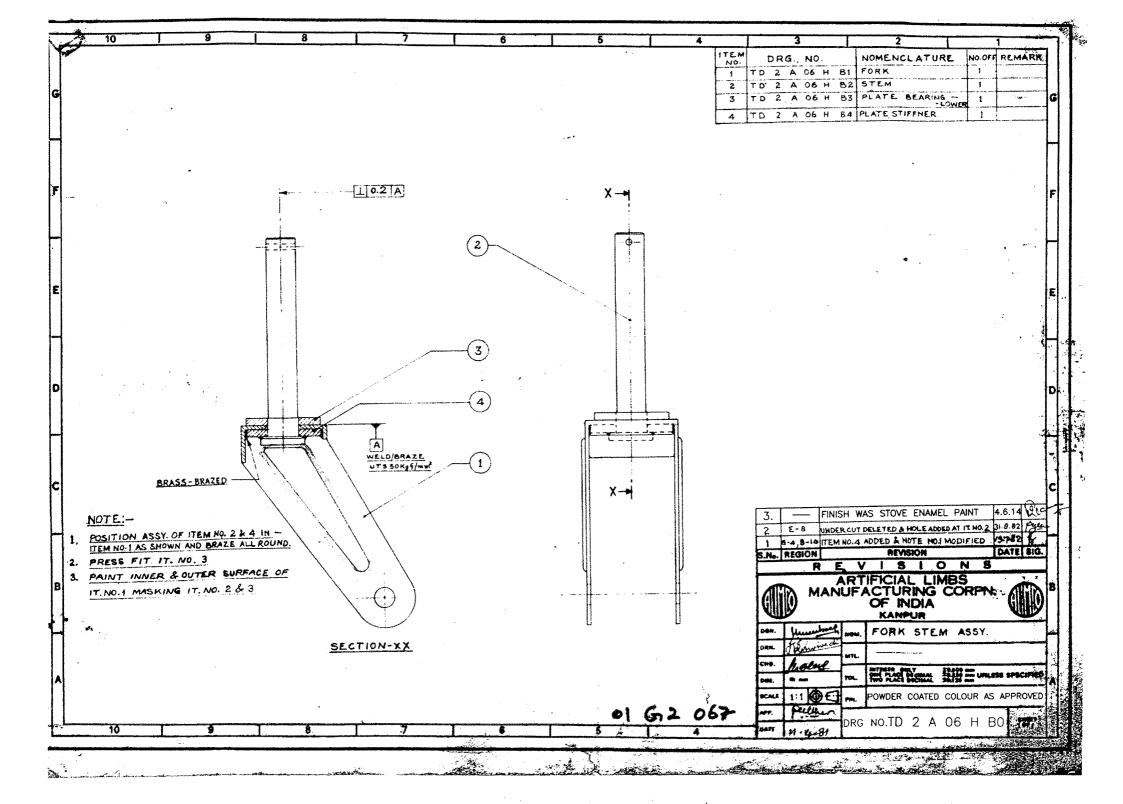


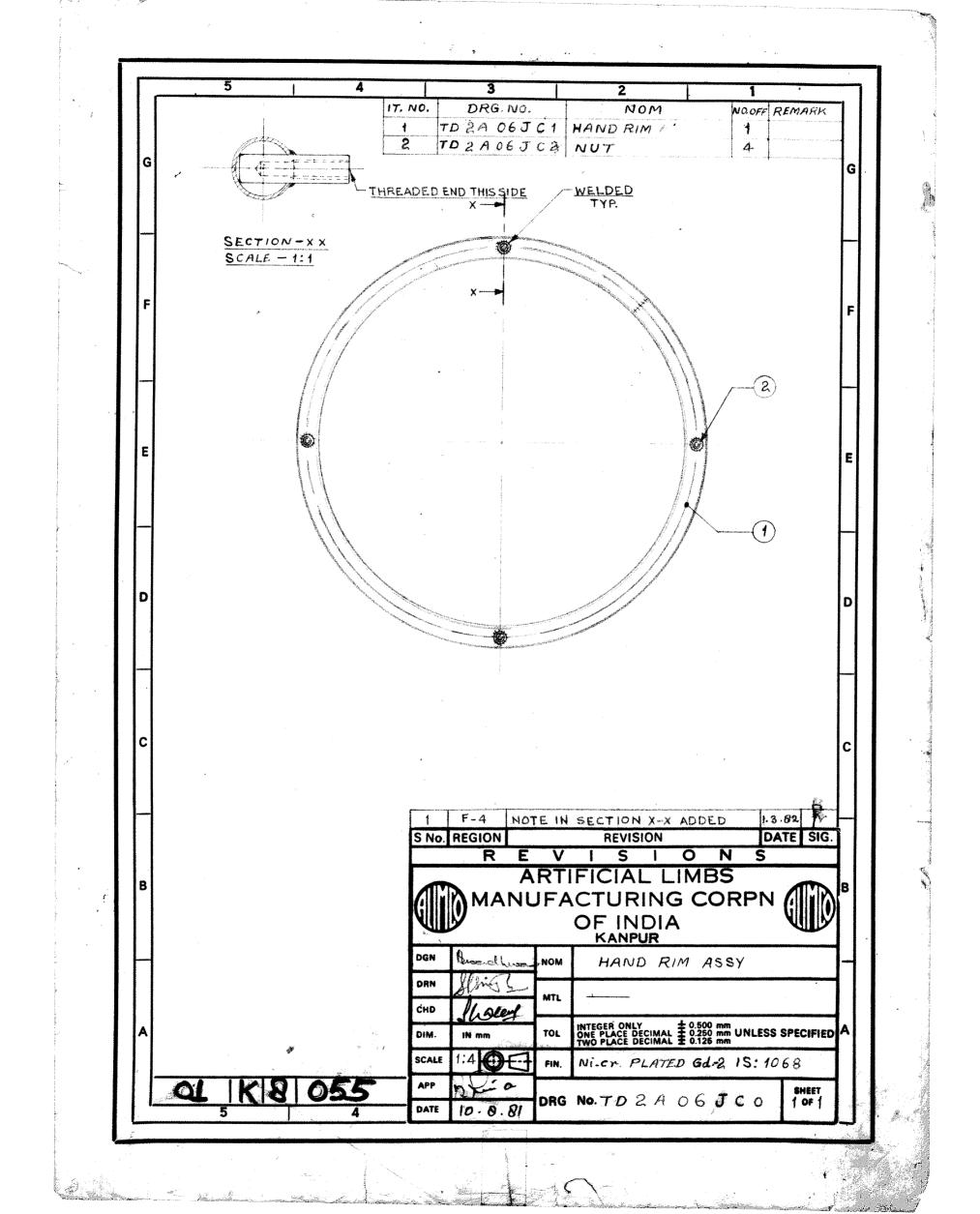


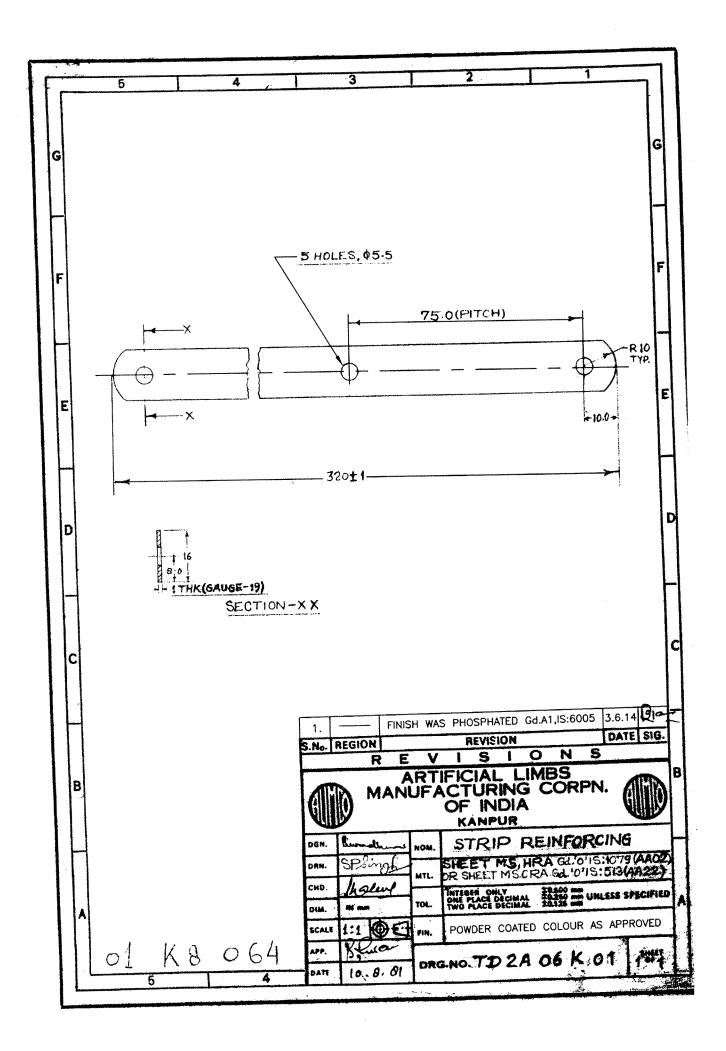


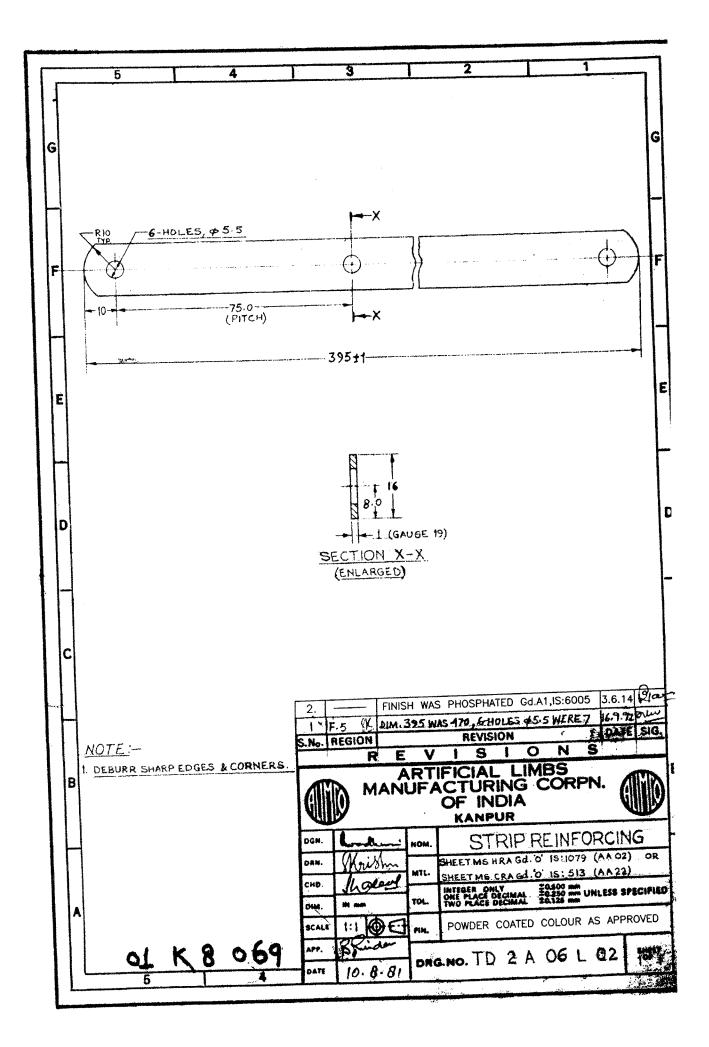


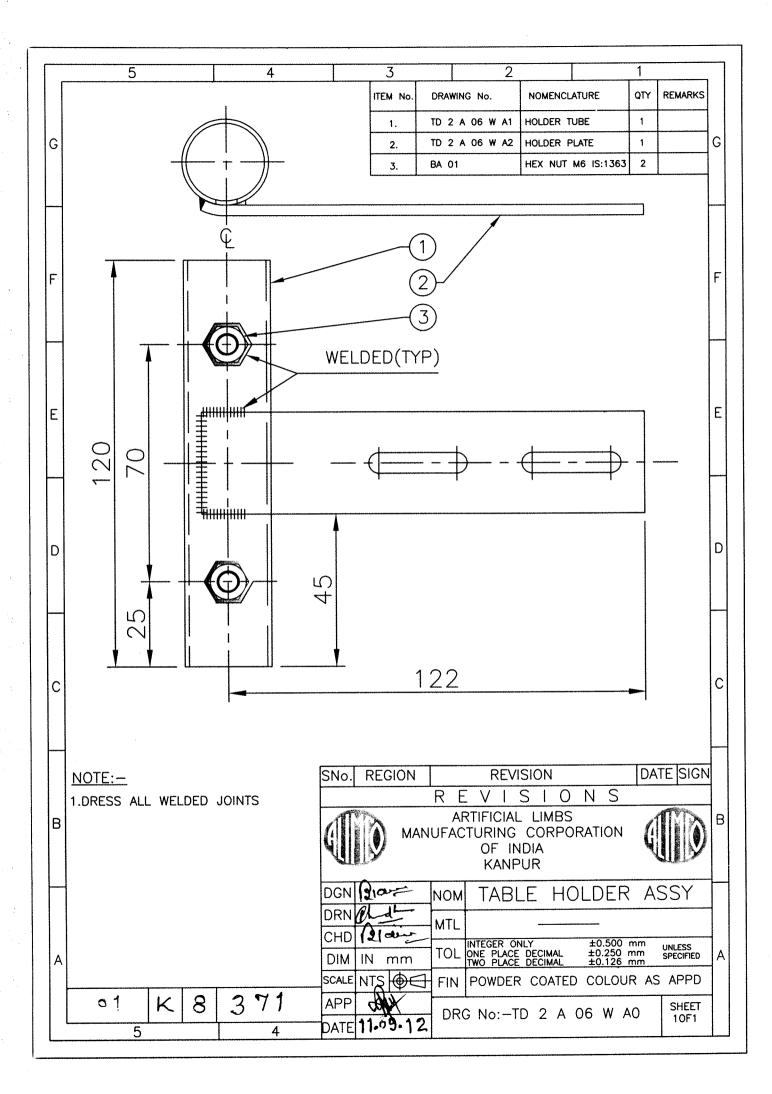




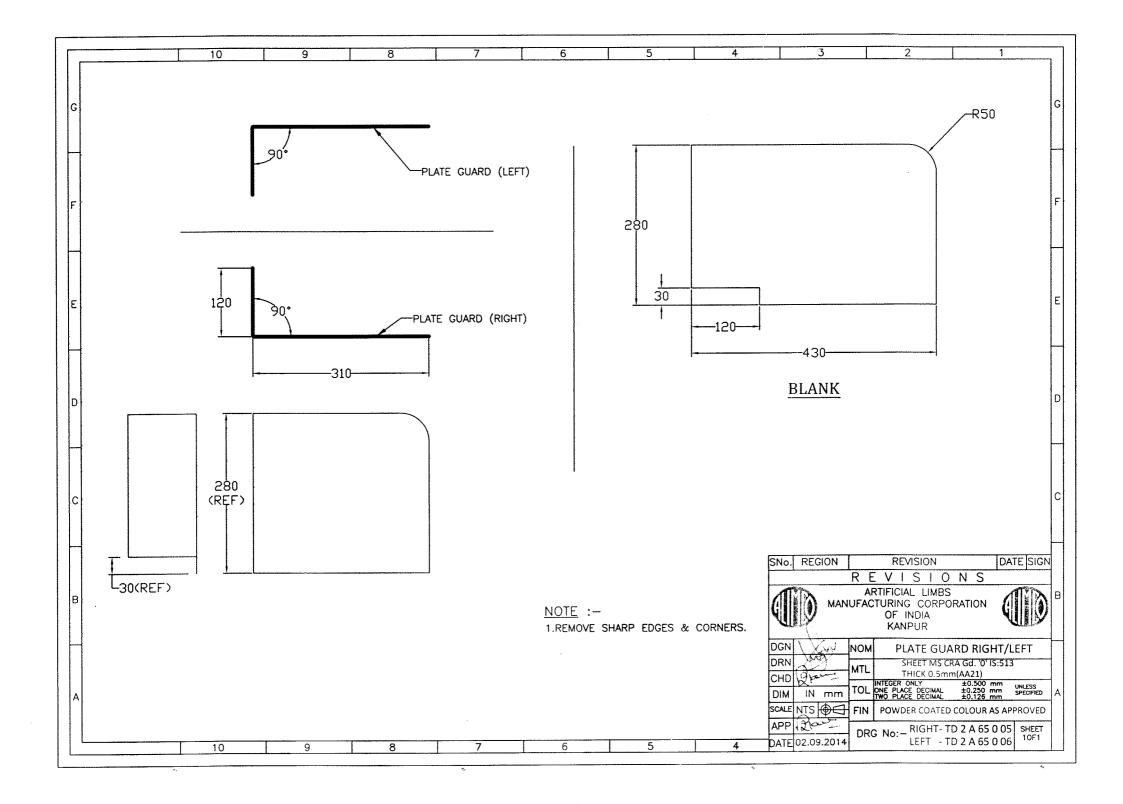


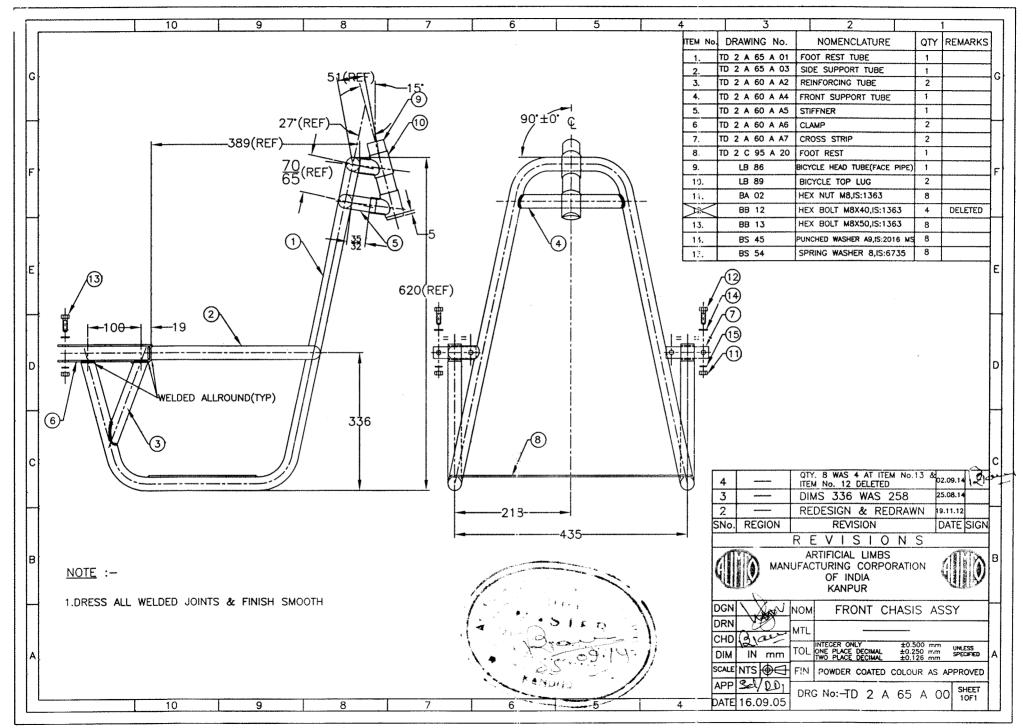






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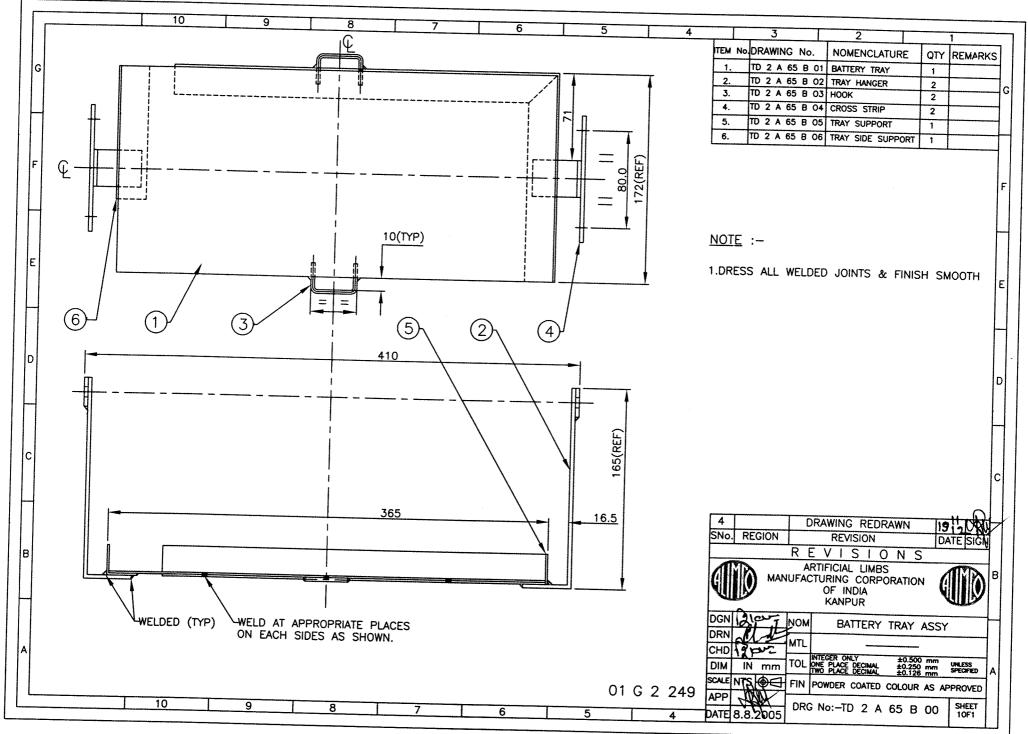


