



वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्
Council of Scientific & Industrial Research
राष्ट्रीय वांतरिक्ष प्रयोगशालाएं
National Aerospace Laboratories

Invitation for e-Bids / Notice Inviting e-Tender

Tender No. NAL/PUR/MSD/053/25

Date: 08/09/2025

CSIR - National Aerospace Laboratories (NAL), Bengaluru, Republic of India, is one of the premier research laboratories under aegis of Council of Scientific and Industrial Research (CSIR), an autonomous body under the Department of Scientific and Industrial Research, Government of India, New Delhi. CSIR-NAL is a Science and Knowledge based Research, Development and Consulting Organization. It is internationally known for its excellence in Scientific Research in Aerospace Engineering.

The Director, CSIR-NAL invites e-bids from the Manufacturers, their distributors and Indian Agent of Foreign Principals, if any, for the procurement of the following Goods/Services for its day-to-day research

Sr. No.	Brief Description of material (s)	Quantity
1	Fabrication, Supply and erection of MTS storage tank, MTS day tank, MTS evaporator, Mixing chamber, MTS line, and other all accessories as per the attached specification	1 Set
Note: Please refer Annexure for detailed specifications.		

Type of Bid	Two Bid
Mode Of Procurement	Open Tender
Performance Security	3% of the Purchase Order value

1. The Schedule for Submission of e-Bids and Opening of e-Bids is as follows:

Date & Time of Submission of e-Bid	03/10/2025 - 11.00 Hrs
Date and Time of Opening of e-Bid	03/10/2025 - 11.30 Hrs

2. E-Bids are invited through the electronic tendering process and the Tender Document can be downloaded from the Government e-Marketplace Portal i.e., <https://gem.gov.in>. **The submission of e-Bids will be only through the GeM portal <https://gem.gov.in>. Bids will not be accepted in any other form.**

3. Interested bidders' may obtain further information from the office of the:
Stores & Purchase Officer
Purchase Section
CSIR- National Aerospace Laboratories
PB No.1779, HAL Airport Road, Kodihalli, Bengaluru – 560017
Karnataka-India
Tel #: 080 25086040/6041, Fax #: 080 25269611
Email : purchasek@nal.res.in

पी वी संख्या : 1779, एचएएल एयरपोर्ट रोड, बेंगलूरु-560 017, भारत / P.B.No. 1779, HAL Airport Road, Kodihalli, Bengaluru-560 017, INDIA
फोन / Phone (का/ Off.): +91-80-2508 6040-45, फैक्स/ Fax: +91-80-2526 9611

4. The prospective bidders' should adhere to deadlines specified in Tender details corresponding to this Tender on GeM portal <https://gem.gov.in>.

5. **Bid Security (BS) / Earnest Money Deposit (EMD):**

The bidders has to furnish/submit BID SECURING DECLARATION as per the FORMAT, in the name of "**The Director, National Aerospace Laboratories, Bengaluru**", without which the bid is liable to be rejected.

6. **Open Tender enquiry:**

Only Local suppliers with prescribed local content as detailed in DPIIT Order No. P-45021/2/2017-PP (BE-II) dated 16th Sep, 2020 and subsequent orders issued by Ministry of Finance, Government of India from time to time, are eligible for bidding. bidders' must enclose the certificate declaring the local content of supplies as per the format.

7. **Global Tender Enquiry:**

Either the Indian Agent on behalf of the Foreign Principal or the Foreign Principal can bid directly in a tender but **not** both. However, the offer of the Indian Agent should also accompany the authorisation letter from their principal. To maintain sanctity of tendering system, one Indian Agent **cannot** represent **two** different foreign principals in one tender.

(a) In case of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry.

One manufacturer can also authorize only one agent/ dealer. There can be only one bid from the following:

i)	The Principal manufacturer directly or through one Indian agent on his behalf; and
ii)	Indian/foreign agent on behalf of only one principal.

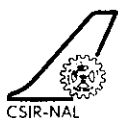
(b) Foreign bidders' must disclose the name and address of agent and representative in India

and Indian bidders' must disclose their foreign principal or associates.

(c) If bidders' is Indian Agent of Foreign Principal, the following instruction shall be complied and as amended from time to time as on the date of issue of Tender:

i)	Bidders' must necessarily comply with conditions of "Make in India" Order No.F-45021/2/2017-PP (BE-II) dated 16-Sep-2020 of Ministry of Commerce and Industry, Government of India, as amended from time to time on the date of issue of Tender.
ii)	The bidders' shall comply with restrictions under Rule 144(xi) of the GFR 2017 related to restrictions on participation of Foreign bidders' and their Authorised Indian Agent/Dealer in terms of Order No.P-45021/112/2020-PP(BE-II) (E-43780) dated 24-Aug-2020 of the Ministry of Commerce and Industry, Department for Promotion of Industry and Internal Trade, as amended from time to time as on the date of issue of Order.

Note: Kindly refer to the first page of Notice Inviting Tender for tender type/mode of procurement and submit the bid accordingly



9. The bids of those bidders' failing to comply the following clauses will be summarily rejected.
- (a) The bidders' proposing to supply finished products directly/indirectly from bidders' of Countries sharing the land border with India should submit copy of registration done with the Ministry of Home Affairs and Ministry of External Affairs.
 - (b) If the products supplied are not from bidders' of Countries sharing land border with India, the bidders' should enclose a declaration
 - (c) The debarment of a bidders' in this tender, if any, is reciprocal of that Principal's Country, if it is Import.

Note: Kindly refer to the first page (NIT) for tender type (i.e. Open Tender Enquiry / Global Tender Enquiry) and submit your bid accordingly.

