

BHARAT HEAVY ELECTRICALS LIMITED
QUALITY DEPARTMENT, BHOPAL

QND/EOI/25-26/01 Rev-00

Expression of interest for EDDY CURRENT TESTING of Integral Low Finned Tubes (SA268 TP439 Welded construction) using Encircling Method as per ASTM E309 & ASME SA1016

BHEL Bhopal is manufacturing Moisture Separator & Reheater for 700MW Nuclear power plants for Kaiga-5&6 and GHAVP-1&2 wherein the welded Integral Low Fin Tubes of SA268 TP439 are used for heat transfer in reheater bundles. Considering criticality of equipment, these welded tubes are tested for Ultrasonic & Eddy current testing at base tube stage and further testing by Eddy current & Hydrostatic after finning at Tube supplier (Foreign supplier in present case) works on random sampling basis. These finned tubes are to be further tested by Eddy current testing after receipt from Tube supplier before taking for insertion to tube bundles.

Brief Introduction:

About Tube: {Refer Tube drawing attached as Annexure-1 }

Finned Tubes details are as given below:

Straight Tubes welded SS Tubes as per SA268 TP439

Unfinned end section of Tube: **OD 25.4mm x 2.11mmThk**

Finned section of Tube: **Fin OD 25.3 Fin height 1.27mm Root thickness 1.42 mm 27 Fin per inch Fin Tip thickness 0.2mm**

Set-1: **approx. 3930 nos. of Tubes of 8.234 Mtr.**

Set-2: **approx. 4244 nos. of Tubes of 8.404 Mtr.**

In order to detect defects in Tubes, all Tubes are to be Eddy Current tested with Encircling method as per ECT procedure (Reference draft procedure given in Annexure-2) once duly approved by NPCIL.

Bidder can carry out the ECT in two ways

Option-1:

Bidder can bring the testing setup (Equipment and conveying mechanism) to BHEL Bhopal and BHEL Bhopal will provide infrastructure facilities (like space, electricity, etc.) to bidder for testing of tubes. Bidder will have to provide details of the setup for BHEL/NPCIL approval along with bid and acceptance of offer shall be subject to BHEL/NPCIL approval.

Testing Agency shall arrange all test equipment and test coil suitable for finned tube inspection, tube handling system, calibration tube machining, labour and any incidental requirements pertinent to the project. BHEL Bhopal shall hand over the tubes on ex-works basis in Bhopal. **Quoted rate shall be inclusive of any such incidental charges on lump-sum basis only.**



Option-2:

Bidder can carry out testing at his works with their installed facility. In this case bidder will have to provide suitable Bank guarantee for Tubes. BHEL & NPCIL will carry out approval of testing facility at vendor works before acceptance of offer.

Tubes shall be collected by vendor in packed condition from BHEL Bhopal and shall be sent back to BHEL Bhopal after clearance from NPCIL in packaging suitable for NPCIL projects.

Inspection is to be done in presence of NPCIL. Testing Agency will have to coordinate with local NPCIL QA /NPCIL Mumbai for deputation of NPCIL inspectors for witness.

SCOPE OF WORK:

- Submission of Bank Guarantee (in case of Option-2)
- Calibration of testing facility
- QAP for testing i.e. In-process inspections,
- Test report Format (Shall contain requirements of mandatory appendix as per ASME)
- Protection and packing of Tubes for transport
- Transport and handling of Tubes in Wooden boxes
- Documentation

BHEL seeks Expressions of Interest from bidders who, prima facie, qualify for this assignment against Pre-Qualification Requirements (PQR) as given in Annexure-2.

The purpose of the EOI is to:

- Arrive at uniform specification parameters meeting technical requirements, including terms of payment, and
- Shortlist interested parties for further processing through open or limited tenders

However, it may be noted that BHEL is under no obligation to go ahead with the proposed assignment and may terminate this exercise at any time, without assigning any reasons. Bidders are also hereby informed that they participate in this EOI at their own risk and cost and no compensation, whatsoever, shall be admissible by BHEL.