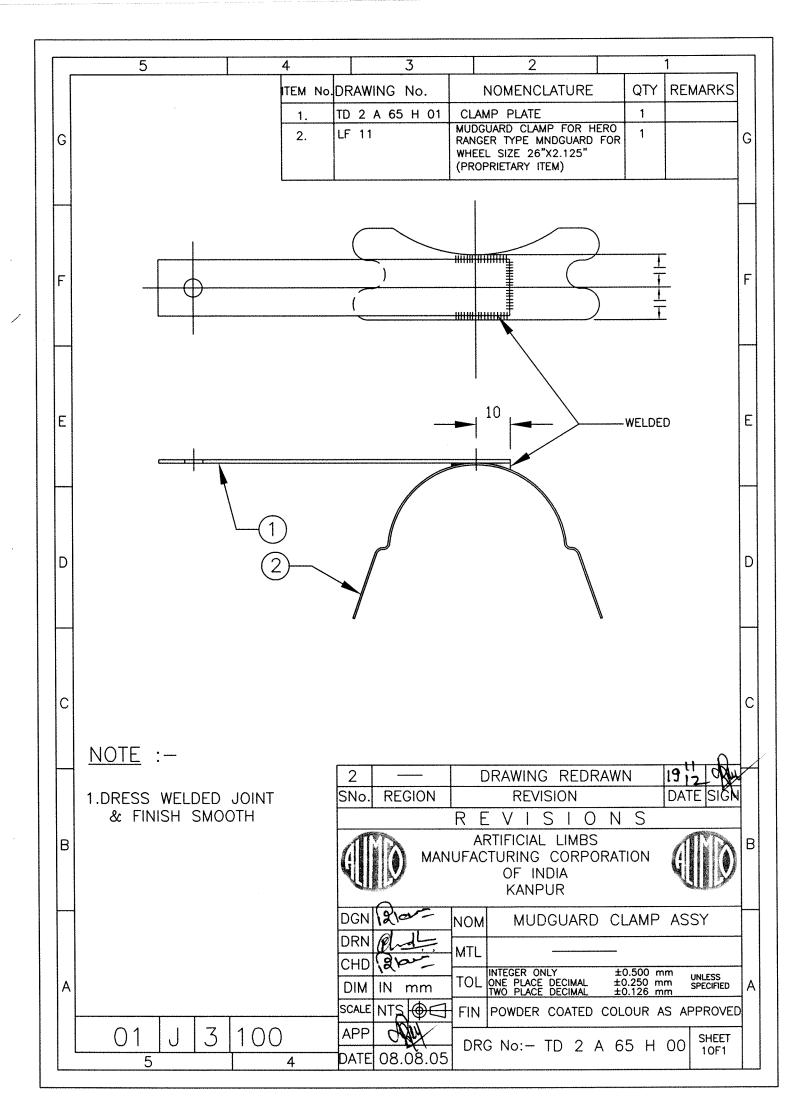


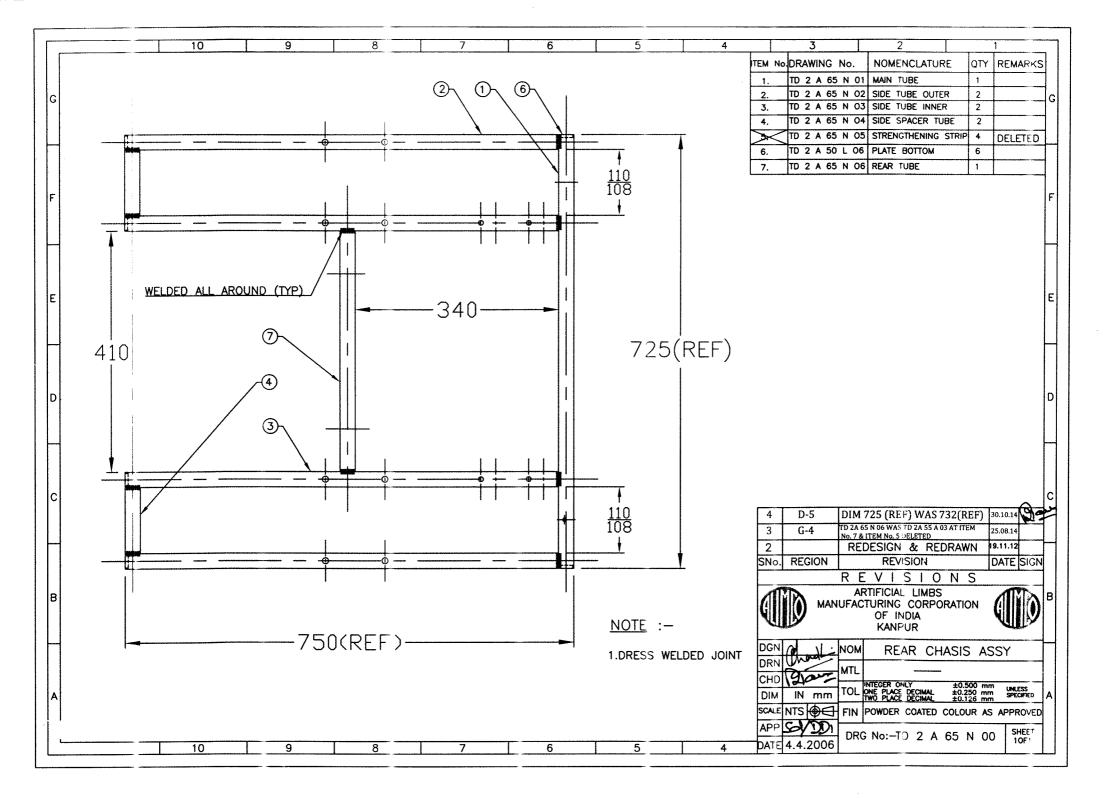
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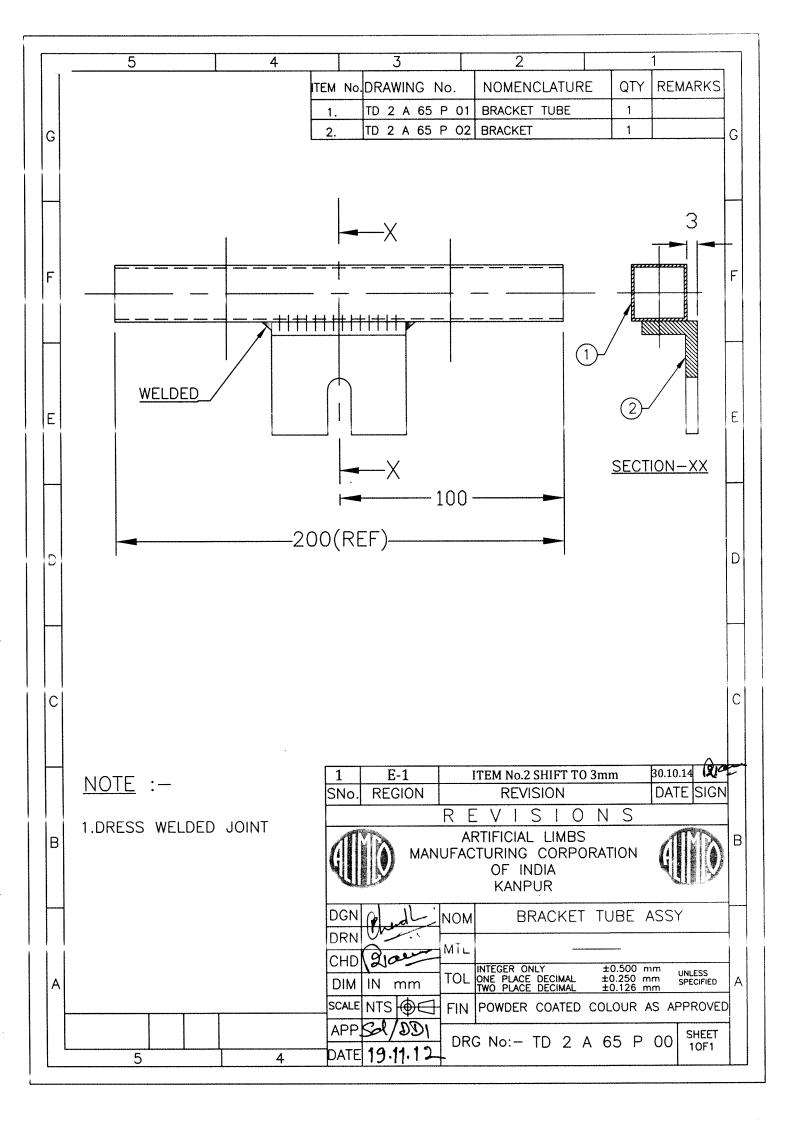
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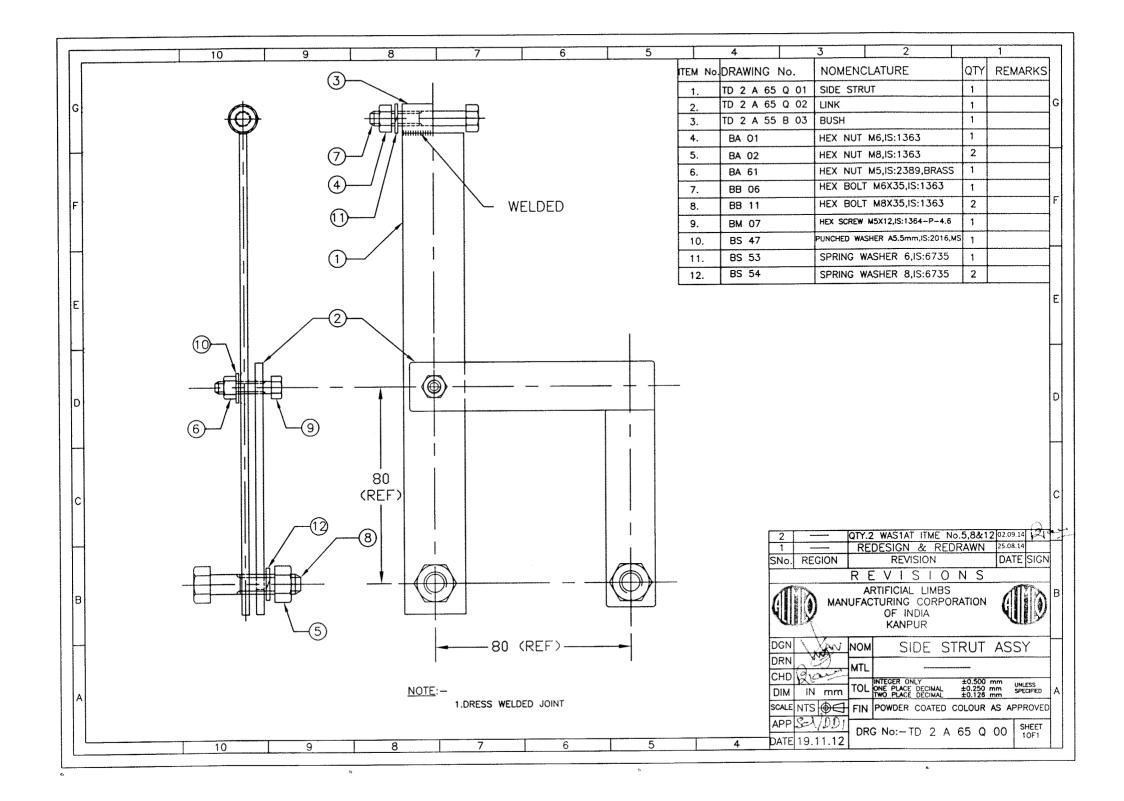
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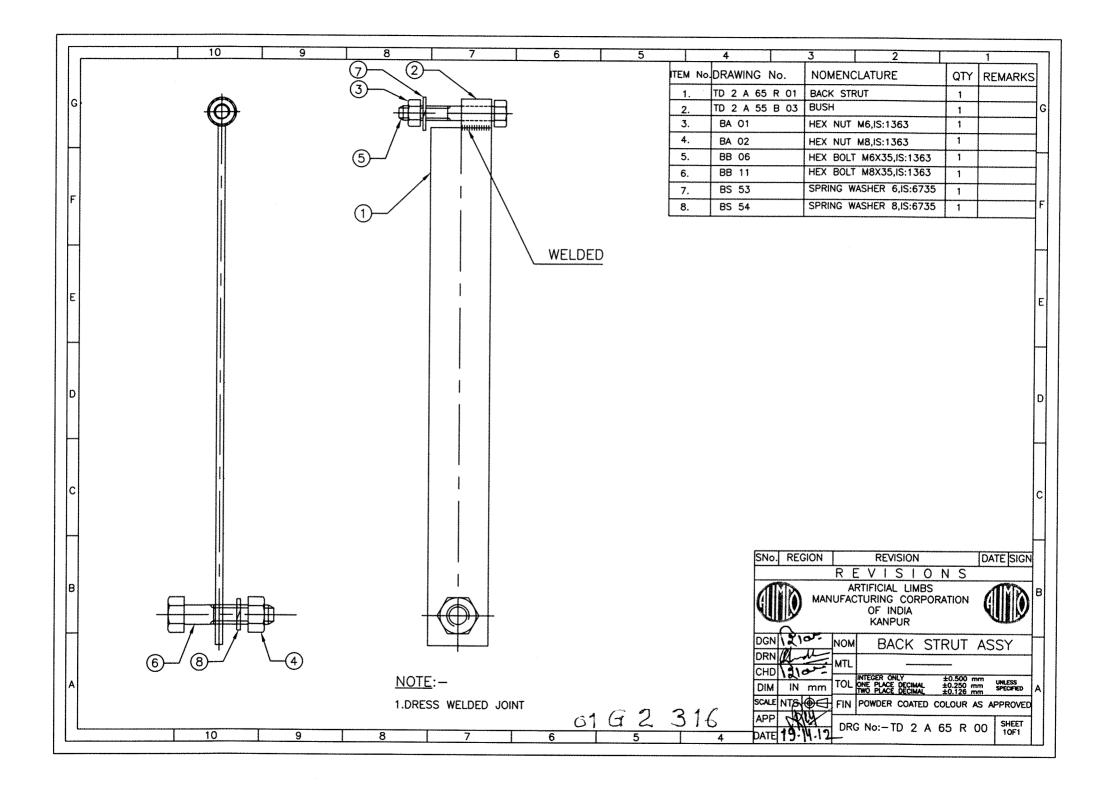