10. As per Govt. of India procurement policies,
- a) The purchaser intends to give purchase/service preference to local supplies (Preference to Make in India) in case the cost of procurement is up to Rs.50.00 (fifty) lakhs.
 - b) The procuring entity intends to give purchase/service preference to products/goods manufactured by micro, small and medium enterprises.
11. Bidders' are requested to refer to the instructions regarding Procurement Policies for "Make in India", issued by Ministry of Commerce and Industry, Department of Industrial Policy and Promotion dated. 28-May-2018, and 4-Jun-2020 and guidelines as and when issued.
12. Printed conditions, if any, submitted along with the quotation shall not be binding on us.
13. Bidders' to certify the quoted price is not higher than the price quoted with other Government Institution for similar specifications and quantity during the current financial year.
14. Payments shall be made promptly by the Purchaser but in no case later than thirty (30) days after submission of the invoice or claim by the Supplier. While claiming the payment, the supplier should certify in the bill/invoice that the payment being claimed strictly in terms of the contract and all obligations on the part of the supplier for claiming the payment have been fulfilled as required under the contract.

Mandatory fields in Tax Invoice and Receipt Vouchers	
Invoice Number and Date	Name, address and GSTIN of the supplier
Shipping and billing Address	Customer Name & GSTIN [CSIR-NAL] Bank Details
HSN Code/SAC Code	Place of Supply
Taxable value and discounts	Item details i.e. description, quantity (number), unit, the total value
Signature of the Supplier	Rate and amount of taxes i.e. CGST/SGST/IGST

15. Kindly, note CSIR-NAL GST No.29AAATC2716R1ZB. The bidders' are requested to furnish their GST no. in their invoice, failing which NAL will not be able to make the timely payment.
16. Unsolicited / conditional / unsigned Quotations/Quotations received after the due date and time shall be summarily rejected. The bidders' shall comply the terms and conditions of the tender, failing which, the offer shall be liable for rejection.
17. The prospective bidders' are requested to refer to the Standard Terms and Conditions available on NAL Internet (www.nal.res.in) under the icon Tender-Purchase before formulating and submitting their bids'.
18. The Director, CSIR-National Aerospace Laboratories (NAL), Bengaluru, India reserves the right to accept or reject any bids or accept all tenders either in part or in full or to split the order, or to annul the bidding process without assigning any reasons there for.

Thanking you,

Yours faithfully


Stores & Purchase Officer

Tender No.:

BID-SECURING DECLARATION FORM

Date: _____

Bid No. _____

To (insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

(a)	have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
(b)	having been notified of the acceptance of our Bid by the purchaser during the period of bid validity
	(i) fail or reuse to execute the contract, if required, or
	(ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown)
in the capacity of (insert legal capacity of person signing the Bid Securing Declaration).

Name: (insert complete name of person signing the Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of : (insert complete name of Bidder)

Dated on _____ day of _____ (insert date of signing)

Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

Tender No.:

SELF DECLARATION CERTIFICATE FOR LOCAL CONTENT

In Respect of NIT/RFQ No.issued by CSIR-National Aerospace Laboratories, Bengaluru

I, the undersigned, (full names), do hereby declare, in my capacity as of(name of bidder / OEM), the following:

(a) The facts contained herein are within my own personal knowledge.

(b) I have read and understood the requirement of Local Content and same is specified as percentage calculated in accordance with the definition provided at clause 2 of revised **Public Procurement (Preference to Make in India) Order 2017**.

"Local content" as per above order means the amount of value added in India which shall be the total value of items procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value in percent."

(c) I have satisfied myself that the goods/services/works to be delivered in terms of the above-specified NIT comply with the local content requirements and I hereby confirm in respect of quoted item(s) that:

(i) Local Content is equal to ----- (in percentage) and come under 'Class-I Local Supplier Category' (The local content requirement to categorize a supplier as Class I Local Supplier is minimum 50%)

Or

(i) Local Content is equal to ----- (in percentage) and come under 'Class-II Local Supplier Category' (The local content requirement to categorize a supplier as Class II Local Supplier is minimum 20%)

(Tick appropriate Category of Local Supplier).

(d) The local content calculated using the definition given above are as under:

Sl. No	Name of Item / Equipment	Local content calculated as above (%)	Location of local value addition (Location shall be the specified as name of city or district, etc.)	Imported content including all Customs duties (%)
Note: Attach separate sheet duly signed if space is not sufficient.				

(e) I understand that if we are offering products with local content less than the minimum requirement prescribed under Clause 5 of the above order, we will fall under the category of Non-Local Suppliers. We can't claim ourselves as Class-I local suppliers/ Class-II local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC/CMC etc. as local value addition.

(f) I also understand; false declarations will be in breach of the code of integrity under rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

SIGNATURE:

Seal / Stamp

DATE: _____

NB:

(i) Before completing this declaration, bidders must study the General Conditions, Definitions, Government Directives applicable in respect of Local Content & prescribed tender conditions.

(ii) In case the bidder is supplier and not OEM, then the above mentioned MII certificate should be given by the OEM in their letter head.

(iii) Local content percentage shall be declared item wise or tender wise strictly as per the terms of the tender.

(iv) Local Content Declaration to be signed by Chief Financial Officer or other Legally Responsible Person Nominated in Writing by The Chief Executive or Senior Member/Person with Management Responsibility (Corporation, Partnership or Individual).

(v) The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

Tender No.: NAL/PUR/

Format for declaration by the Bidder for Code of Integrity & Conflict of Interest (This declaration should be furnished on the Bidders Letter Head)

Ref. No: _____

Date _____

To,

(Name & address of the Purchaser)

Sir/Madam,

With reference to your Tender No. _____ dated _____ I/We hereby declare that we shall abide by the Code of Integrity for Public Procurement as mentioned under Para 1.3.0 of ITB of your Tender document and have no Conflict of Interest.