As part of their EOI, bidders are required to:

1. Critically examine the technical feasibility of the Testing assignment and comment on the same with detailed reasoning, based on their experience.
2. Provide feedback on the technical specification and other terms and conditions so as to ensure that the best practices of the industry are well incorporated into the same.
3. Make an assessment of the risks involved in testing of this nature, as perceived by them, and advise on strategies for mitigation of the risks.
4. The Bidder need to submit their offers (as listed below) along with documents in support of meeting the PQR as per Annexure-3.

Interested firm should submit their proposal (in English) giving the following details.

- The profile of the company
- The financial details of the firm
- The bidder shall inform the experience list where testing of Finned tubes has been done by them giving details of customer, Tube Material of construction & Fin details, and time taken for testing.
- List of equipment used in testing
- List of experienced & Qualified manpower available with them for carrying out testing
- Estimated time for arranging & installation of setup at BHEL Bhopal for option-1
- Estimated time for testing of Tubes

Disclaimer:

BHEL reserves the right to accept or reject (partially or in full) the suggestions given by the bidder, without assigning any reasons. By participating in this EOI, the bidder gives BHEL the right to use the information provided by the bidder to finalize the specification for this package. Depending on need, post submission of the EOI by the bidder, further engagement with the bidder may include providing clarifications to BHEL by mail or phone, presentations and across the table discussions at BHEL's office in Bhopal, facilitating visits of BHEL personnel to bidder's works.

BHEL may respond to the queries raised/clarifications sought to the best of its ability. BHEL at its discretion may extend the due date for submission of EOI and the decision of BHEL in this respect would be final and binding on the respondents.

This EOI is not an agreement and is neither an offer nor invitation by BHEL to the prospective Applicants or any other person. The purpose of this EOI is to provide interested parties with information that may be useful to them in the formulation of their application for qualification pursuant to this EOI.

Notwithstanding anything contained in this EOI, BHEL reserves the right to accept or reject any application and to annul the EOI process and reject all applications, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons therefore. In the event that BHEL rejects or annuls all the applications, it may, at its discretion, invite all eligible OEMs/suppliers to submit fresh applications.

BHEL reserves the right to disqualify any applicant during or after completion of EOI process, if it is found there was a material misrepresentation by any such applicant or the applicant fails to provide, within the specified time, supplemental information sought by BHEL.

BHEL reserves the right to verify all statements, information and documents submitted by the applicant in response to the EOI. Any such verification or lack of such verification by BHEL shall not relieve the applicant of his obligations or liabilities hereunder nor will it affect any rights of BHEL.

The response to be submitted at the following address:

Additional General Manager (Quality)**HoD (QND, QFB & QTH)****Bharat Heavy Electricals Limited****Block-1 Annexe, West Wing, 1st Floor, Piplani, Bhopal, MP, 462022****Phone: +91-0755-2505678 Email: vdongre@bhel.in**

For any request for further information or clarification on the EOI document, please send your enquiries to below mentioned persons by email / phone.

- 1.) **Mr. Manish Kumar (Manager, QND)**
Email: manishkumar1@bhel.in, Ph:0755-2502649
- 2.) **Mr. Priyesh Kumar Upadhyay (Manager, QND)**
Email: priyeshkumar@bhel.in, Ph:0755-2503495
- 3.) **Mohammad Wahab Rafique (Sr. Manager, CDE)**
Email: wahab@bhel.in, Ph:0755-2503523