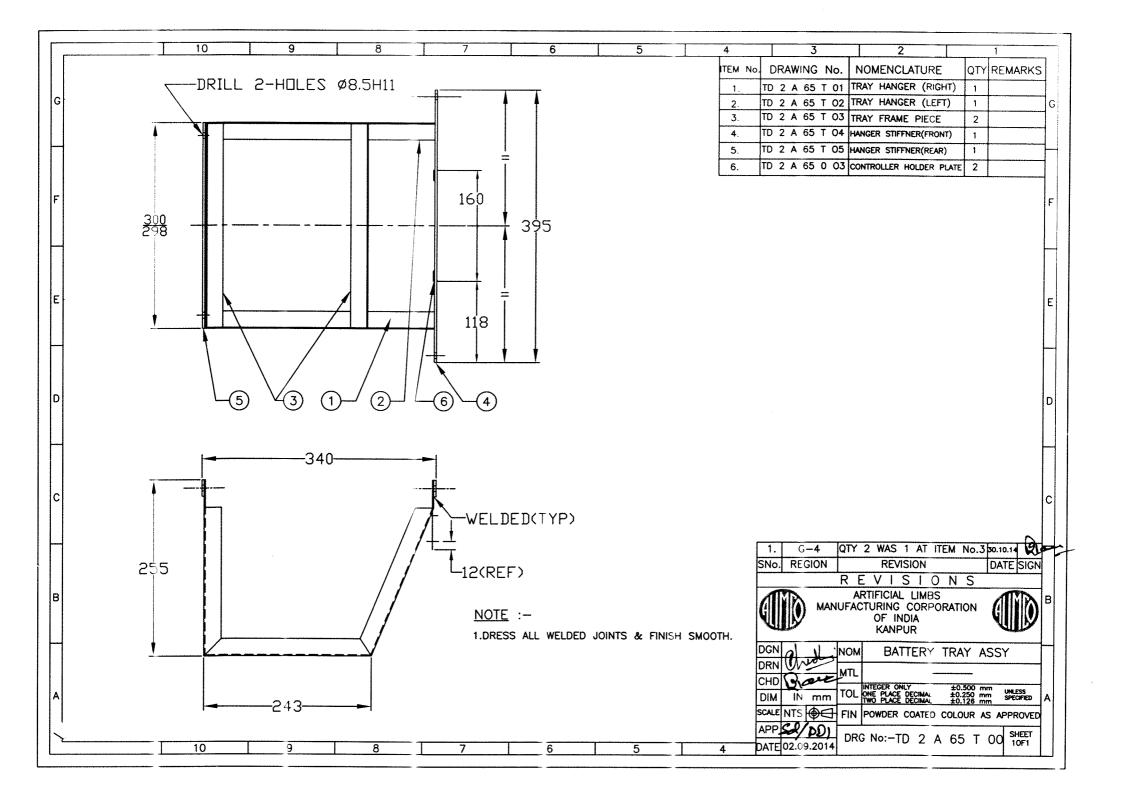


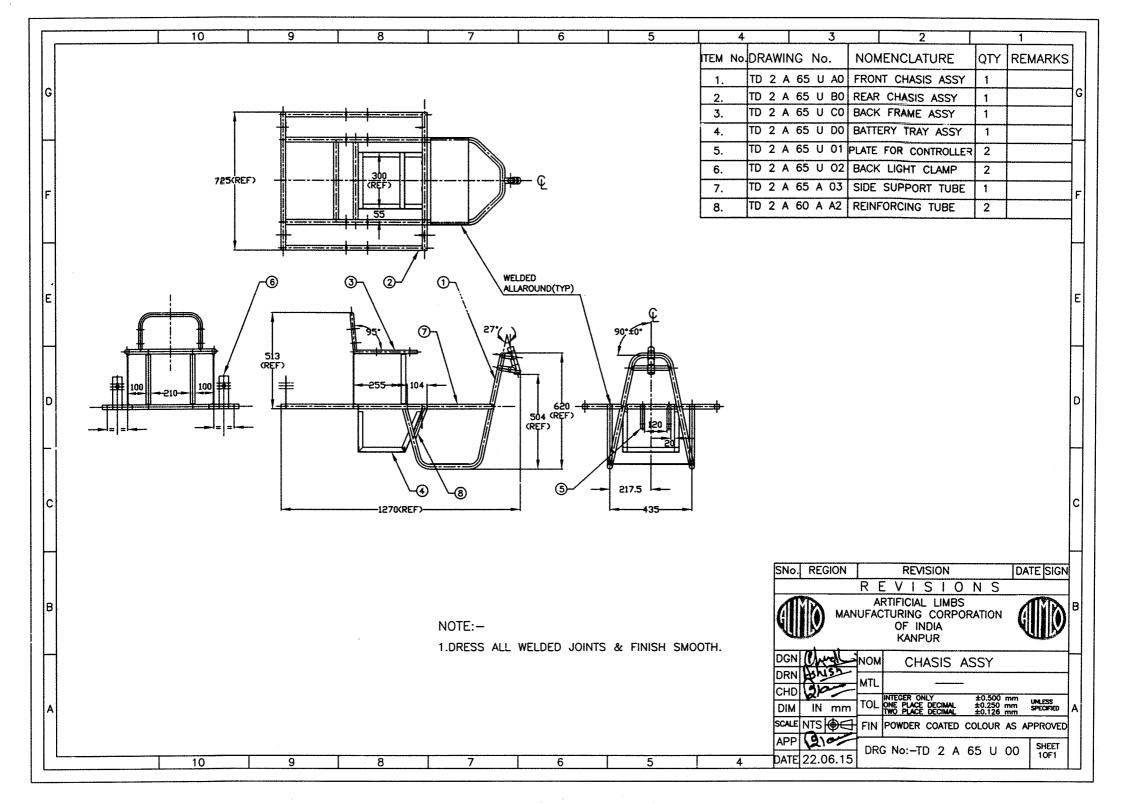


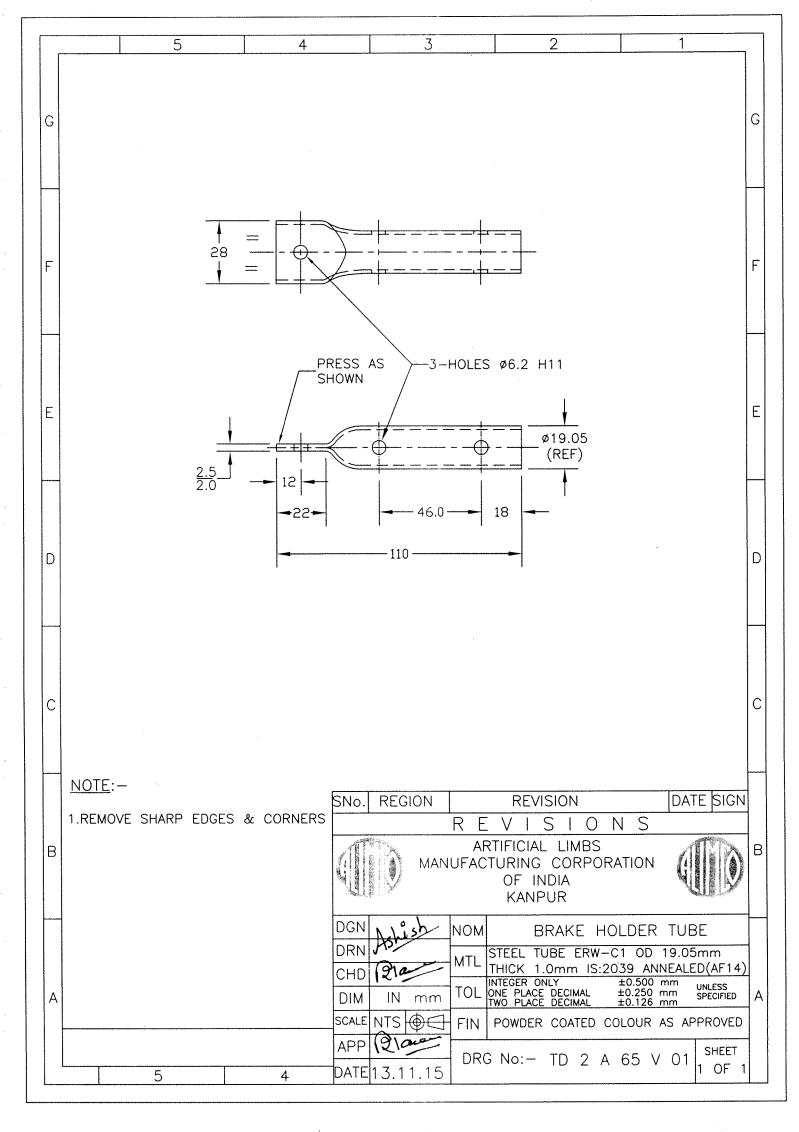




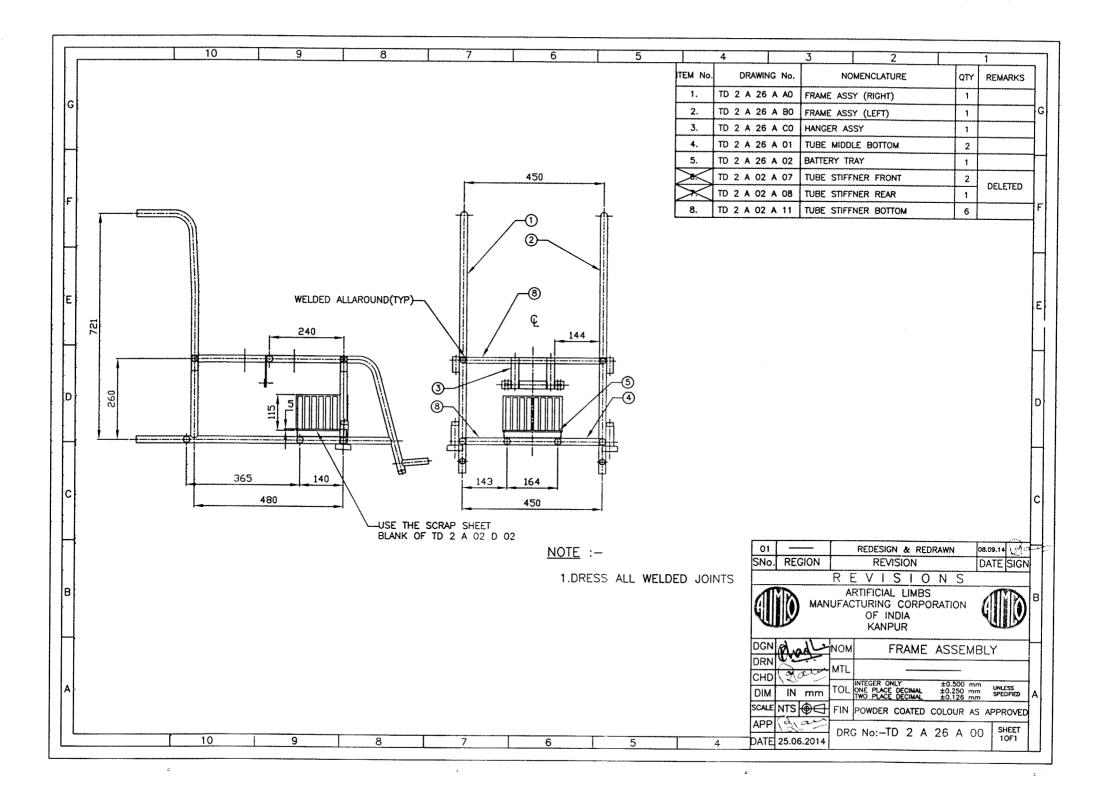


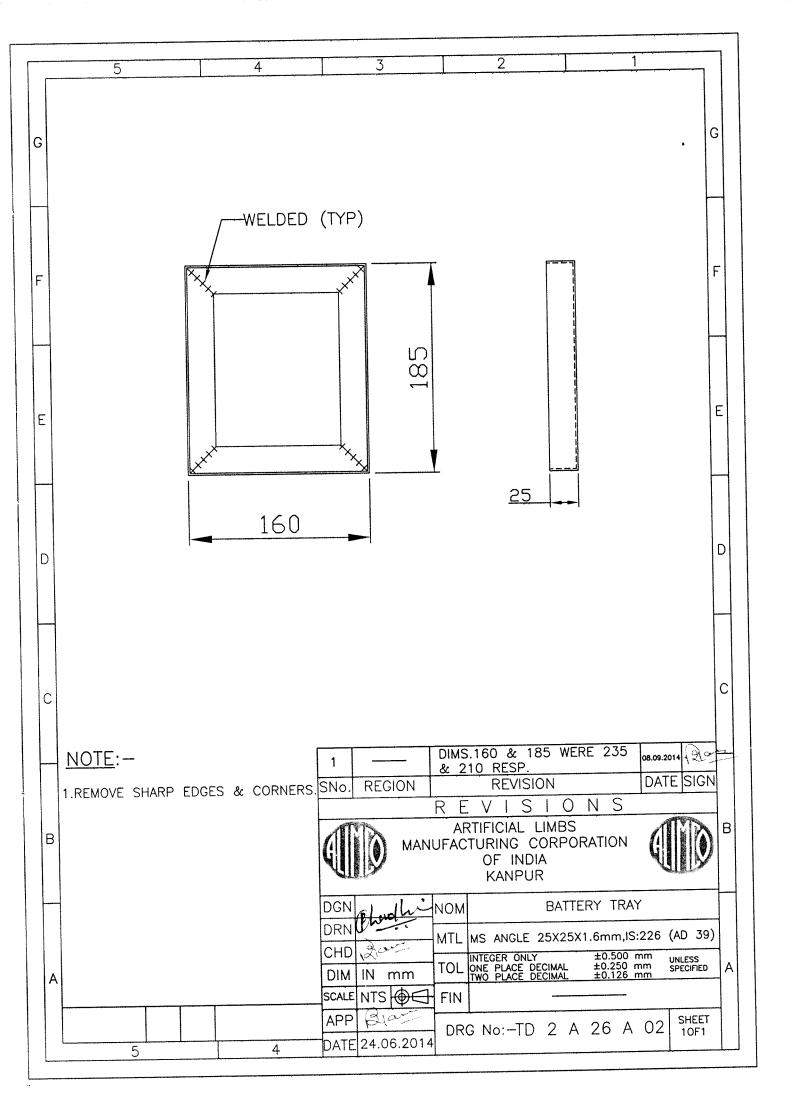


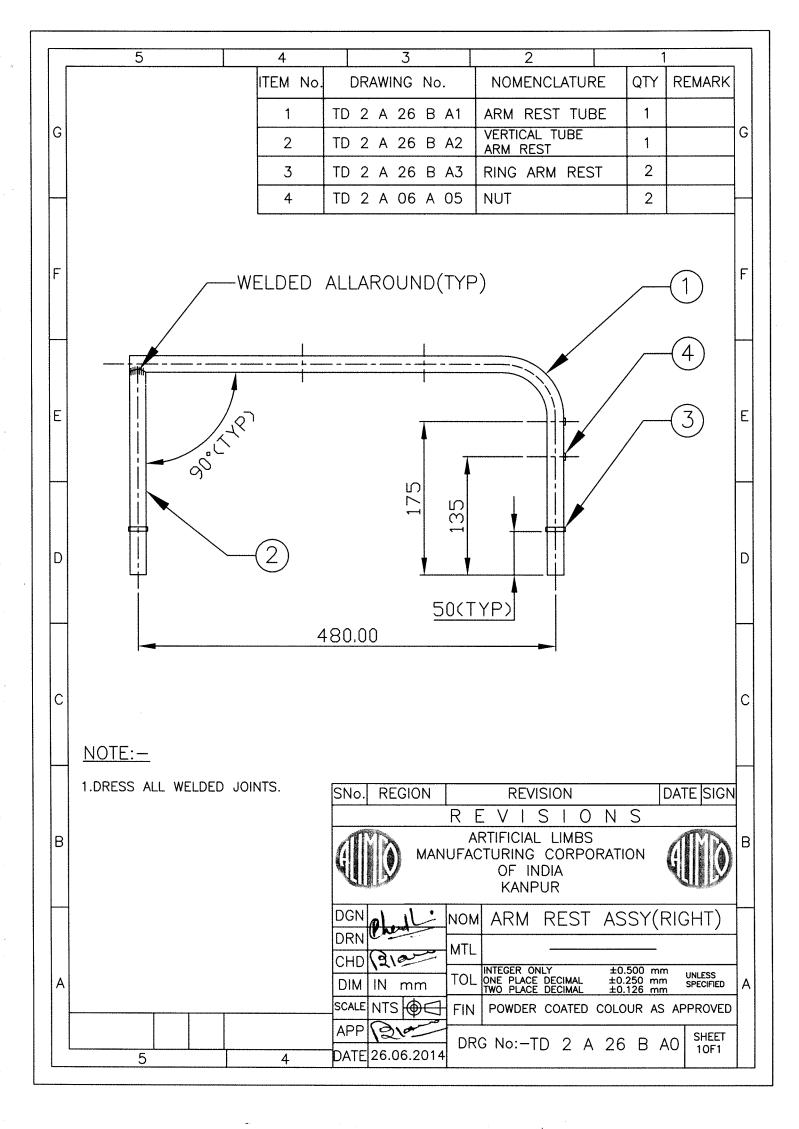




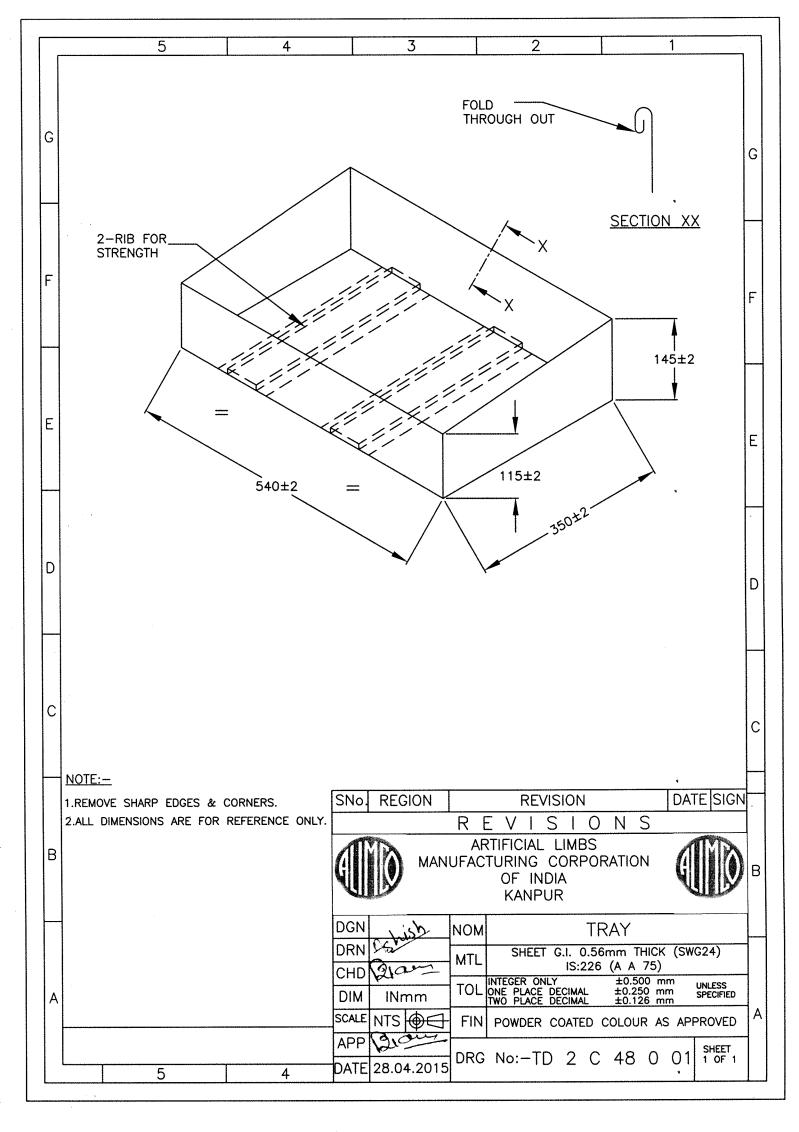
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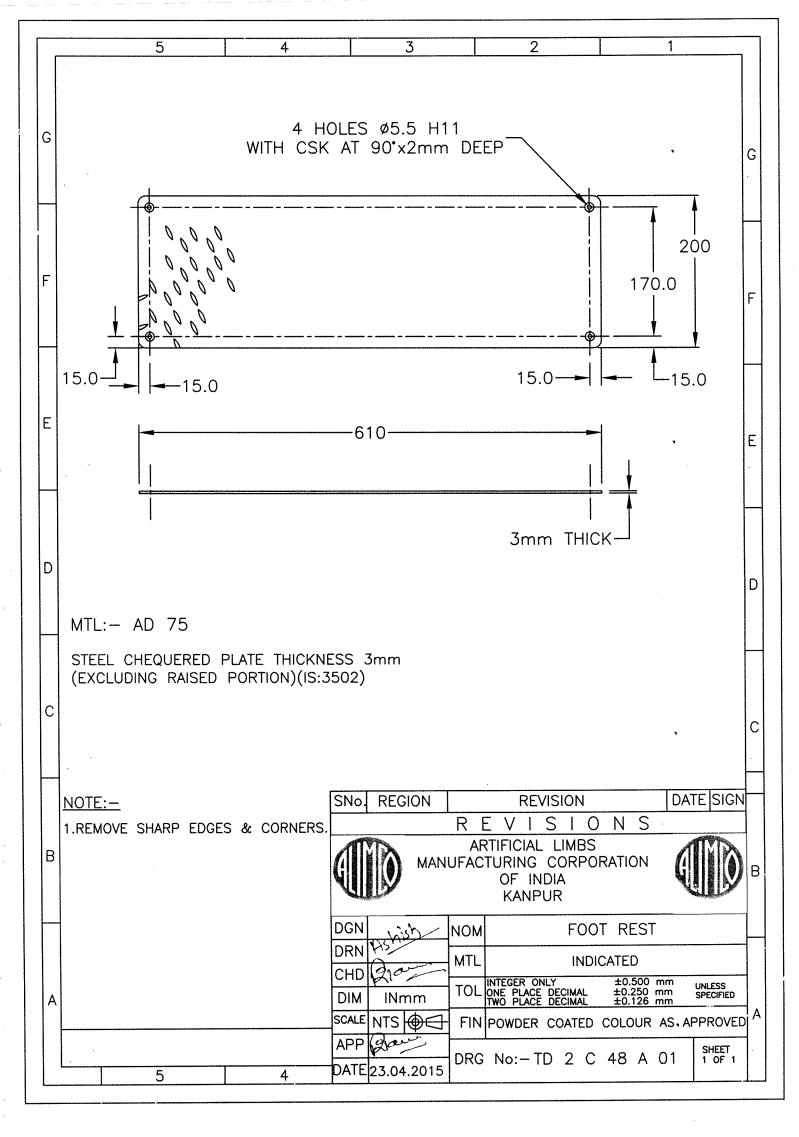