The details of any previous transgressions of the Code of Integrity with any entity in any country during the last three years or of being debarred by any other Procuring Entity are as under:

- a)
- b)
- c)

We undertake that we shall be liable for any punitive action in case of transgression/contravention of this code.

Thanking you,

Yours Sincerely,

Signature
(Name of the Authorised Signatory)
Company Seal

Tender No.: NAL/PUR/

SELF CERTIFICATION

With reference to Clause No. 1.1.3, of this tender and GoI, Ministry of Finance Order No.: F. No. 6/18/2019-PPD, dated 23rd July, 2020, on "Restrictions under Rule 144 (xi), of the General Financial Rules (GFRs)", & OM No. F. No. 18/37/2020-PPD, dated 8th February, 2021, and as amended from time to time on the date of issue of Tender:

It is certified that

- ☐ We are not a bidder of a country which shares a land border with India.

OR

- ☐ We are a bidder of a country which shares a land border with India, however, we are eligible to bid in any procurement whether of goods or services as we are registered with the Competent Authority as specified in Ministry of Finance (GoI) Order No. 6/18/2019 – PPD, dated 23rd July 2020. Copy of valid registration is attached.
- ☐ Tick as applicable

Place:

Date:

Authorised Signatory Name:
Company Seal

TERMS & CONDITIONS

Tender No.		
Sr. No.	Approximate weight of the Consignment	Approximate dimensions of the consignment
1		
2	Indian Customs Tariff No. and HSN No. (ICT & HSN No.)	
3	Country of Origin	
4	Percentage of Local Content	
5	Annual Turnover	
6	Type of Supplier	
7	Mode of Shipment By Air / SEA / Road / e-download	
8	Port of Destination	Final Destination
9	Delivery Term (INCO Term), as the case may be	
10	Delivery Schedule including Supply, Installation, Commissioning, Training & Acceptance	
a)	Delivery of the Item BoQ/NIT [In weeks / Days / Months] from the date of PO / LC / ILC / Advance [Mention the appropriate term]	
b)	Installation & Commissioning from the date of Delivery of item [In weeks/Days/Months]	
c)	Training from the date of Installation & Commissioning of item [In weeks/Days/Months]	
d)	Acceptance from the date of Training [In weeks/Days/Months]	

11	Installation & Commissioning (if any) Quoted Price inclusive or exclusive	
12	Training (if any) Quoted Price inclusive or exclusive	
13	Partial Shipment [If partial shipment required, the charges incurred towards partial shipment to be borne by Bidder]	
14	Payment Term	
15	Currency of Bid/Quotation	
16	Statutory Levies [GST/IGST or any other taxes, duties] % of tax to be mentioned.	
17	Bidder GST No.	
18	Bidder Bank Details along with Cancelled cheque	
19	Insurance Coverage	
20	Warranty	
21	Agree to submit Performance Security, if any	

23	Validity of offer	
24	Order to be placed [Full address, Tel #, Fax #, Email Id, Contact Person]	
25	Nature of the item [to be specified] Hazardous/Radio Active/ Perishable/ Dangerous/ Shelf-life or any other	
26	Bidder to mention in the quote, any special carrier requirement is necessary for transport viz Special License, ODC etc.,	
27	Any other	
28	Total Price quoted as per BoQ/Price Schedule/List of Deliverables exclusive of tax	
29	Total Price quoted as per BoQ/Price Schedule/List of Deliverables inclusive of tax	
Note:	Unit Price indicating currency FOB (named port of shipment or FCA (named place of delivery)	



Fabrication, supply and erection of MTS storage tank, MTS day tank, MTS evaporator, Mixing chamber, MTS line, and other all accessories as mentioned below

1.0 Introduction

Methyltrichlorosilane (MTS) liquid is stored in specially designed SS316L tank placed over a load cell and connected to the CVI furnace to supply the MTS liquid through mass flow meter, MTS day tank placed over a load cell, MTS evaporator, mixing chamber.

The major parts are namely,

- I. MTS storage tank
- II. Load cell (0-1500 kg and 0-200kg)
- III. MTS day tank
- IV. MTS evaporator
- V. Mixing Chamber

2.0 MTS storage tank (1336)

Tank is to be fabricated using SS316L material. Fabrication/welding should be as per BS5500 or ASME section VIII DIV II as per the drawing (C-1336). Material (SS316L) is to be tested by the vendor and stamped in the presence of CSIR – NAL before using it for vessel fabrication.

3.0 MTS day tank

MTS day tank (as per drawing C-1337) is to be built to BS5500 CAT3/ ASME sec VII DIVII/1, for an internal pressure of 15 PSI using 316L stainless steel material. Material (SS316L) is to be tested by the vendor and stamped in the presence of CSIR – NAL before using it for vessel fabrication.

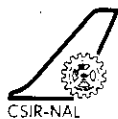
4.0 MTS evaporator Assembly (C – 3305, C – 4331, C – 3332, C – 3333)

5.0 Mixing chamber (C-3331)

6.0 Bill of materials

Sl.No.	Name of the item	Qty.	EM/Supplier/Name	Remarks
1.	MTS storage tank as per Drawings	1	-	As – per BS5500/ASME Sec VII DIVII/1
2.	MTS tank as per Drawing	1	-	As – per BS5500/ASME Sec VII DIVII/1
3.	MTS Evaporator	1	-	As – per BS5500/ASME Sec VII DIVII/1