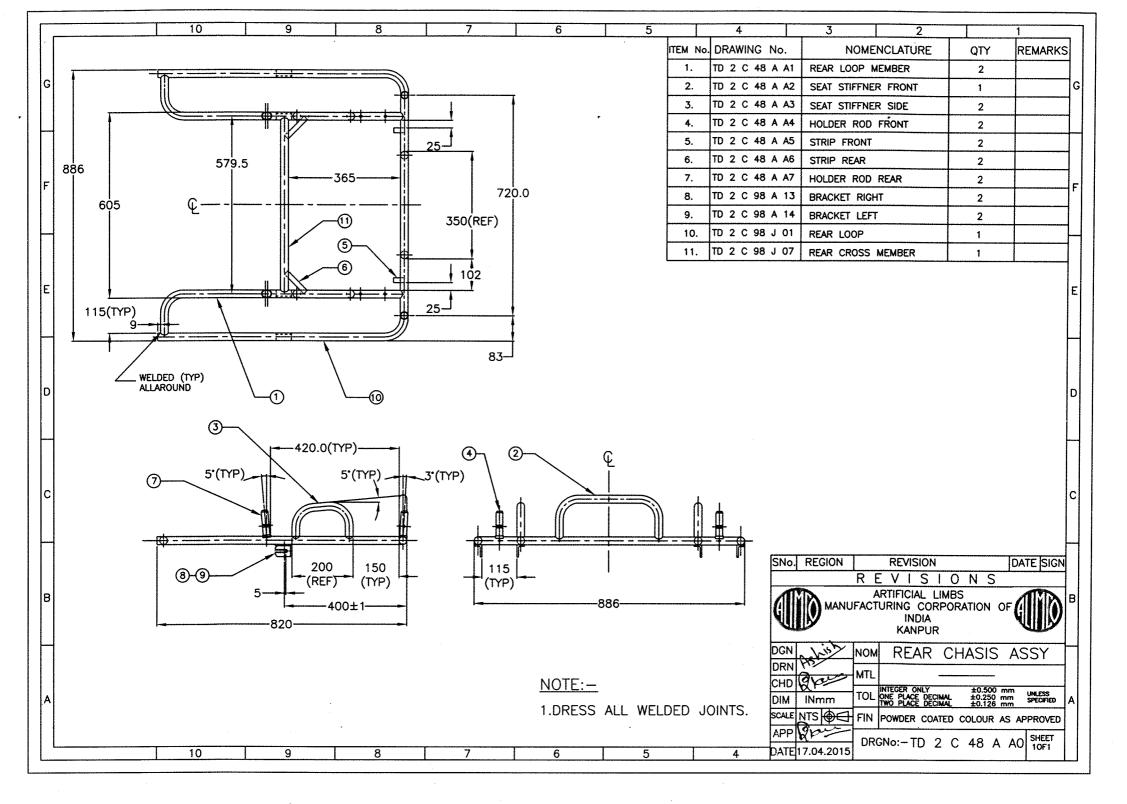


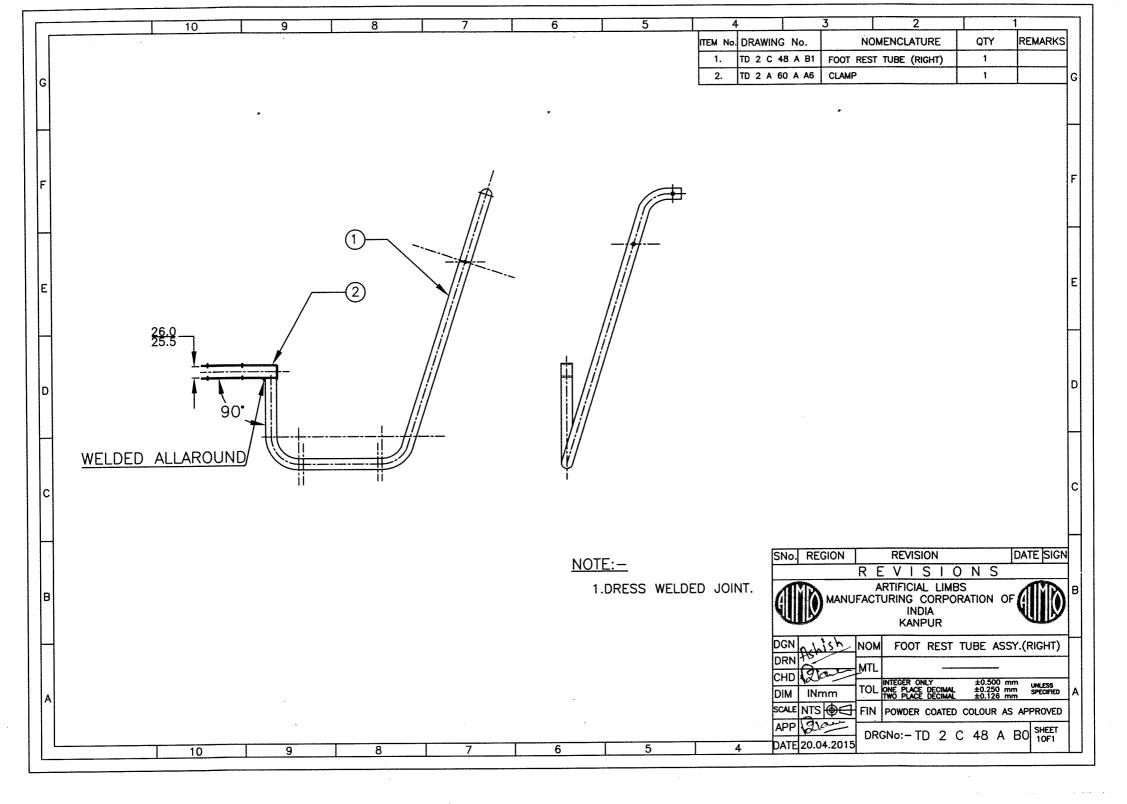


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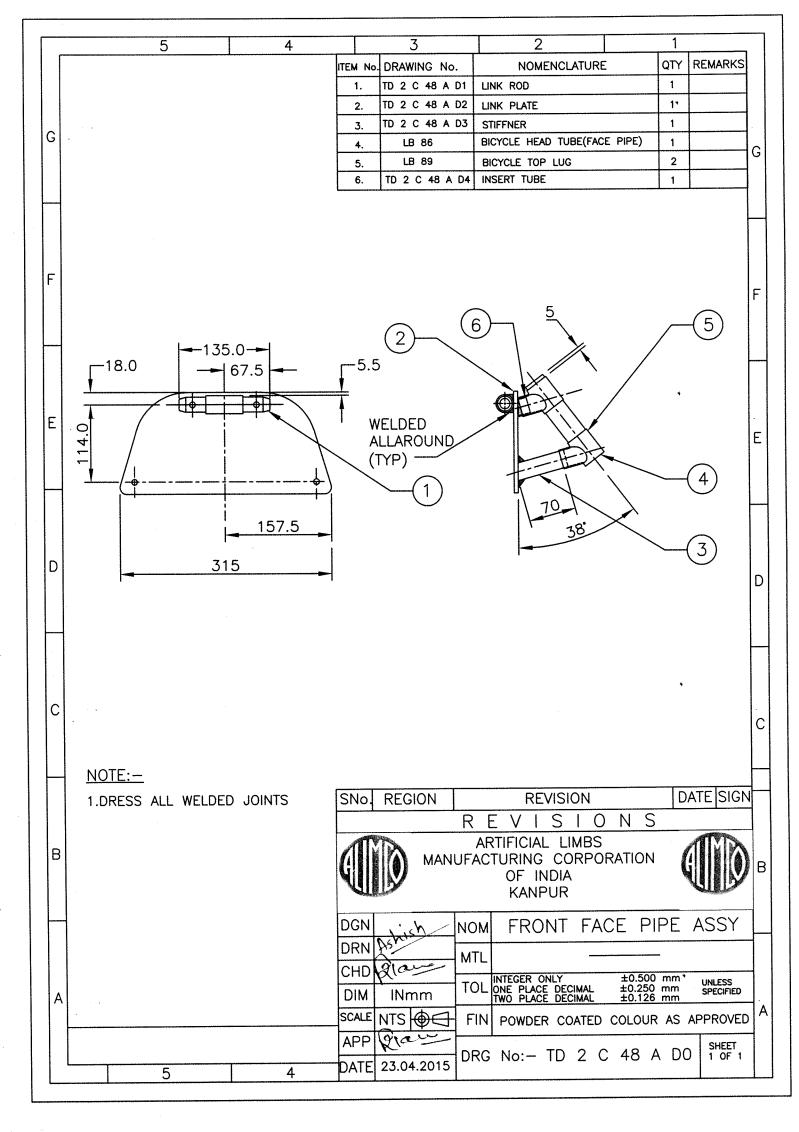


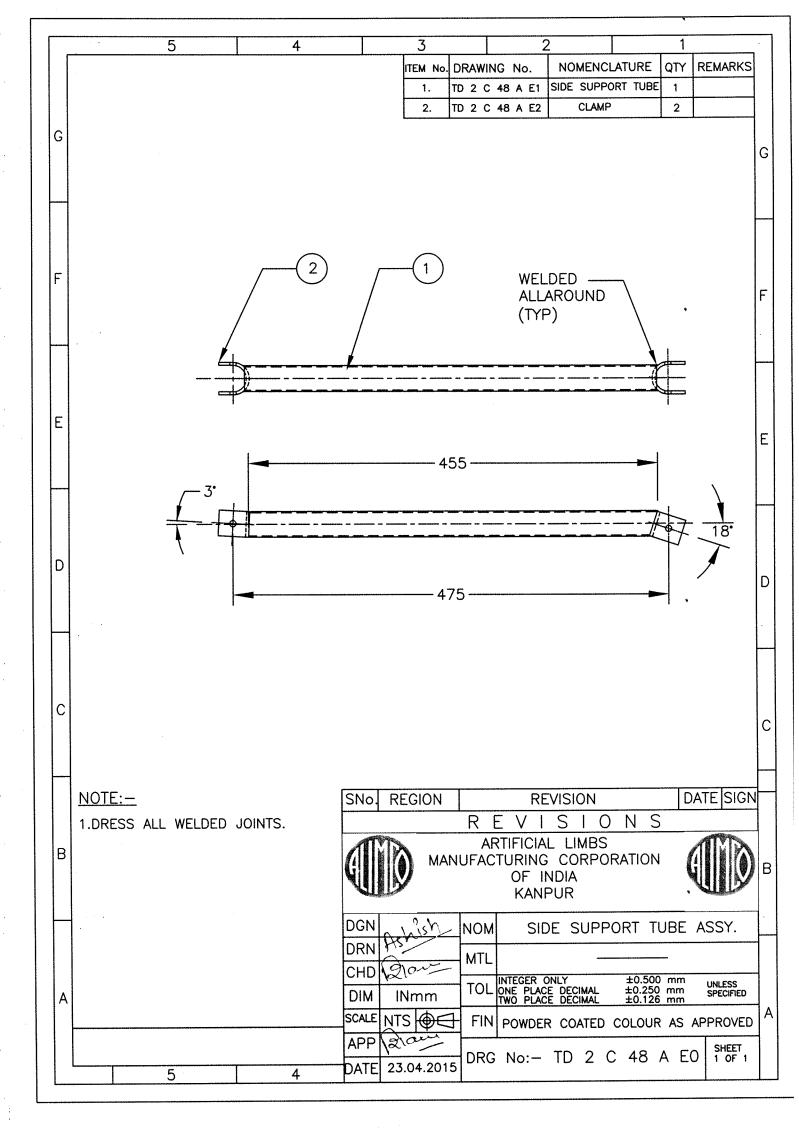


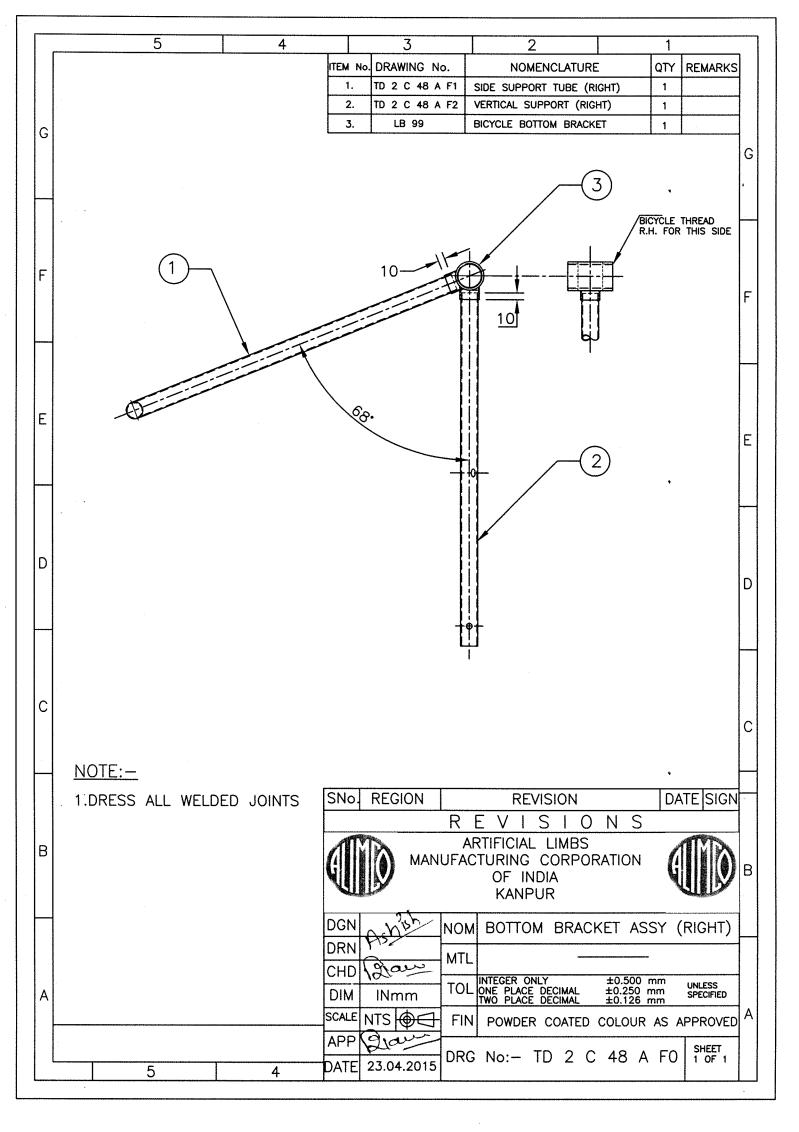


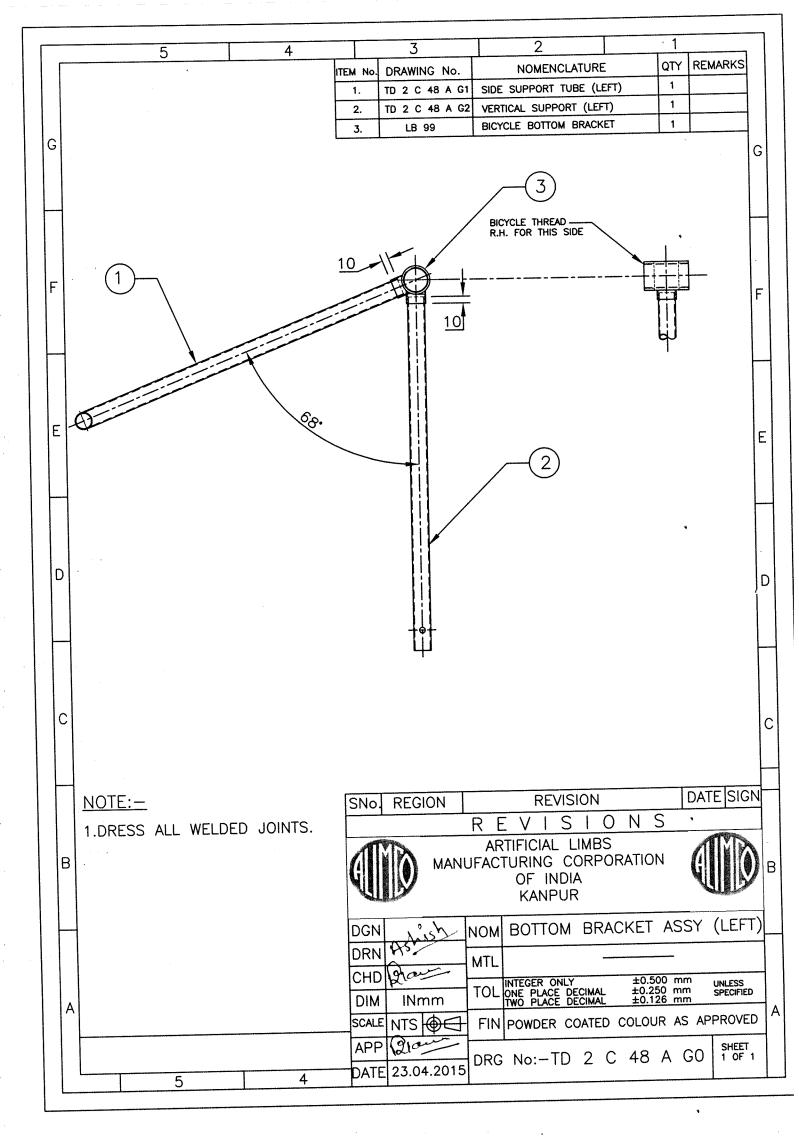


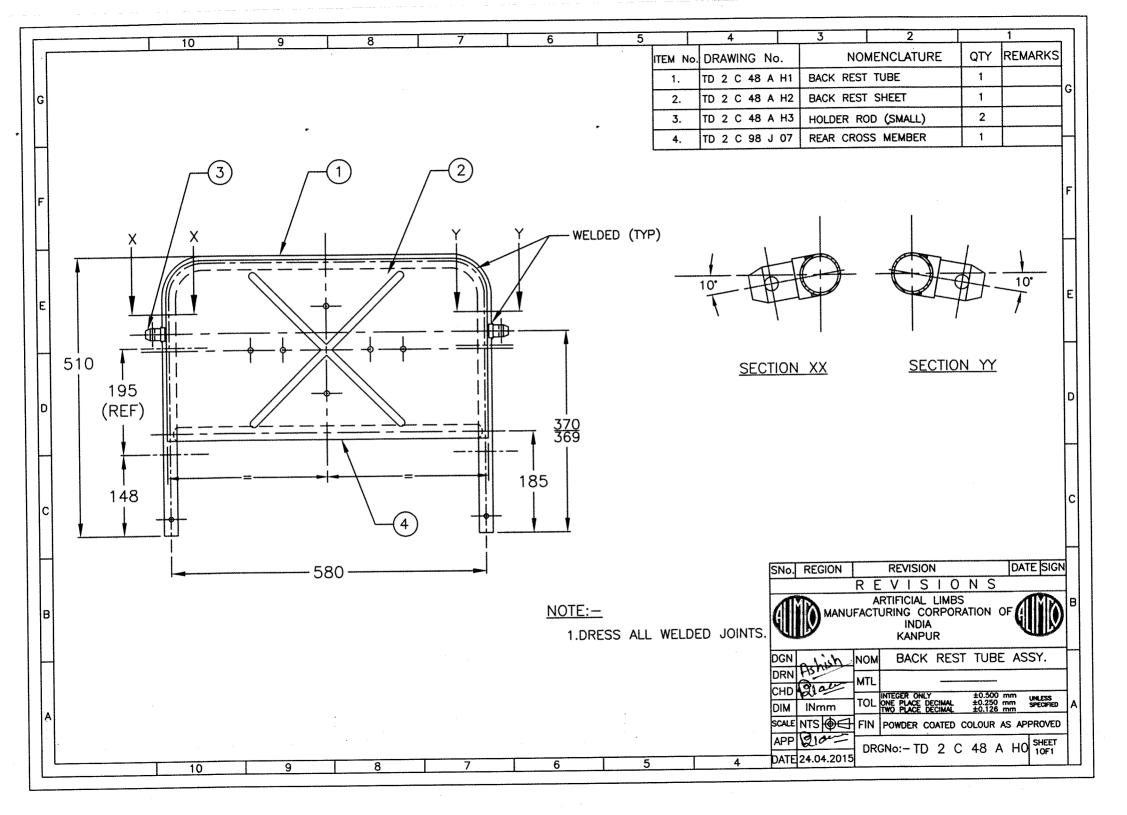
| G | 10 9 8 7 6 5 4 3 2 1 ITEM No. DRAWING No. NOMENCLATURE QTY REMARKS 1. TD 2 C 48 A C1 FOOT REST TUBE (LEFT) 1 1 2. TD 2 A 60 A A6 CLAMP 1 1 | G |
|---|---|---|
| F | | F |
| E | | E |
| D | WELDED ALLAROUND | D |
| c | NOTE: SNO. REGION REVISION DATE SIGN | c |
| В | 1.DRESS WELDED JOINT. ARTIFICIAL LIMBS MANUFACTURING CORPORATION OF INDIA KANPUR DGN Wish NOM FOOT REST TUBE ASSY.(LEFT) DRN MTL MTL MTL | В |
| | CHD VALUE JANDER CONLY ±0.500 mm ±0.500 mm ±0.250 mm <td>A</td> | A |

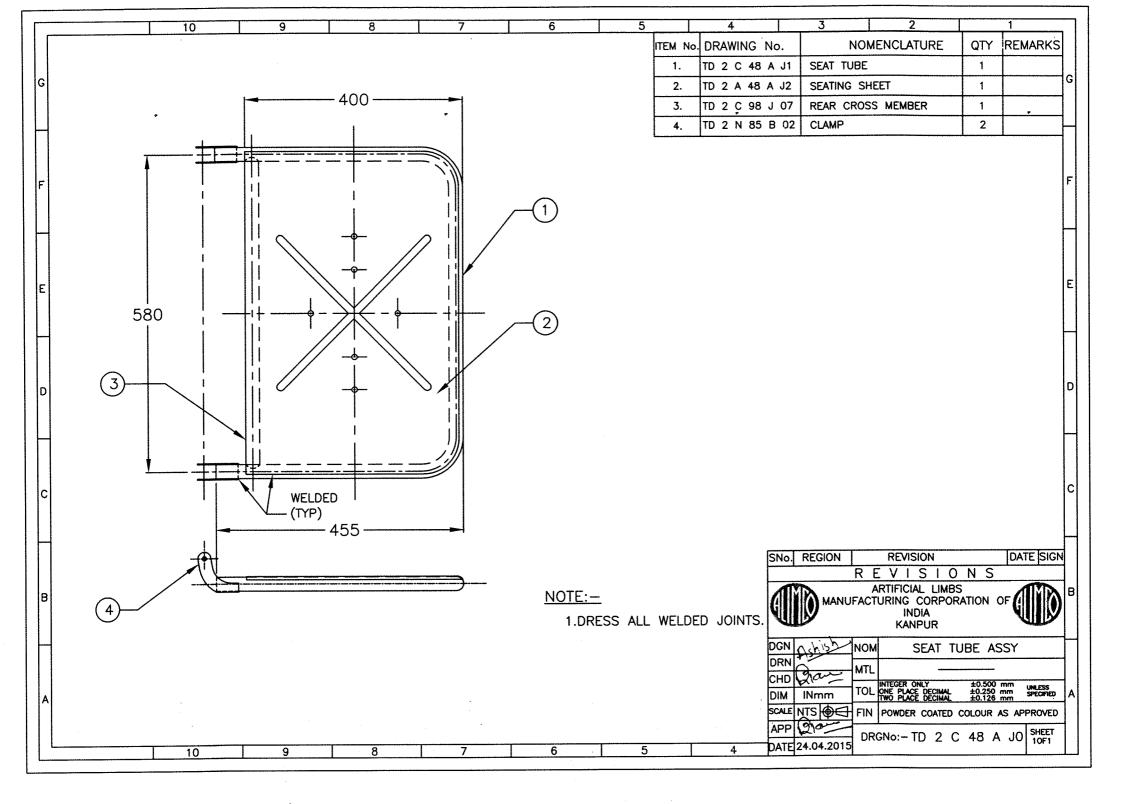




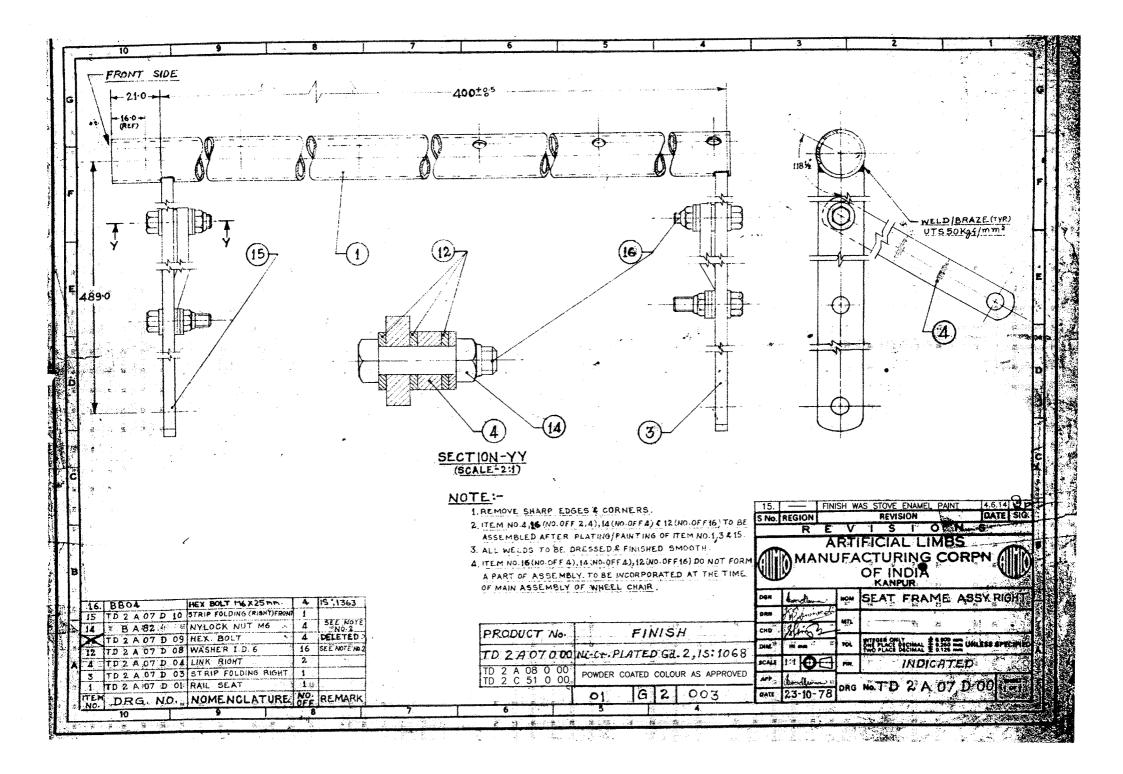


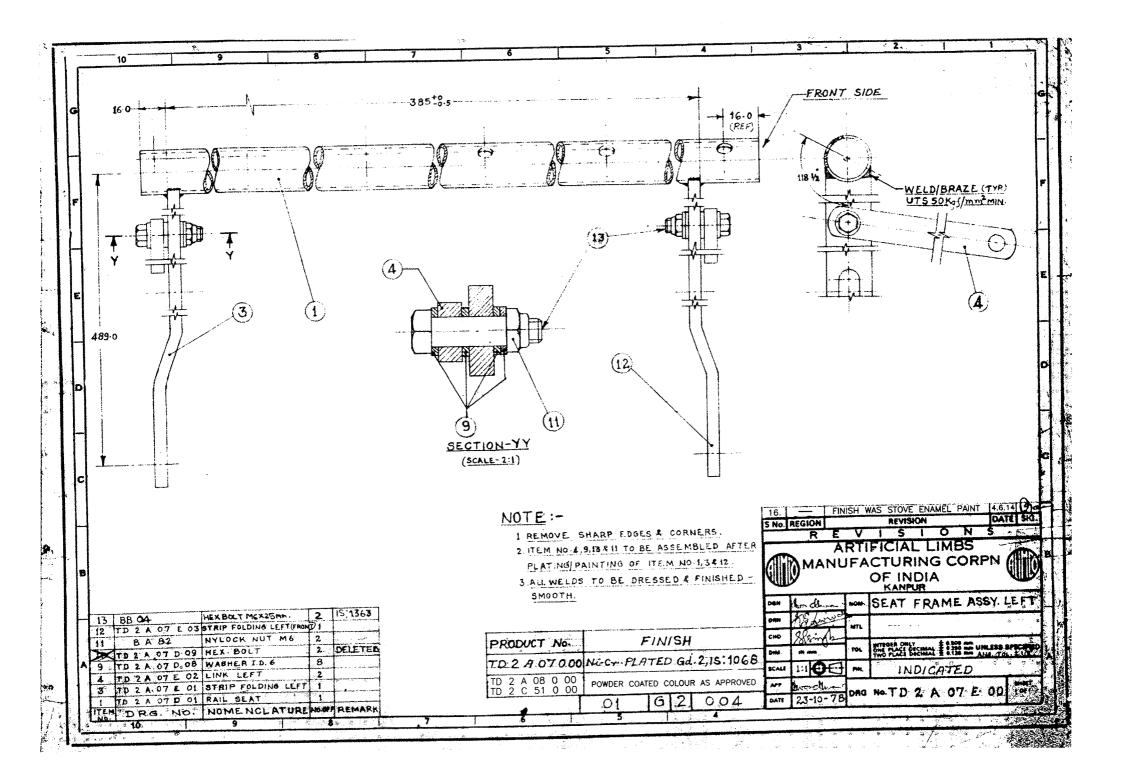


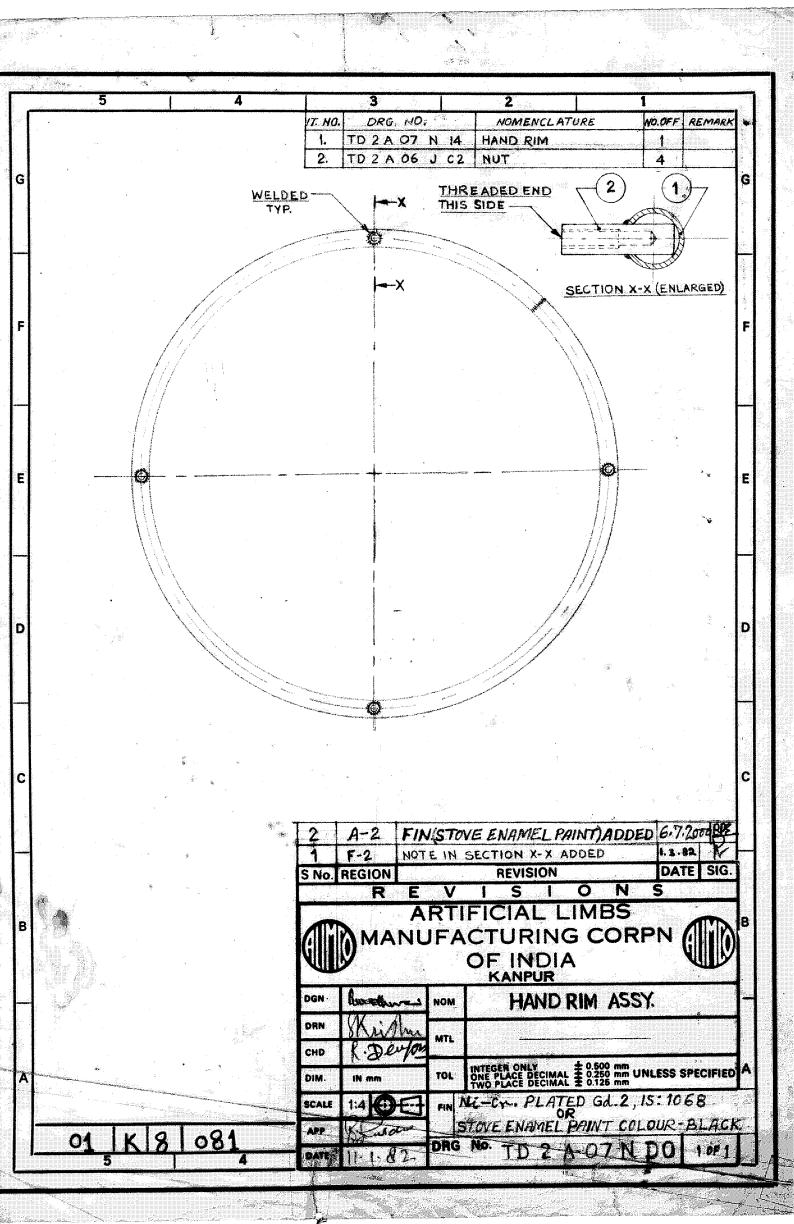


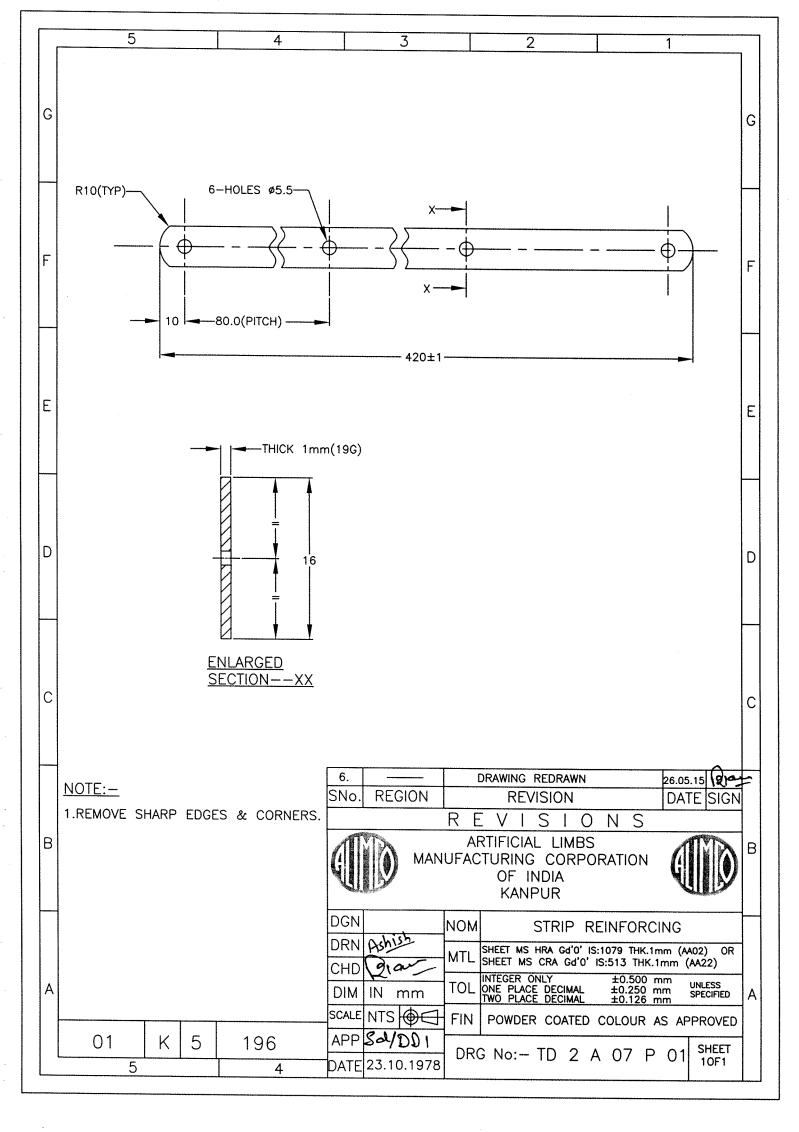


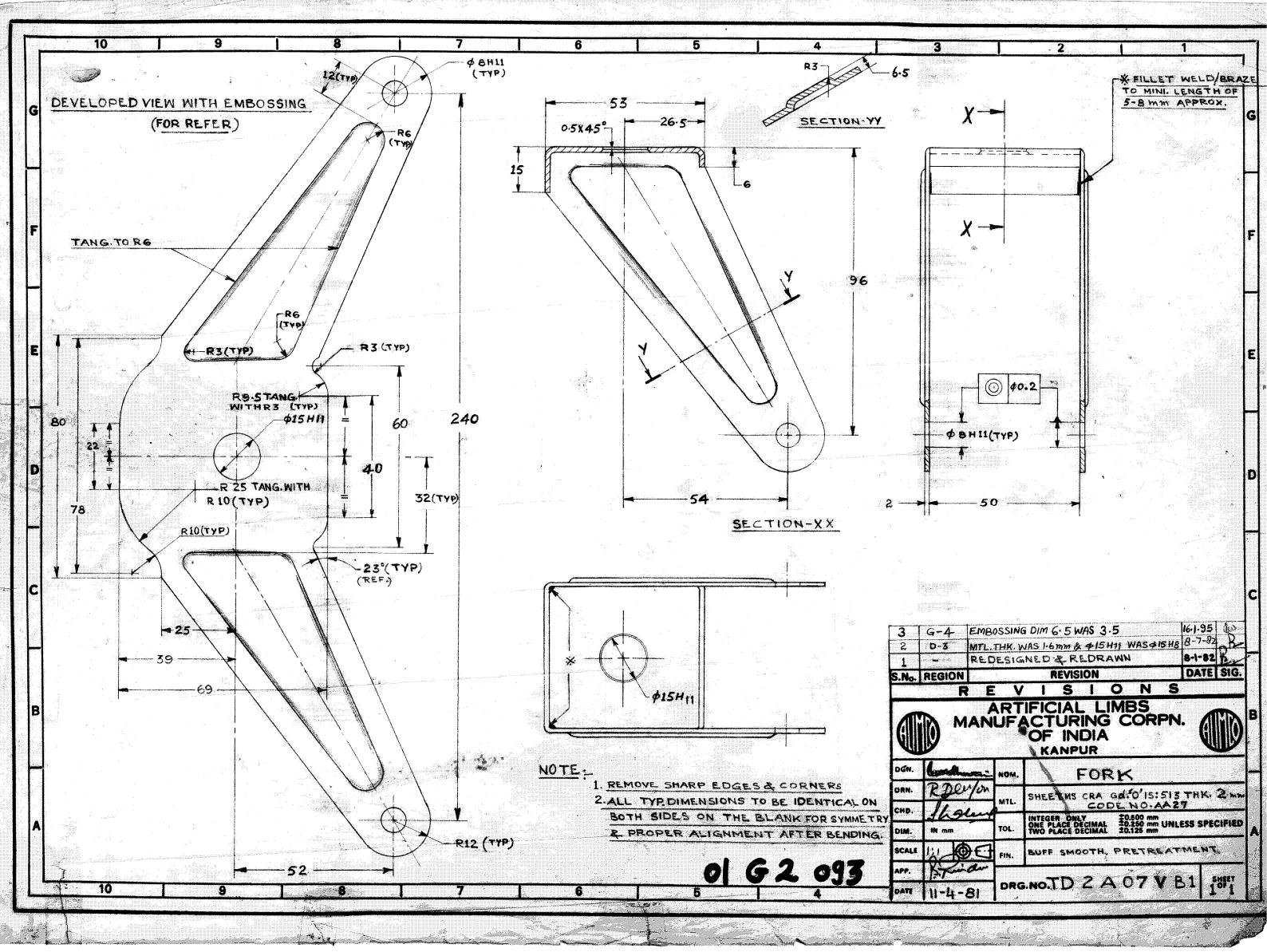
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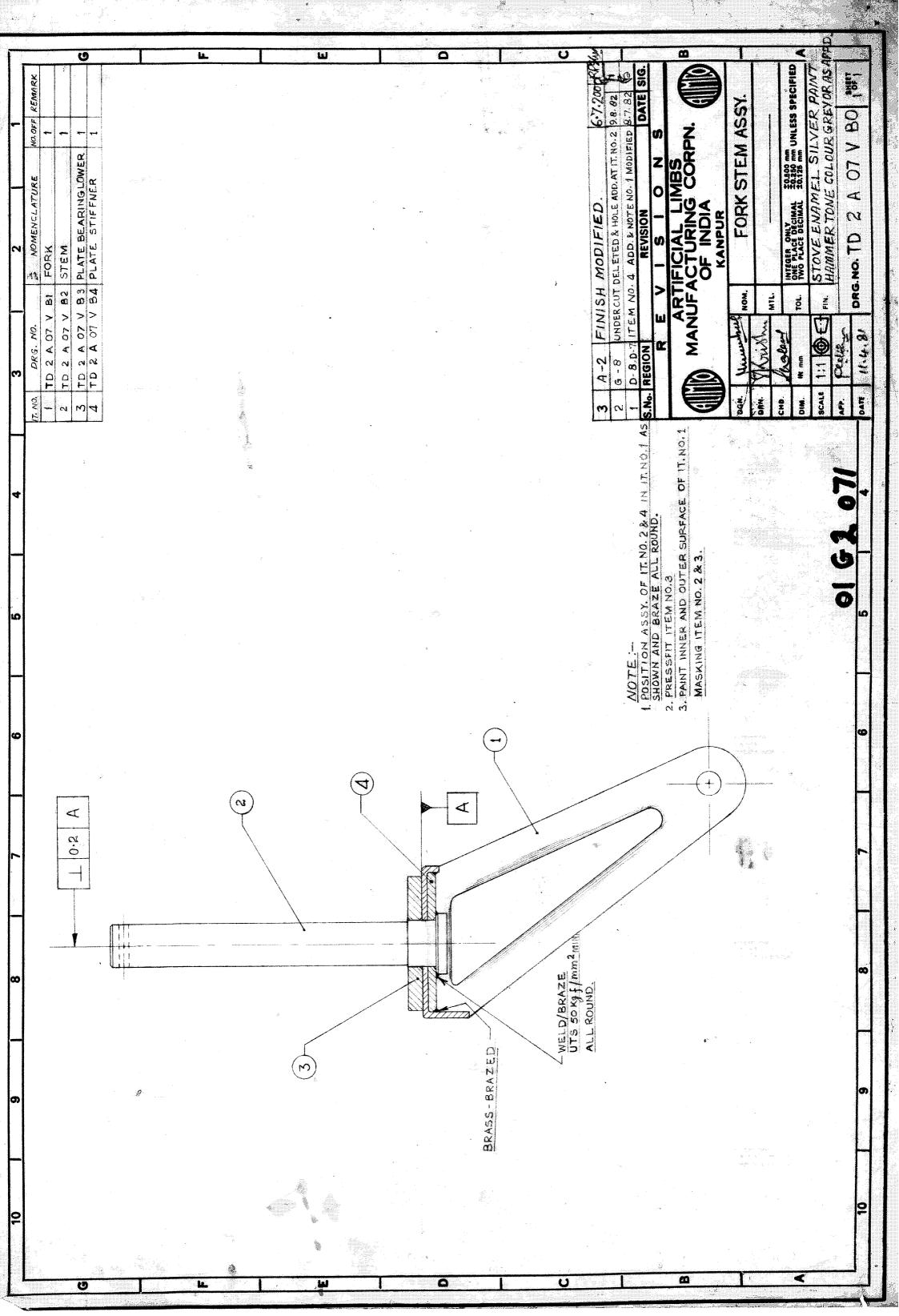