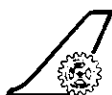
4.	50KF	2	-	As – per BS5500/ASME Sec VII DIVII/1
5.	1/2" NPT socket	5	-	As – per BS5500/ASME Sec VII DIVII/1
6.	170 mm inspection hatch fort vale	1	-	As – per BS5500/ASME Sec VII DIVII/1
7.	1/2" NPT weld socket	8	-	As – per BS5500/ASME Sec VII DIVII/1
8.	Load cell	2	-	As – per BS5500/ASME Sec VII DIVII/1
9.	6mm Swagelok ball valve	4	-	As – per BS5500/ASME Sec VII DIVII/1
10.	10mm ball valve	9	-	As – per BS5500/ASME Sec VII DIVII/1
11.	Absolute pressure gauge (-1bar to 1bar) 6mm	2	-	As – per BS5500/ASME Sec VII DIVII/1
12.	NRV 6mm	2	-	As – per BS5500/ASME Sec VII DIVII/1
13.	6mm T	2	-	As – per BS5500/ASME Sec VII DIVII/1
14.	6mm – 1/4" connector	2	-	As – per BS5500/ASME Sec VII DIVII/1
15.	1/2" NPT – 1/8" OD end connector	1	-	As – per BS5500/ASME Sec VII DIVII/1
16.	10mm OD end needle valve	2	-	As – per BS5500/ASME Sec VII DIVII/1
17.	10mm NRV	2	-	As – per BS5500/ASME Sec VII DIVII/1
18.	Ar. Flow indicator	2	-	As – per BS5500/ASME Sec VII DIVII/1
19.	10mm OD end T connector	2	-	As – per BS5500/ASME Sec VII DIVII/1



20.	1/2" NPT -10mm OD end connector	8	-	As – per BS5500/ASME Sec VII DIVII/1
21.	10mm OD – 1/4" OD end connector	1	-	As – per BS5500/ASME Sec VII DIVII/1
22.	Single stage regulator with 2 gauge & Inlet & outlet 6mm OD end connector/Pressure sensor with necessary connectors.	1 unit	-	As – per BS5500/ASME Sec VII DIVII/1

Important points to be noted

- I. Hydrostatic pressure test to be carried out as per standard in the presence of CSIR – NAL personal
- II. Hydrogen leak test to be carried out for MTS storage tank, MTS day tank, MTS evaporator, Mixing chamber and MTS line.
- III. Nitrogen pressure test to be carried out for MTS storage tank, MTS day tank, MTS evaporator, mixing chamber and MTS line. MTS storage tank, MTS day tank, MTS evaporator, mixing chamber and MTS line to be pressurised to 2-3bar (g) and left for 12h. No leak should be noticed.
- IV. Material (SS316L) is to be tested by the vendor and stamped in the presence of CSIR – NAL before using it for vessel fabrication.



CSIR-National Aerospace Laboratories, Bengaluru - 560 017, India

Fabrication, supply and erection of MTS (Methyltrichlorosilane) storage tank, MTS day tank, MTS evaporator, Mixing Chamber, MTS line, and other accessories

Job Requirements:

- MTS storage tank of SS316L as per drawing (C 1336) following the BS5500 or ASME standard SEC VII/DIV II/1
- MTS day tank of SS316L as per drawing (C 1337) with internal pressure of 15 PSI following the BS5500 or ASME standard SEC VII/DIV II/1
- MTS evaporator assembly of SS316L as per drawing (C 3305, C 4331, C 3332, C 3333) following the BS5500 or ASME standard SEC VII/DIV II/1
- MTS mixing chamber following the BS5500 or ASME standard SEC VII/DIV II/1
- Material (SS316L) is to be tested by the vendor and stamped in the presence of CSIR-NAL before using it for vessel fabrication.
- Vendor must carry out hydrostatic test in presence of CSIR-NAL personnel
- Hydrogen leak test to be carried out for MTS storage tank, MTS day tank, MTS evaporator, mixing chamber and evaporator line
- Nitrogen pressure test to be carried out for MTS storage tank, MTS day tank, MTS evaporator, mixing chamber and evaporator line
- Nitrogen leak test to be carried out for MTS storage tank, MTS day tank, MTS evaporator, mixing chamber and evaporator line at 2 bar pressurized condition, 12 hours (no leaks should be detected).
- Material SS316L should be tested by vendor and stamped in presence of CSIR-NAL personnel

Vendors Requirements:

- Vendors must adhere to recognized codes and standards such as ASME Section VIII Div. II
- Vendor must provide design & manufacturing documentation, including structural and fabrication drawings, at each stages of fabrication
- Vendor must be competent with handling SS materials, welding procedure as per ASME standards, pre-fabrication checks (ovality, flatness, alignment tolerance, approved jigs and fixtures etc.), internal corrosion prevention and protection procedure etc.
- Vendors must provide a Quality Plan and an Inspection & Test Plan (ITP) covering all phases — from design and material procurement to fabrication, inspection, testing, and packaging
- Vendor must provide Material certifications confirming grade and composition (e.g., SS 316L) must comply with ASME standards
- Vendor must provide appropriate external protection during packaging and transporting
- Vendor must provide Proven Track Records (PTRs): at least one tank of similar grade (SS 300-series) commissioned in the past 05 years