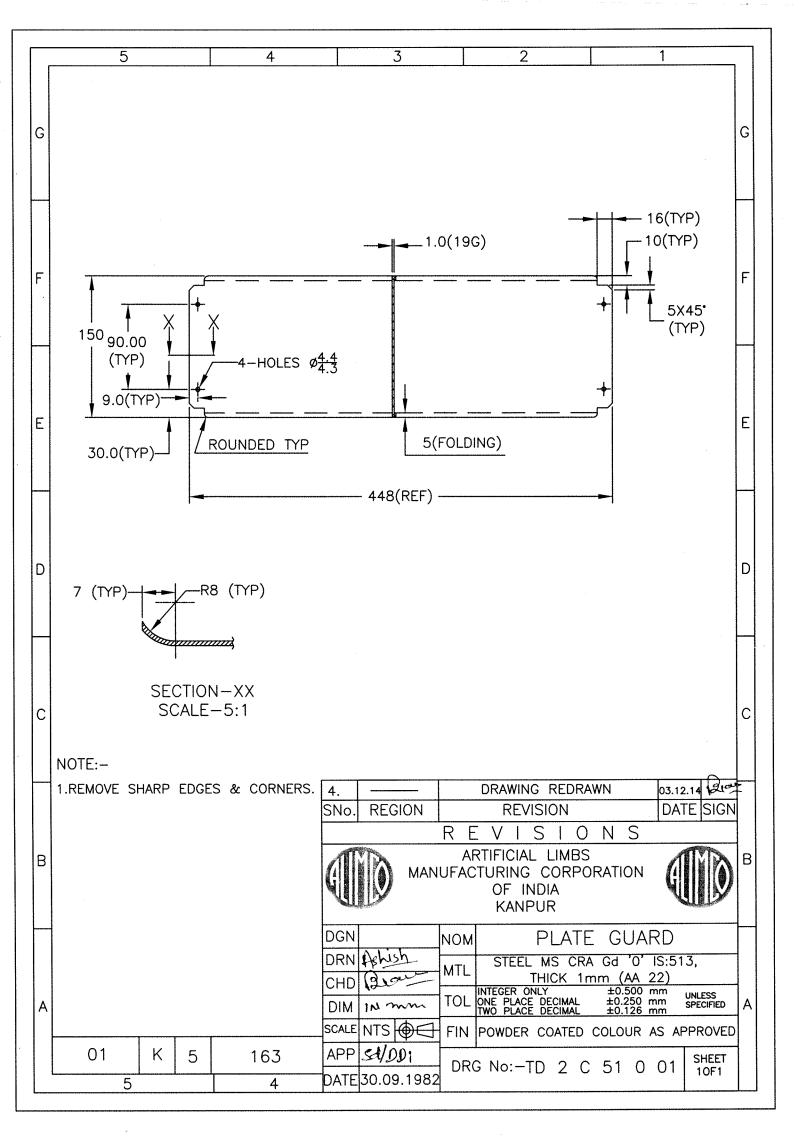


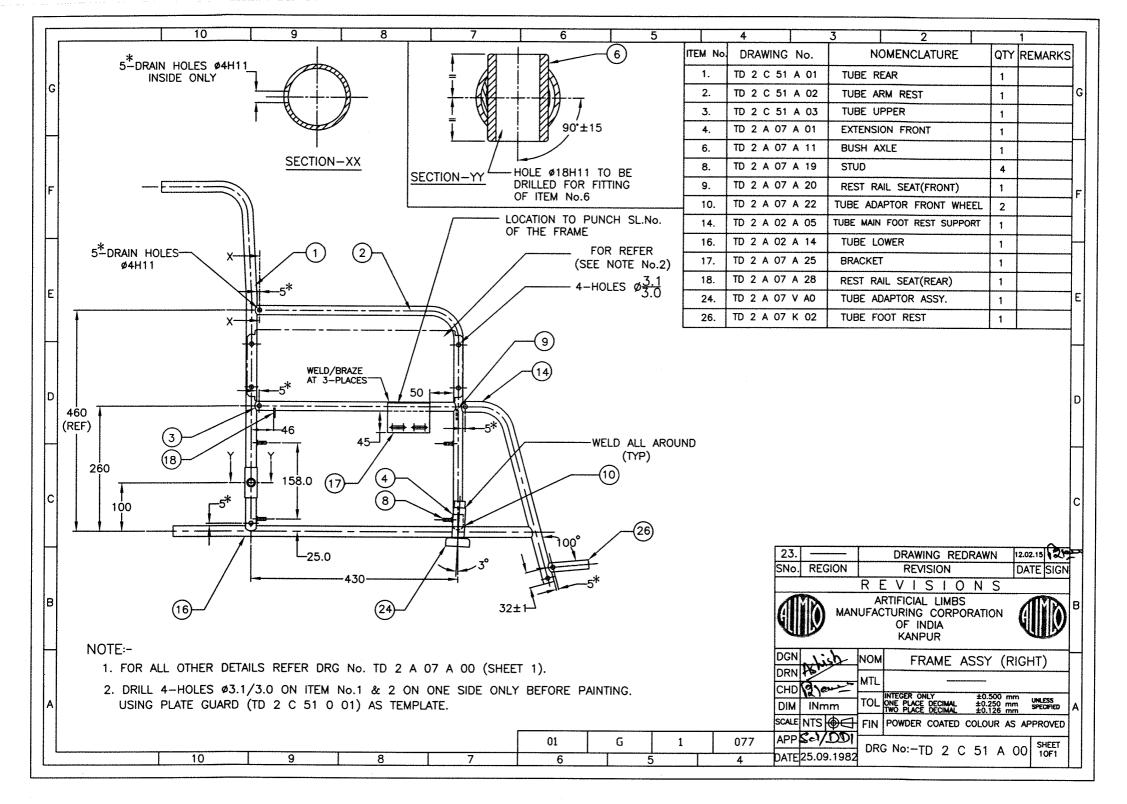


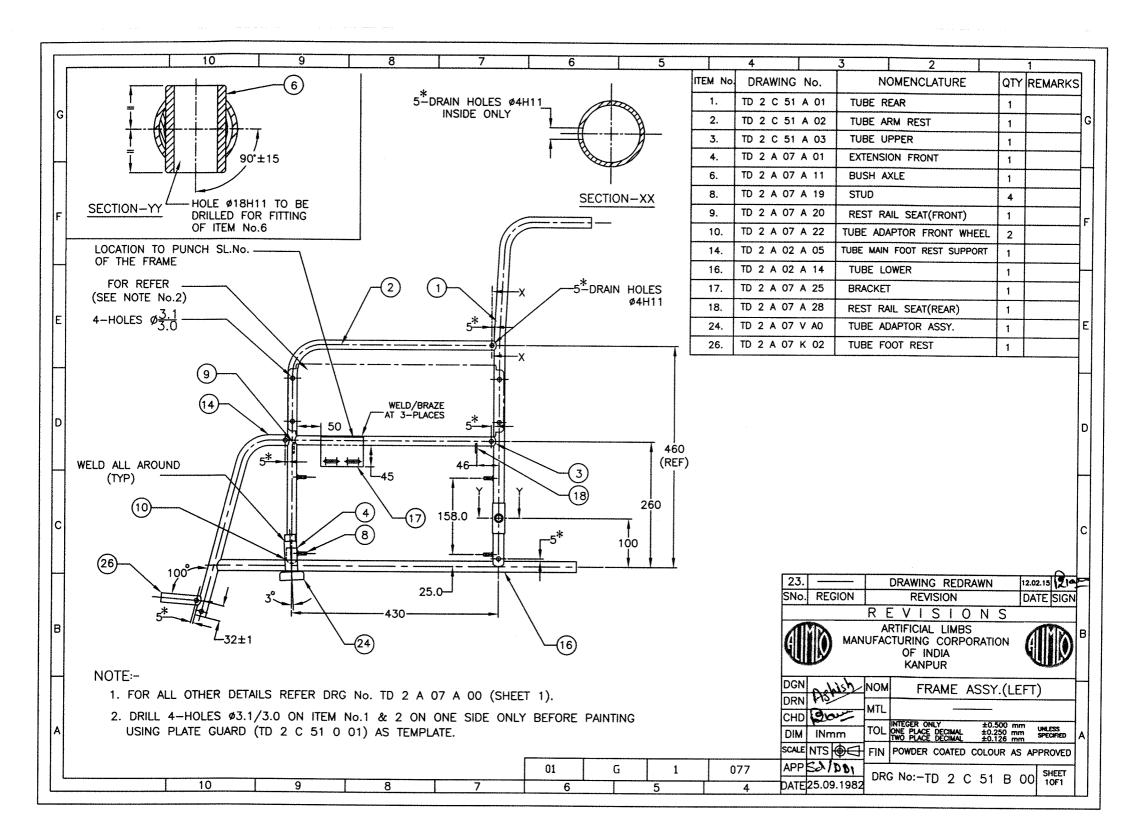




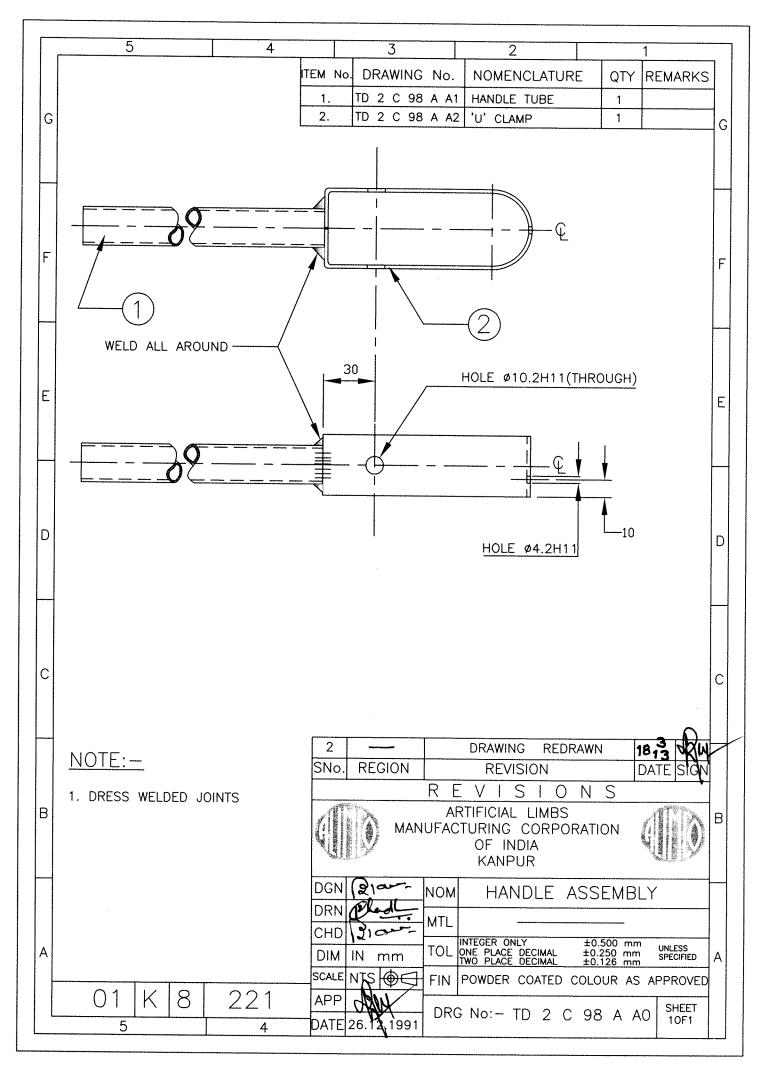


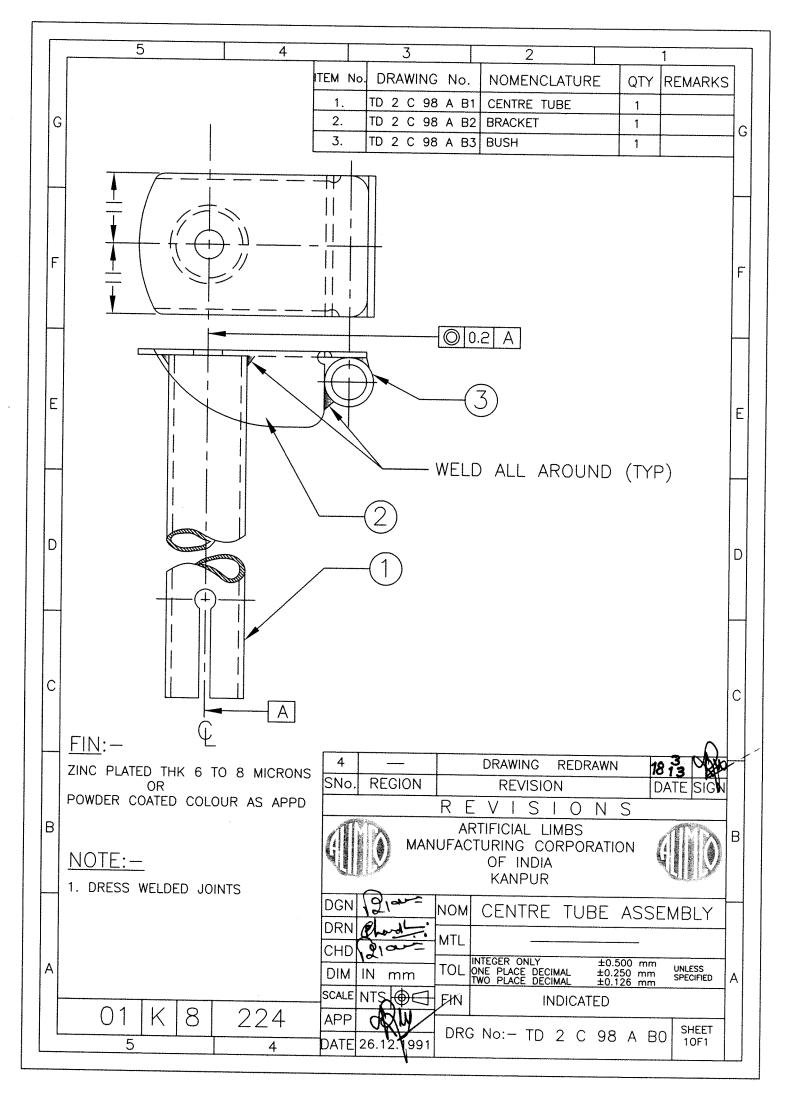


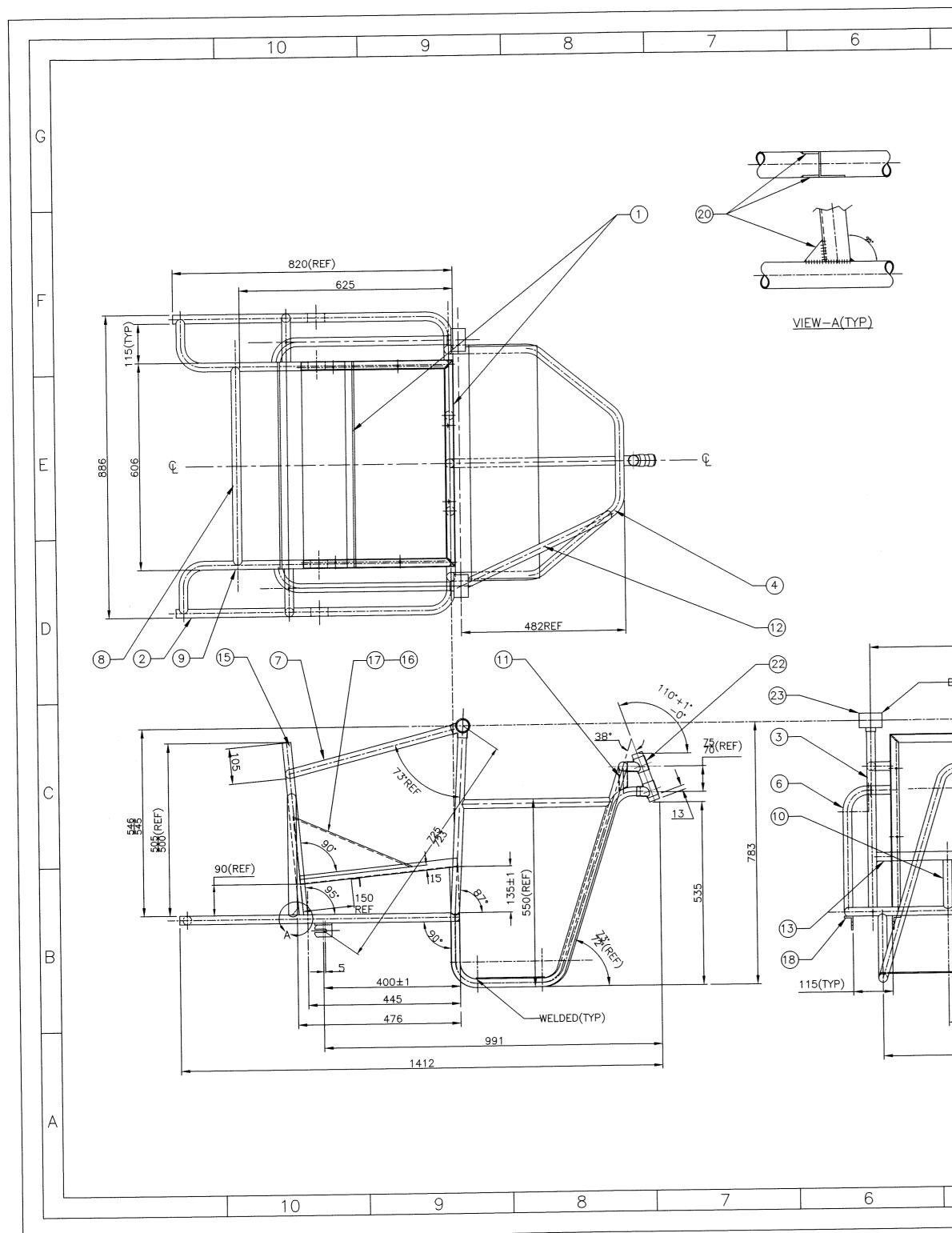




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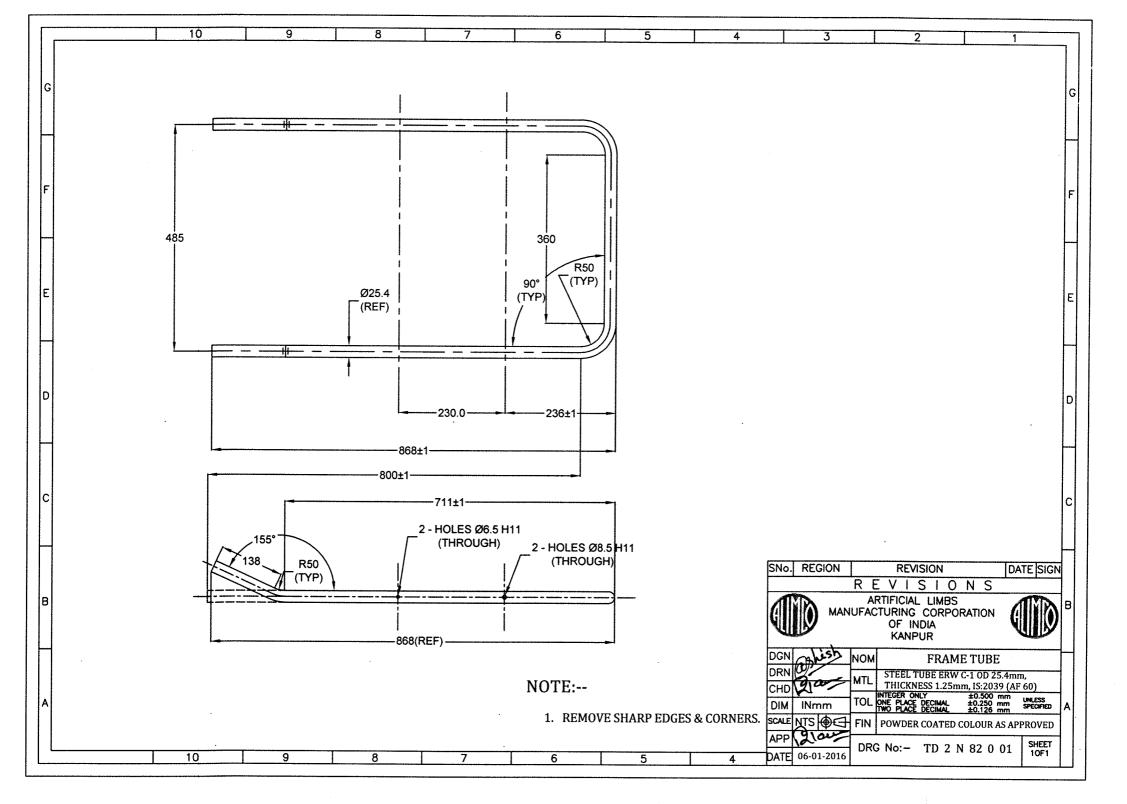


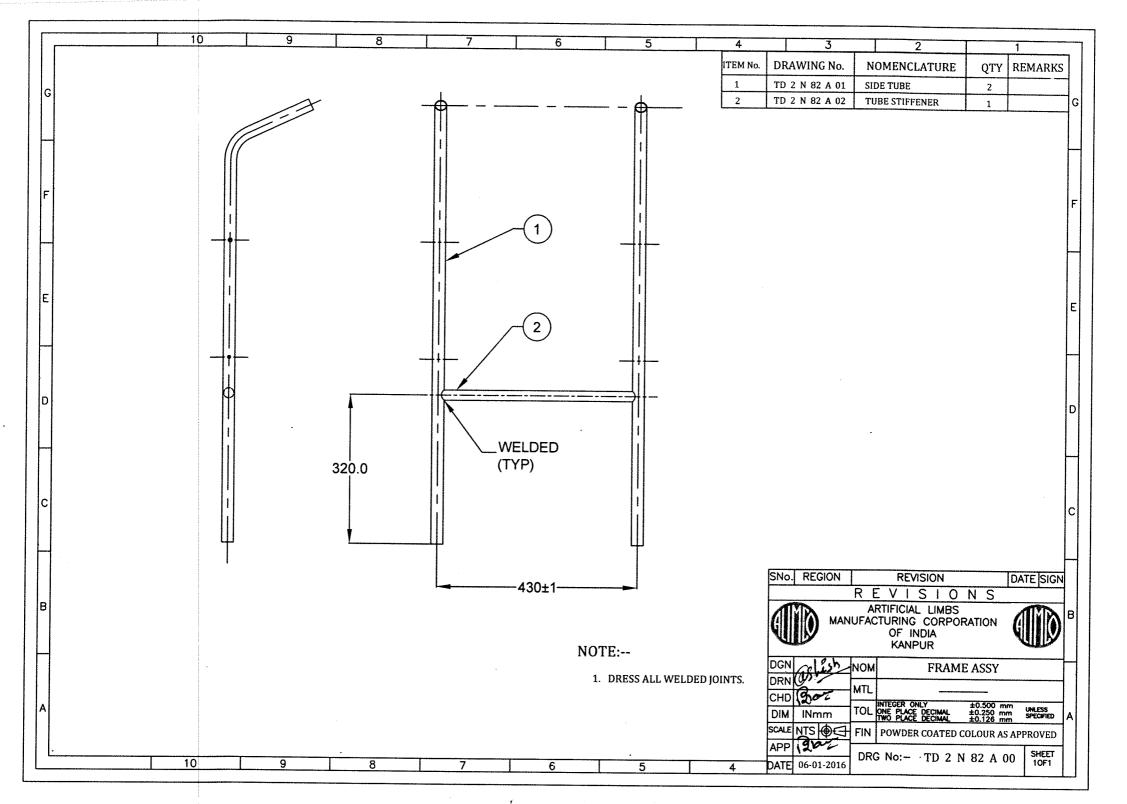


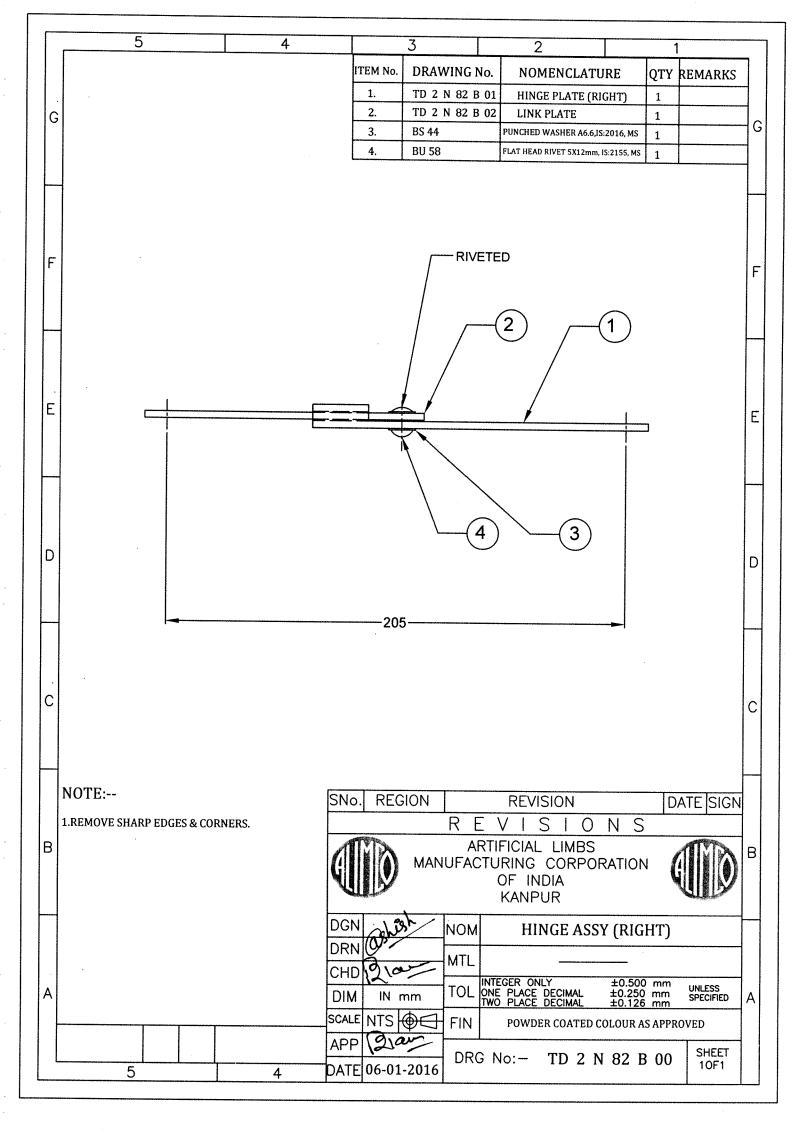


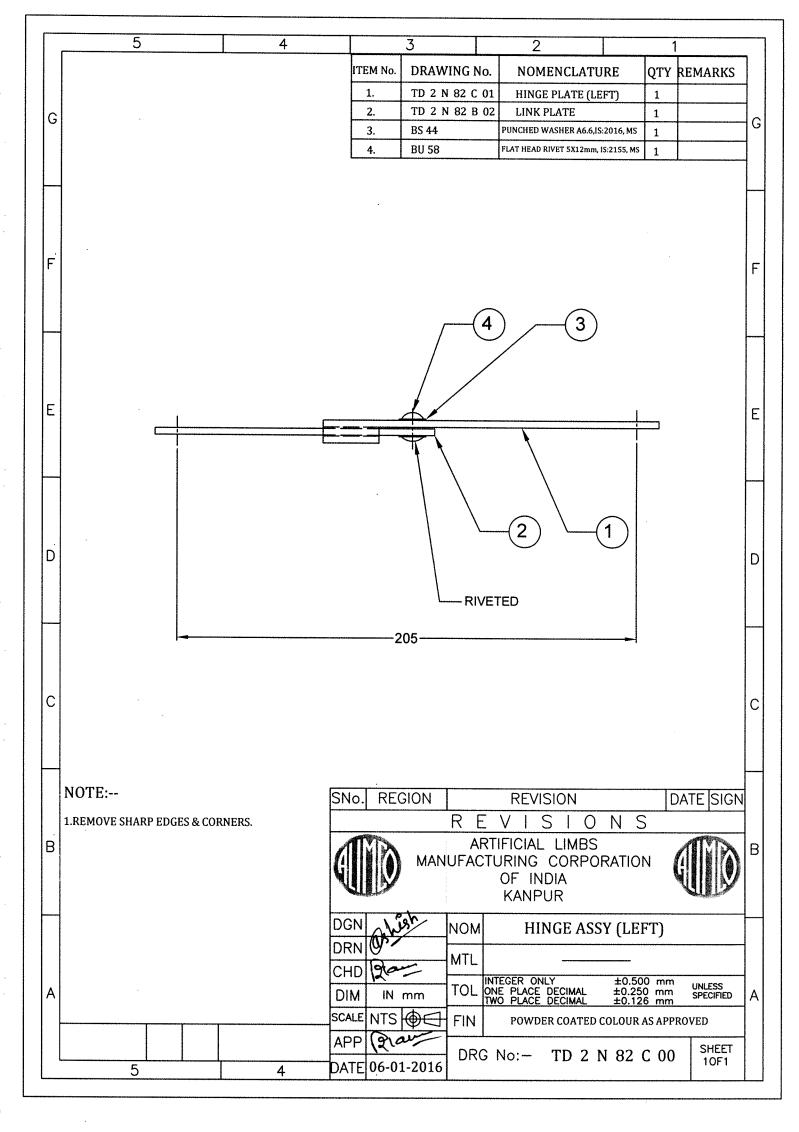
| | A | 1 | 7 | 2 | | |] |
|-----------------------|-------------------------------------|---------------|--------------------------------|--|----------------|--------------|---|
| <u> </u> | 4 EM DRAWING | | 3 | | | Y REMARKS | |
| 1 | o. DRAWING | | NOMENCLATURE | | | T REMARNS | |
| | 1. TD 2 C 98 | | | SUPPORT ASSY | 1 | | |
| | 2. TD 2 C 98 | | REAR LOOP | | 2 | | G |
| | 3. TD 2 C 98 | | | | | | - |
| | 4. TD 2 C 98 | | FOOTREST T | | 1 | | |
| | 5. TD 2 C 98 | | | JPPORT TUBE | 2 | | |
| | 6. TD 2 C 98 7. TD 2 C 98 | | SIDE SUPPO | | 2 | | |
| | <u>7. TD 2 C 98</u> 8. TD 2 C 98 | | REAR CROS | | 1 | | |
| | 9. TD 2 C 98 | | REAR LOOP | | 2 | | |
| | 10. TD 2 C 98 | | SEAT STIFFE | ENER | 2 | | F |
| - | 11. TD 2 C 98 | 3 J 10 | VERTICAL S | TIFFFNER | 1 | | |
| | 12. TD 2 C 98 | | | E SUPPORT TUBE | 1 | | - |
| - | | | STIFFENER | | 2 | | |
| - | | | | | 1 | | |
| - | 14. TD 2 C 98 15. TD 2 C 98 | | | SUPPORT | | | - |
| | | 3 A 02 | | | 1 | | |
| | | | | | 1 | | E |
| - | 17. | | | | 2 | , | |
| - | 18. TD 2 C 98 | | | | 2 | | |
| | 19. TD 2 C 98 20. TD 2 C 98 | | | | 4 | | |
| - | 20. TD 2 C 98 21. LB 86 | DAZI | | EAD TUBE (FACE PI | PE) 1 | | 1 |
| | 22. LB 89 | <u> 1917)</u> | BICYCLE TO | | 2 |) | |
| | 23. LB 99 | | BICYCLE B | OTTOM BRACKET | 2 | <u>}</u> | |
| CYCLE THREAD R.H. | | 01 55 45 21 | | | | | |
| | | MUDGUAR | 111(THROUGH) D FITTING(TYP) | | | 2000 (2)m | C |
| | | 1. SNo. | REGION | DRG REDESIGN & REVISION R E V I S I | O N S | DATE SIGI | |
| | | | | ARTIFICIAL LIME JFACTURING CORF OF INDIA KANPUR | 3S PORATION | | B |
| <u>140 140</u> 665 | 5 | DGN DRN | (han- | NOM FRAM | e asse | MBLY | |
| | | CHD | | TOL INTEGER ONLY TOL ONE PLACE DECIMA TWO PLACE DECIMA | | Im SPECIFIED | |
| | | SCALE APP | NTS OC | FIN POWDER COATE | U CULUUK A | <u> </u> | |
| | | - | 20.08.2013 | DRG No:-TD 2 | C 98 J A | AO SHEET | |