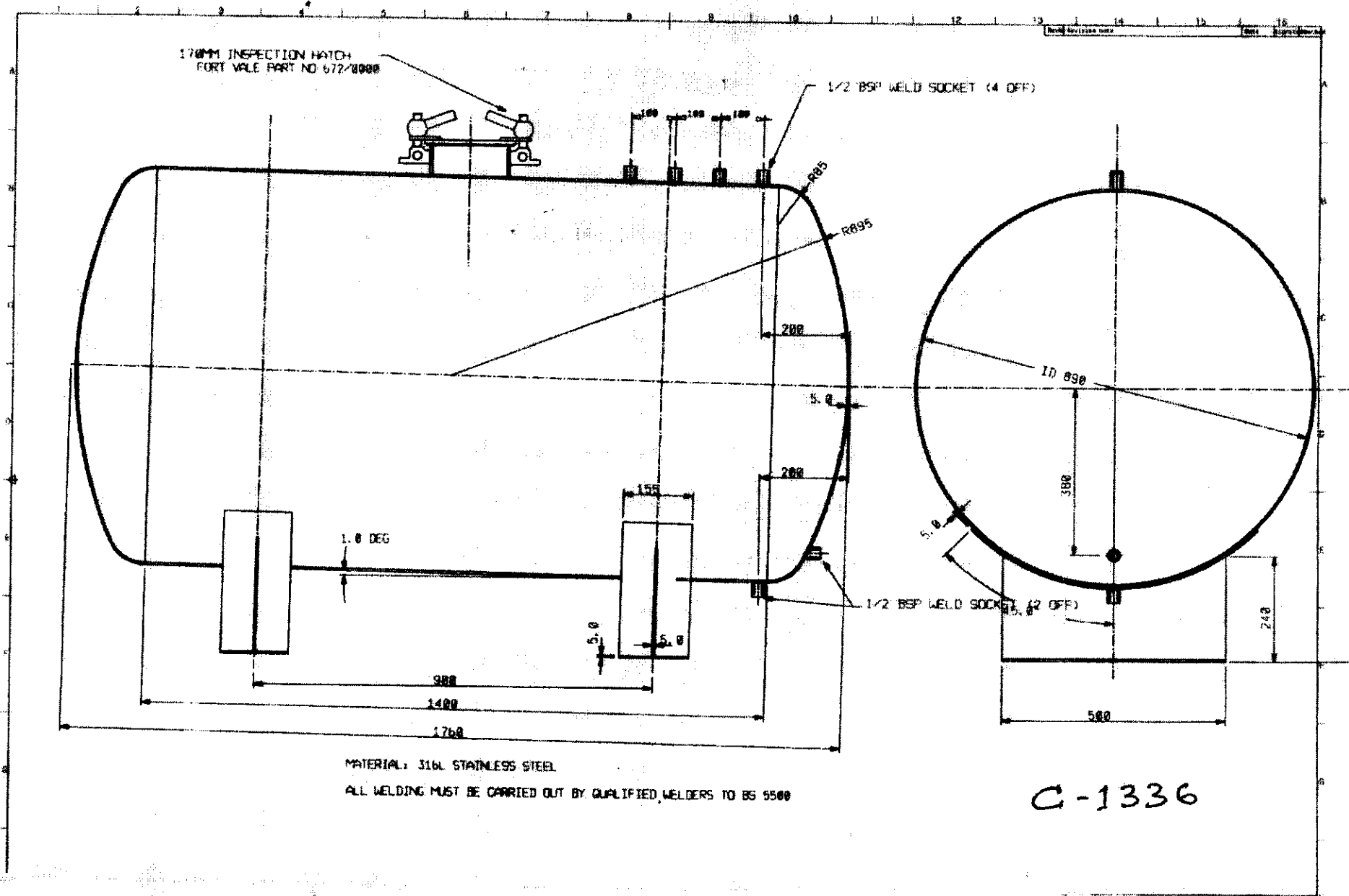
Acceptance test procedure:

- Vendor must carry out hydrostatic test in presence of CSIR-NAL personnel
- Hydrogen leak test to be carried out for MTS storage tank, MTS day tank, MTS evaporator, mixing chamber and evaporator line
- Nitrogen pressure test to be carried out for MTS storage tank, MTS day tank, MTS evaporator, mixing chamber and evaporator line

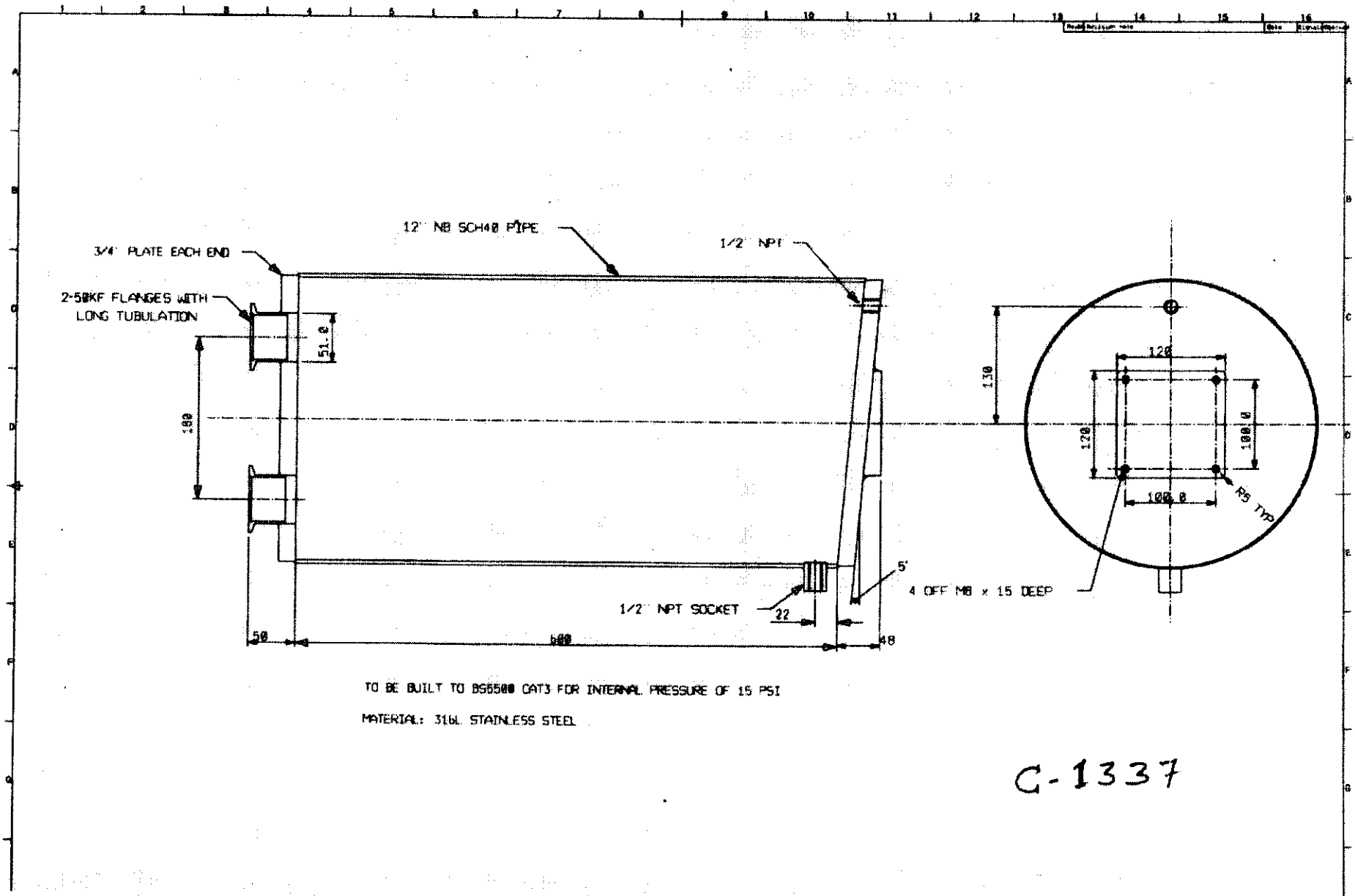
Annexure-1

- Nitrogen leak test to be carried out for MTS storage tank, MTS day tank, MTS evaporator, mixing chamber and evaporator line at 2 bar pressurized condition, 12 hours (no leaks should be detected).
- Material SS316L should be tested by vendor and stamped in presence of CSIR-NAL personnel

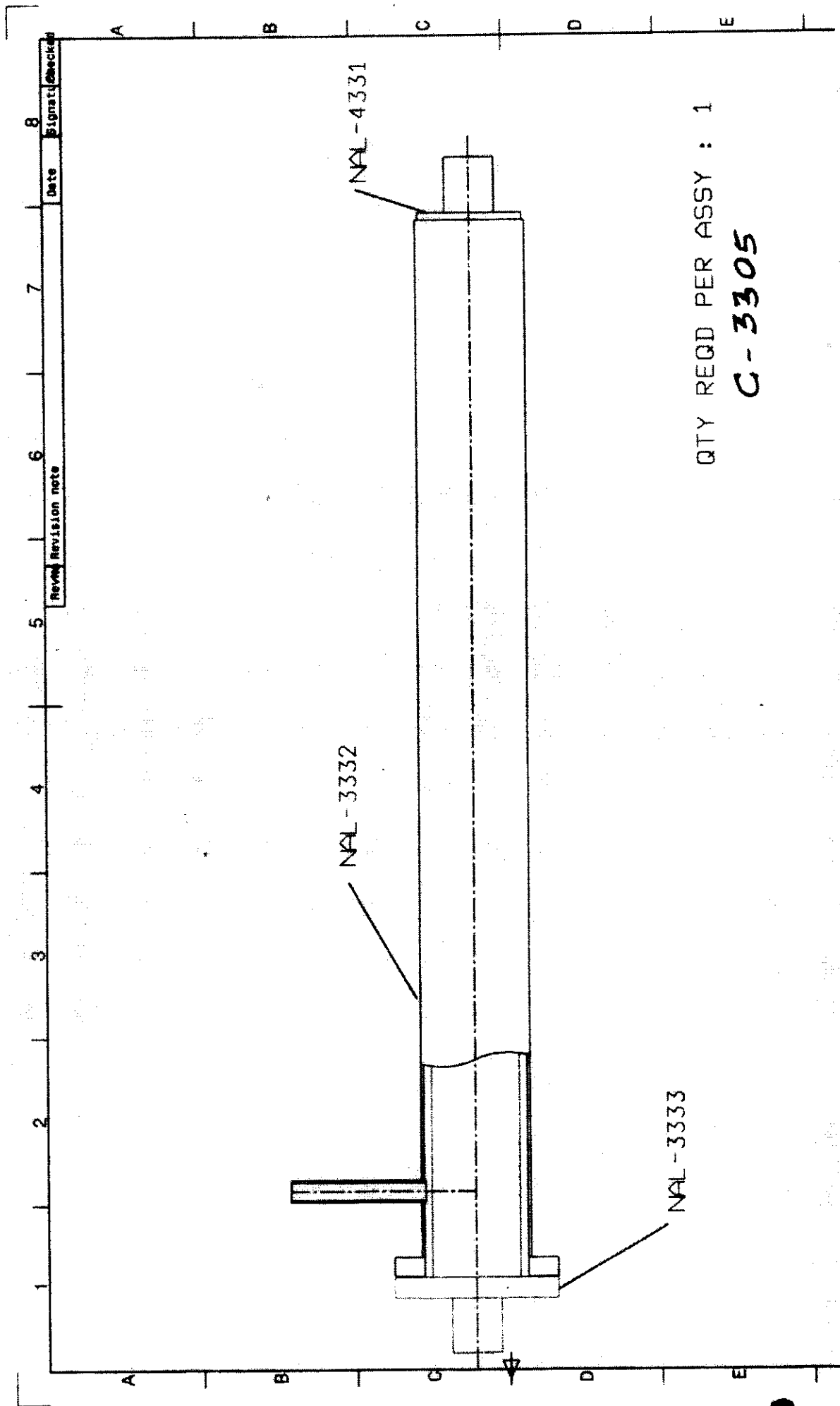
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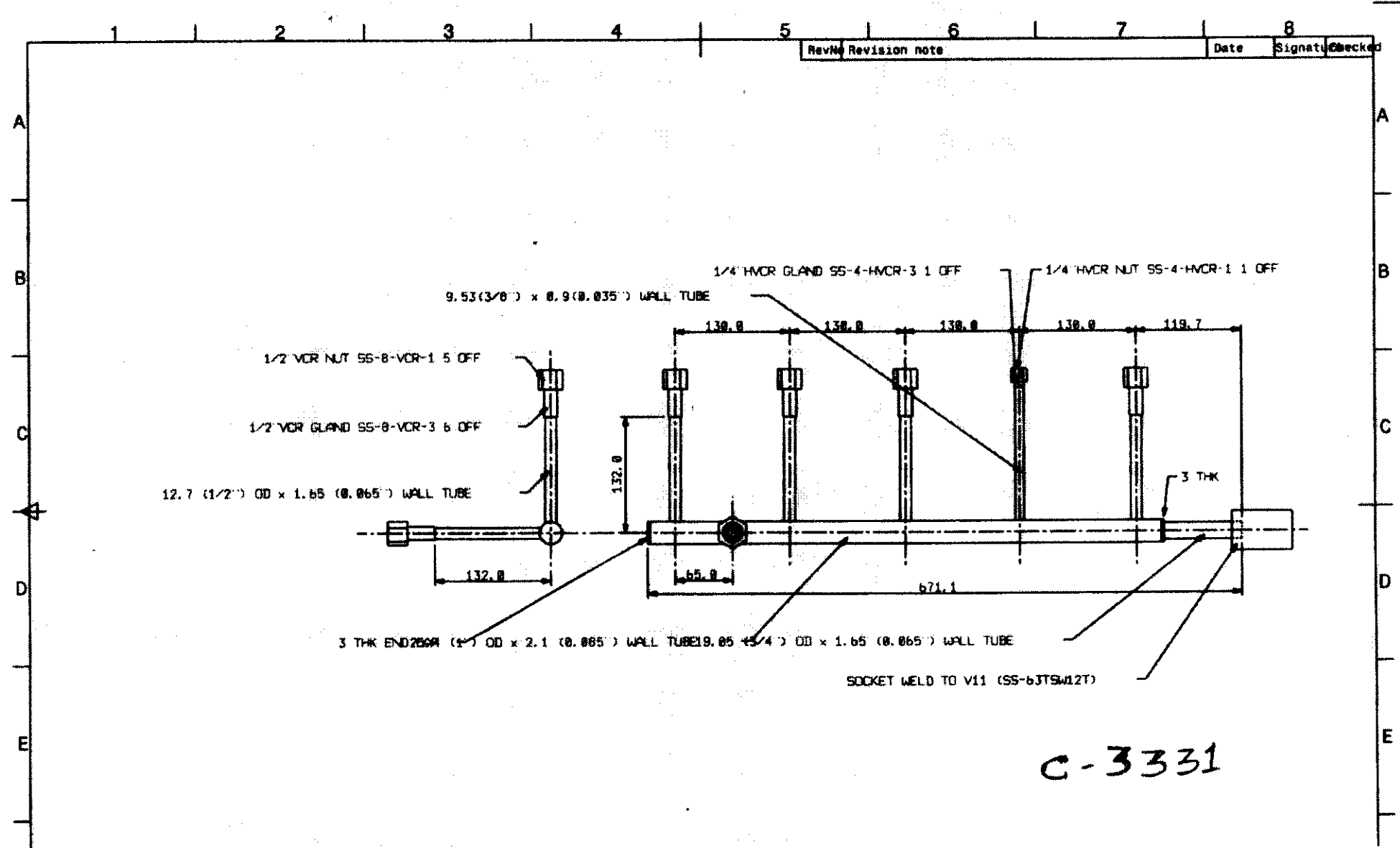
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QTY REQD PER ASSY : 1