TD2N82000

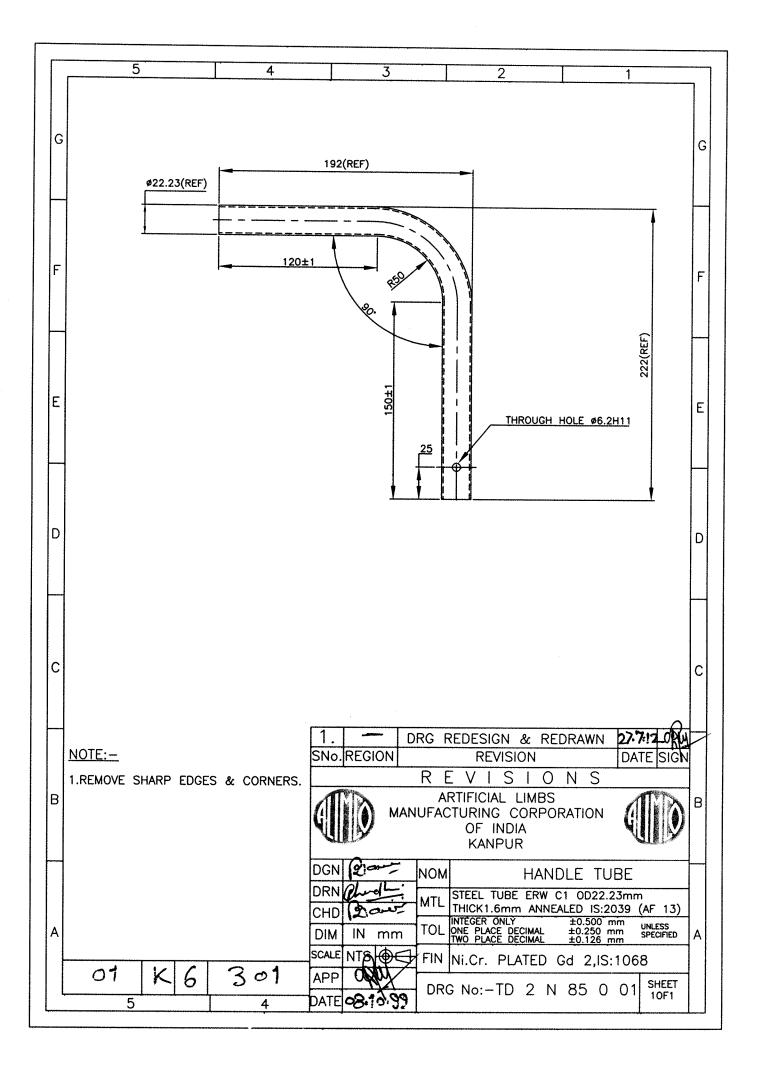


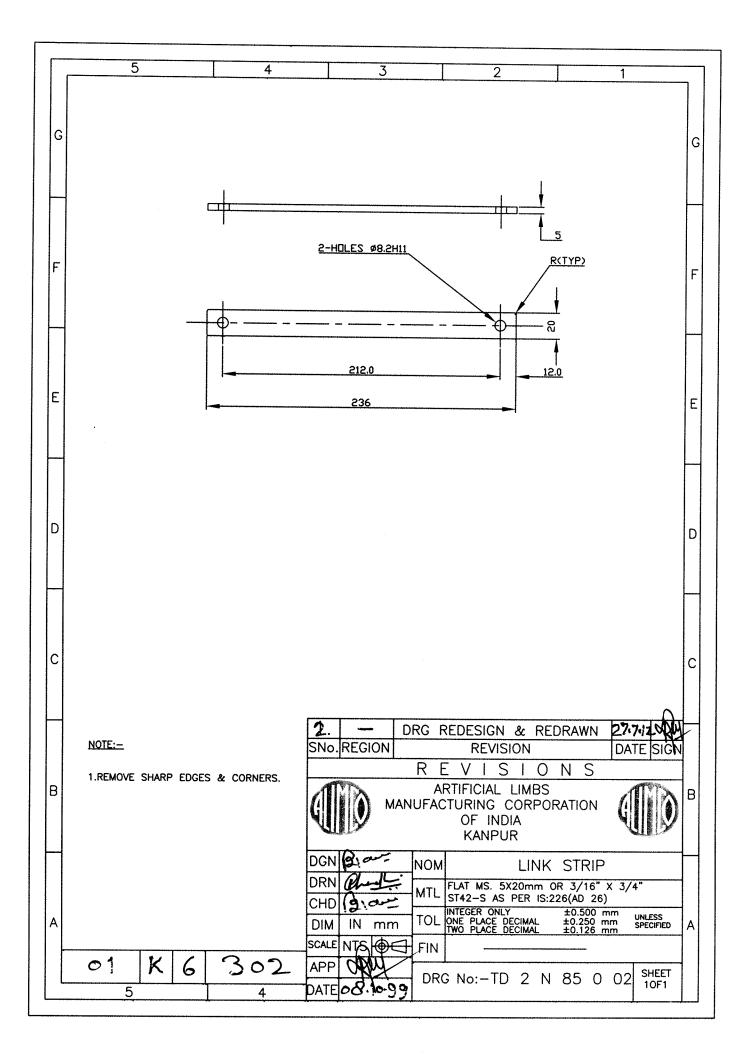


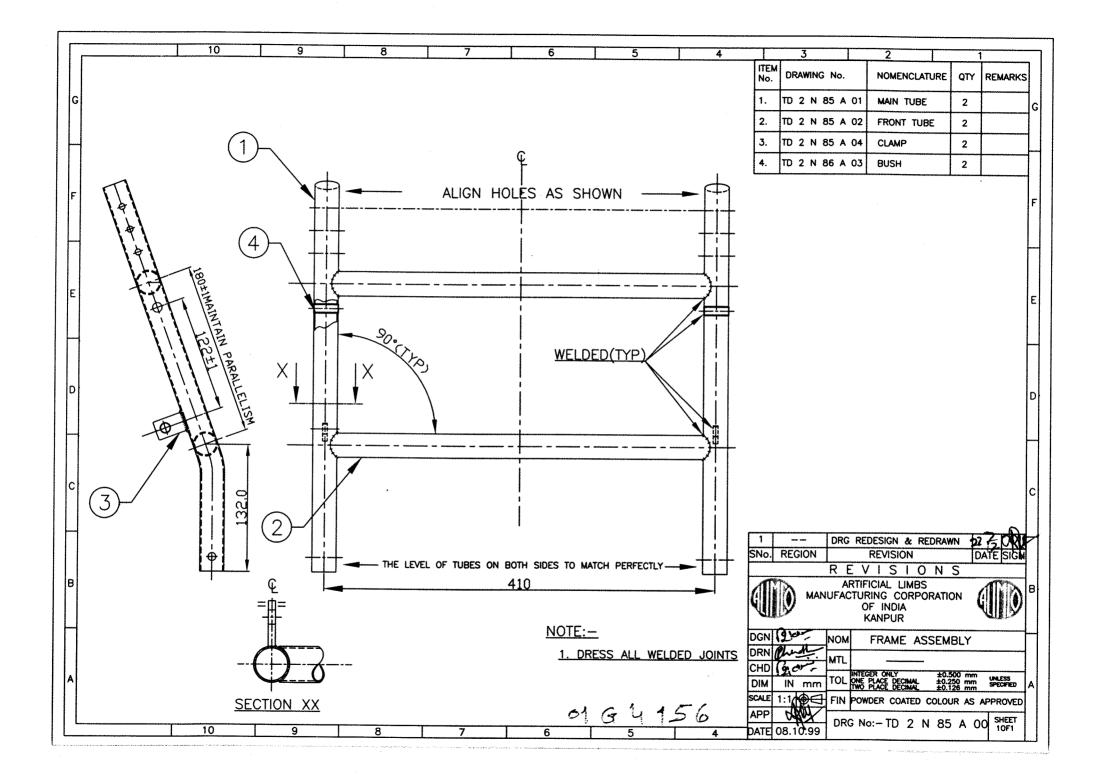


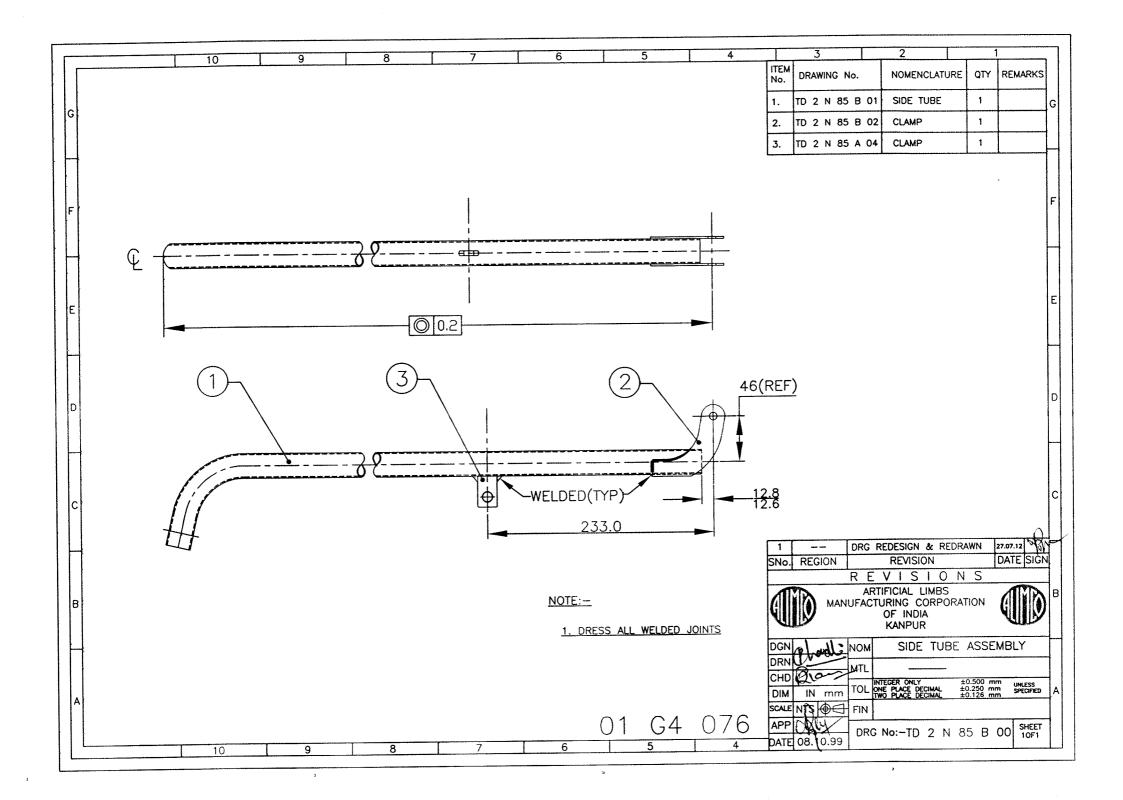


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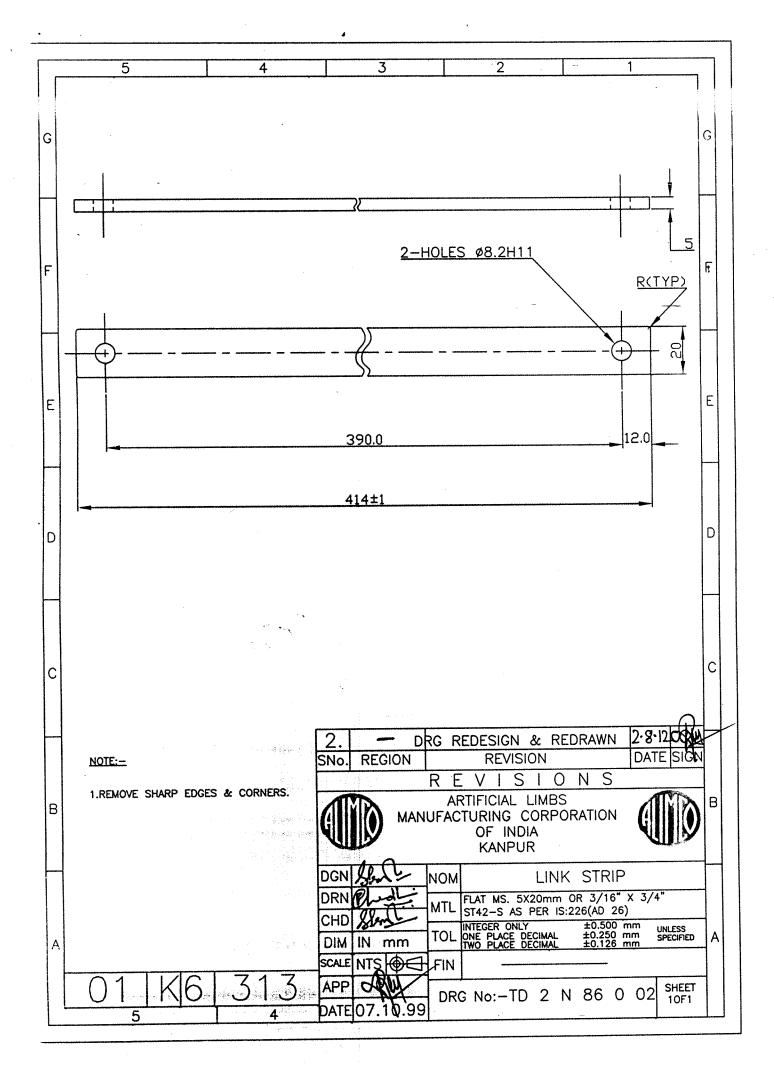


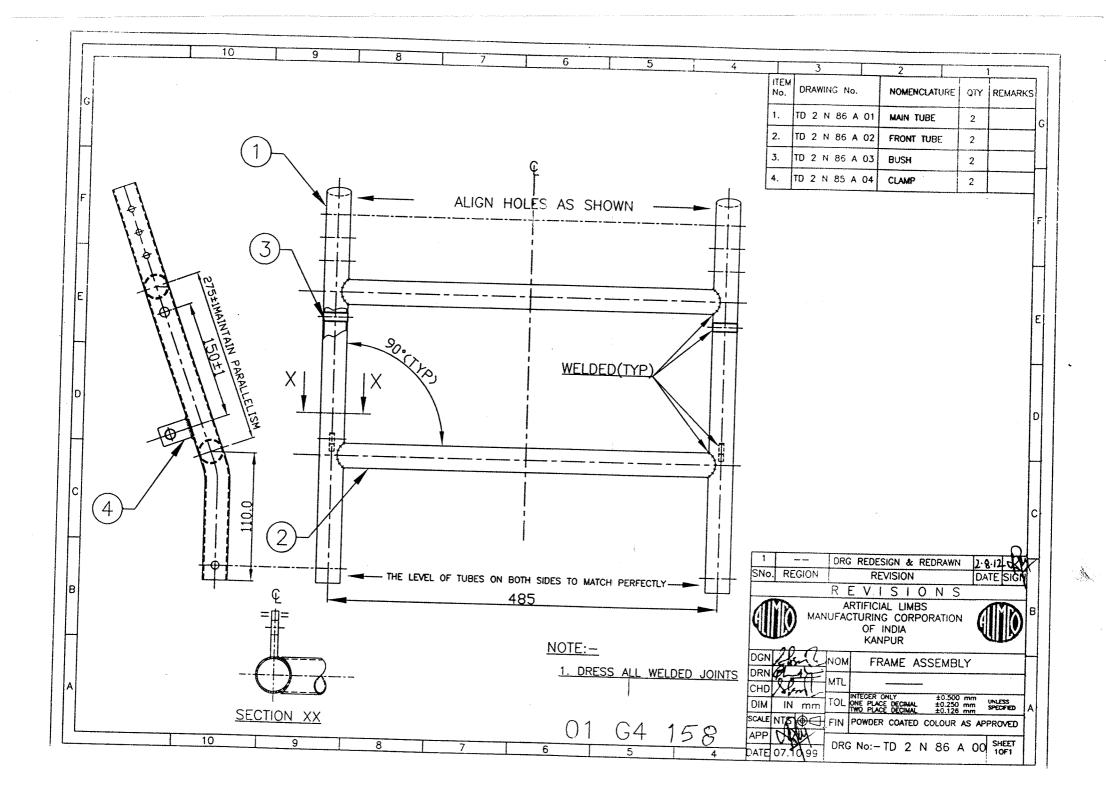


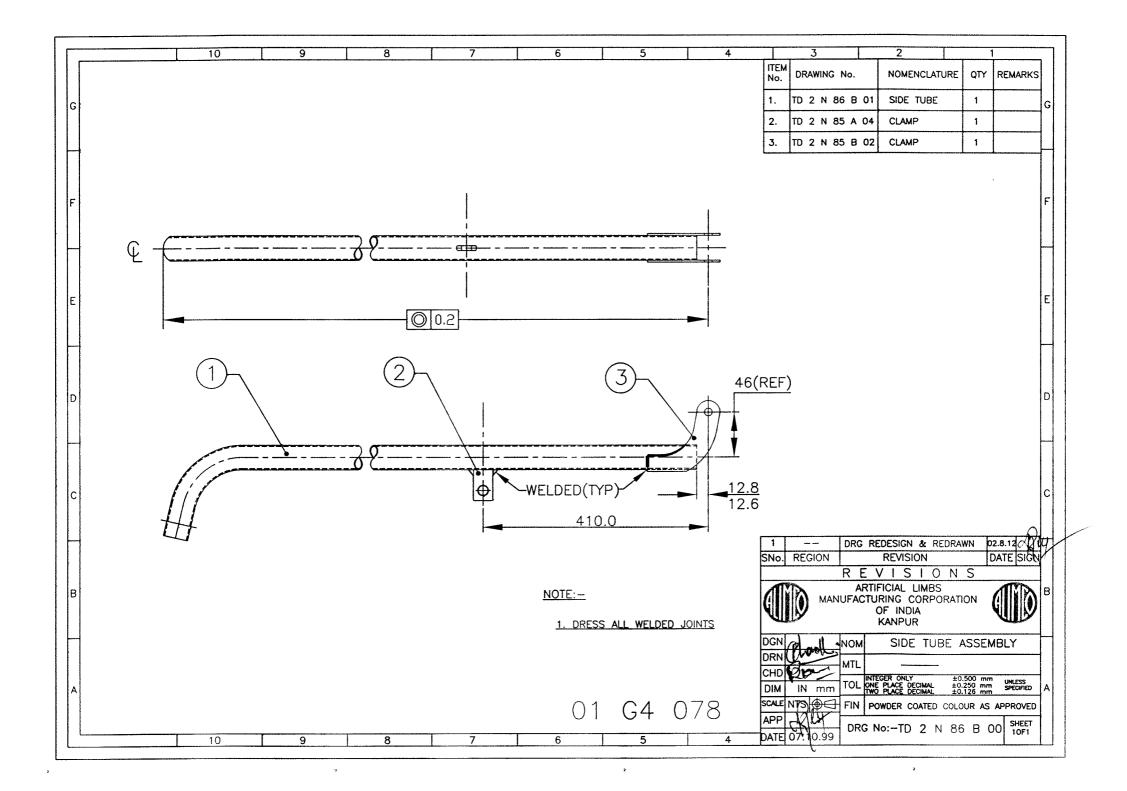


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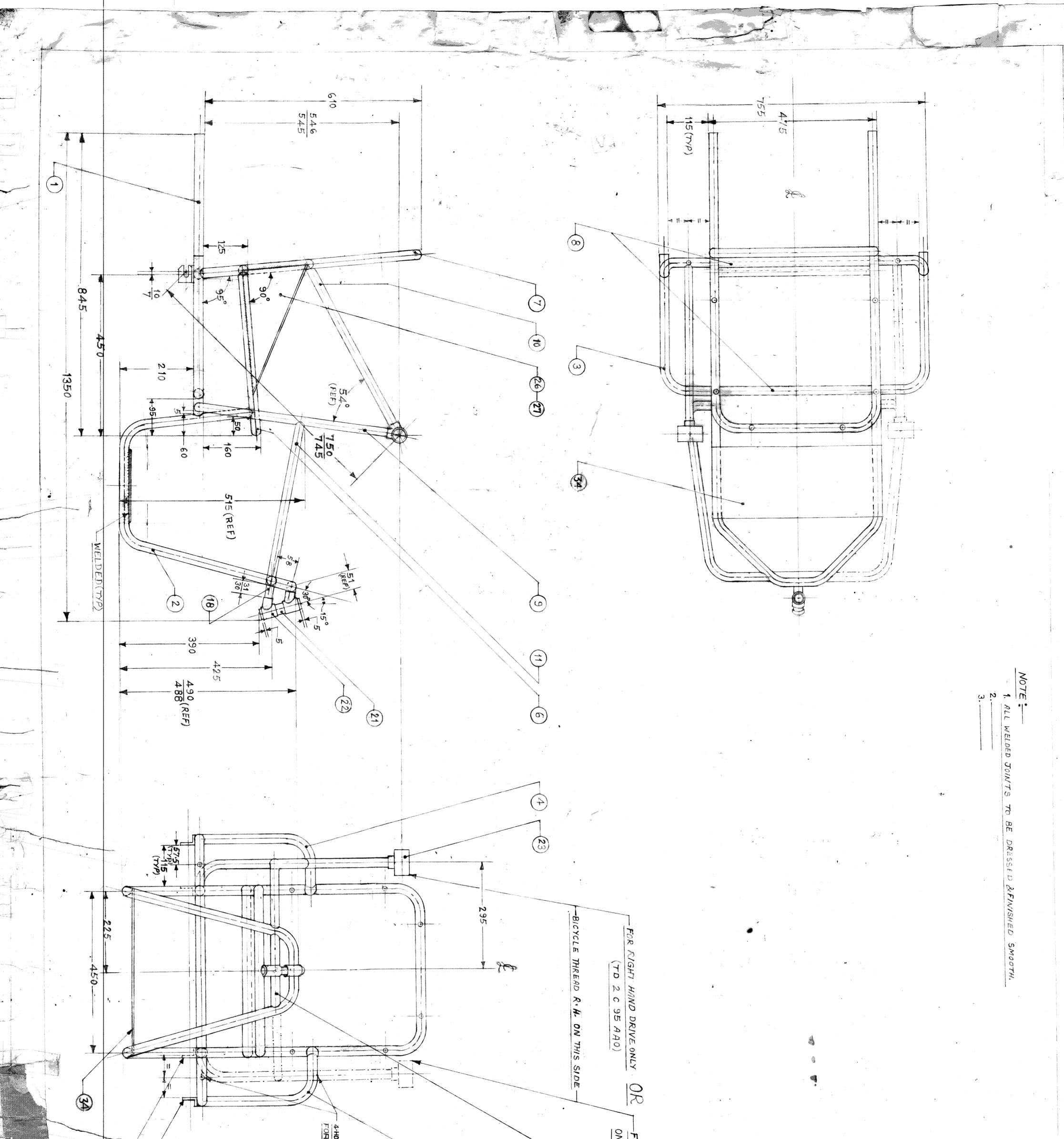
TD2N86000







TD2C95000



| | 6 | HOLES \$52 HTC | UNLY (70 2 | FOR LEFT | | | America 19 militari - Antonio Martinia, anto constato mante Antonio 19 militari |
|-------|---|---|-------------|---|--|---|---|
| | | -TTING | C 96 AAO) | TAND DRIVE | | × × × ================================ | |
| 10050 | | $\frac{1}{2} \rightarrow \sqrt{2} \sqrt{2} \sqrt{2} \sqrt{2} \sqrt{2}$ | | A TD 2 C 95 A TD 2 C 95 | 2 1 TD 2 C 1 TD | 10 2 95 10 2 95 10 2 95 10 2 95 10 2 95 10 2 95 10 2 95 10 2 95 10 2 95 10 2 95 10 2 95 10 2 95 10 2 95 10 2 95 10 2 95 10 2 95 | M DRG-No |
| | MANUFA MANUFA | ITEM NO. 2 ITEM NO. 34 AD 30 TO 33 & NOT 30 TO 33 & NOT 15 HOLES ADDED F ITEM NO. 26 & 7. ITEM NO. 26 & 27. ITEM NO. 12. ITEM NO. 27. ITEM | Constant of | A 17 FOOT RES A 47 FOOT RES A 48 FOOT RE A 40 SIDE GUAN A 10 SIDE GUAN A 10 SIDE GUAN A 19 FOOT RES A 19 FOOT RES D 03 FOOT RES B M5X40 IS:2016 FOOT RE | 16 SIDE GU AAS STIFFN A13 BRACK A14 BRACK BICYCLE (FAC | 02 FOOT REAL 02 FOOT RE 03 SIDE SUP 04 LOOP SU 05 LOOP SU 05 LOOP SU 05 LOOP SU 05 LOOP SU 06 SEAT TU 09 B.B.CROSS A 09 B.B.SHELL 10 VERTICA 11 SIDE FRAM 12 SEAT 12 SEAT 13 BACK RI 14 FOOT R | 1 01 REAR TUE |
| | RED OXIDE PRINT FINAL PAINTING AIR DRYING AIR DRYING AIR DRYING ATTO 2 C 9 | O AS HE KNOW | | T SUPPORT ANGLE EST BD (RIGHT) D FOOT REST D FOOT REST T SUPPORT TUBE EST M5,IS:1365 - 6-6 WASHER B 5-5 MS | ARD (LE) SUPPORT TUBE ER ET (RIGHT) ET (LEFT) HEAD TUBE E PIPE) E PIPE) TOP LUG | L L L L L L L L L L L L L L L L L L L | NCLATURE |
| | AE ASSY (RELLE) AE ASSY (RELE) AE ASSY (RELLE) AE ASSY (RELLE) AE ASSY (RELLE) AE ASSY (RELLE) | NUCED 225,24 17 225,24 17 9.4.10 24.10 17. 9.4.10 17. 9.4.10 24.10 24.10 17. 9.4.10 17. 9.4.10 24.10 17. 9.4.10 24.10 17. 9.4.10 17. 9.4.100 17. 9.4.100 1 | | DELETED DELETED DELETED | | DELETED DELETED DELETED | No OFF REMARKS |
| | | R. R. | | | | | |