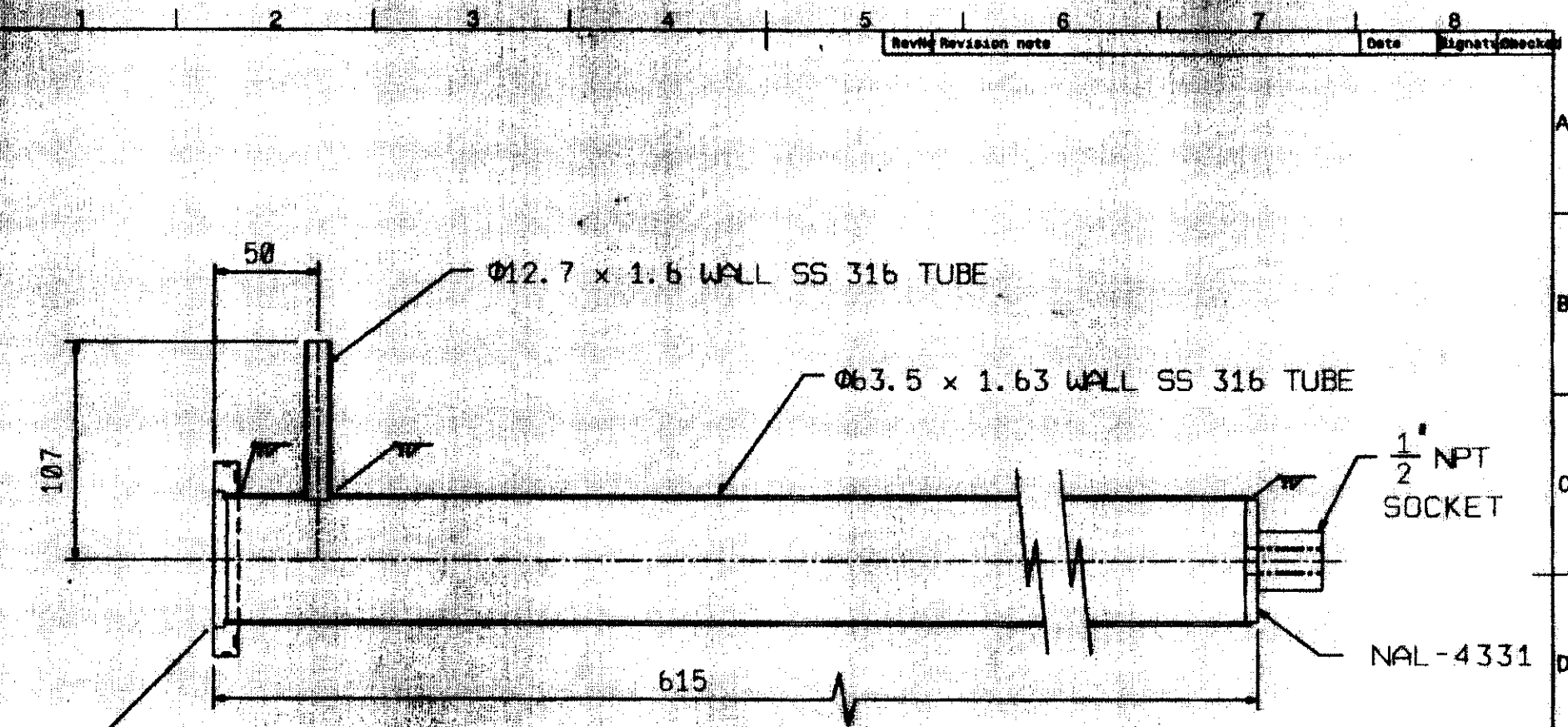
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MSD/053/25



C-3331

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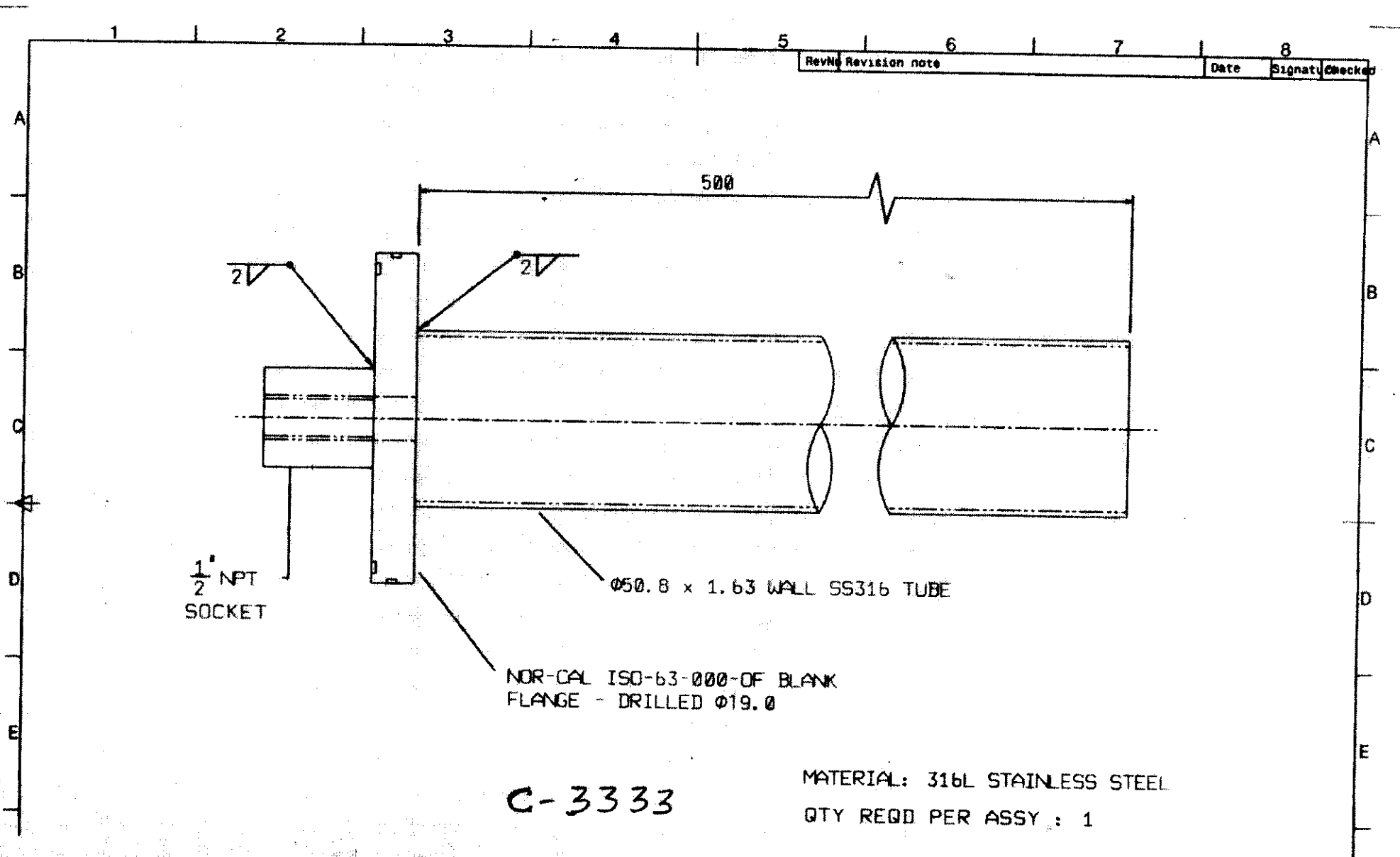


NOR-CAL ISO-63-250-OF
FASTNER FLANGE

MATERIAL: 316L STAINLESS STEEL
WELD ALL JOINTS AND SEAMS

C-3332

MSD/053/25



MSD 1053/25