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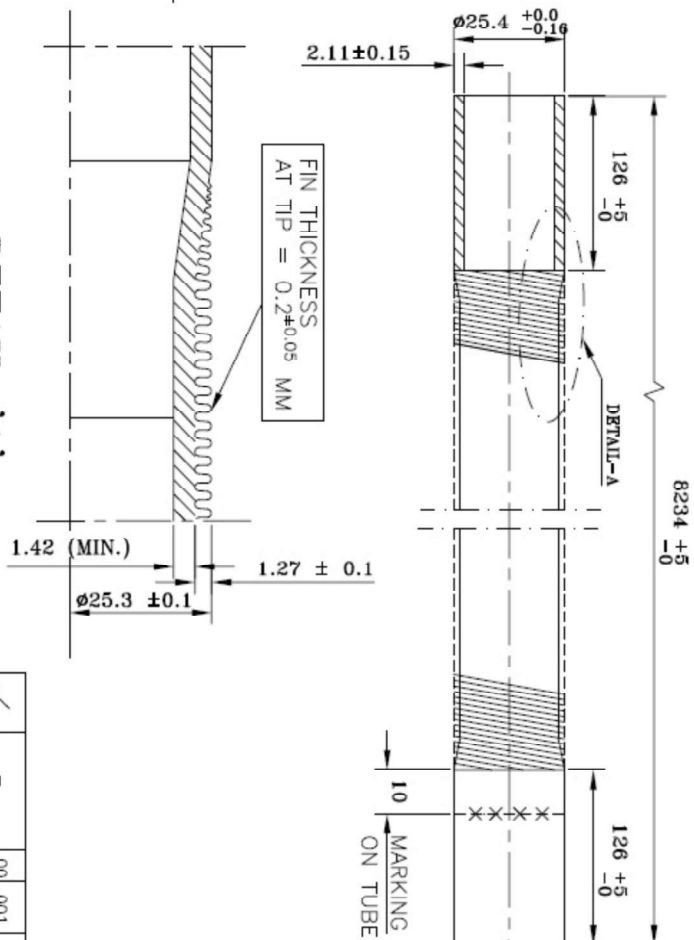
MSR : 700 MW SETS

DRG. NO. 3-16817-40029

(ALL DIMENSIONS ARE IN mm)

TECHNICAL REQUIREMENTS (TR)

1. TUBE MATERIAL WELDED S.S. TUBES TO SA268TP439; LATEST.
2. TECHNICAL CONDITIONS OF INTEGRAL FINNED TUBES SHALL BE IN LINE WITH MATERIAL SPECN. (SA-268) & HE 54029.
3. FIN DETAILS :
 - NO. OF FIN: 1063 NOS./METER (27 ^{±0}/₋₁ FPI)
 - SURFACE AREA OF FINNED PORTION 0.249 sq.m/m (min).
 - PLAIN ENDS OF EACH TUBE SHALL BE CONCENTRIC WITH OD OF FIN WITHIN A LIMIT OF 0.20 mm.
 - 5. TUBE END FACE SHALL BE SQUARE WITH TUBE AXIS.
 - 6. HARDNESS IN THE FINISHED TUBES SHALL BE LIMITED TO 90 HRB MAX.
 - 7. EACH FINISHED FINNED TUBE, UPON COMPLETION OF HEAT TREATMENT OPERATION, SHALL BE HYDROSTATICALLY TESTED AT A PRESSURE OF 37.5 kg./sq.cm(g) USING WATER WITH CHLORIDE CONTENT LIMITED TO 10 ppm max.
 - 8. BOTH ENDS OF EACH TUBE TO BE PROVIDED WITH END CAPS AS PER BHEL SPECN. AA0490002.
 - 9. INSPECTION:- BY BHEL TPIA/BHEL AS PER ENQUIRY AS PER APPROVED Q.A. PLAN.
 - 10. QUALITY PLAN TO BE SUBMITTED BY SUPPLIER INLINE WITH BHEL PROVIDED SQAP FOR BHEL/NPCL APPROVAL BEFORE START OF MANUFACTURING.



DETAIL-'A'

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MSR : 700 MW SETS

Haush

M. Zahn

TITLE: Eddy Current Testing Procedure of Low Finned Tubes of MSR for NPCIL Project.

TABLE OF CONTENTS

SR.NO.	DESCRIPTION	PAGE NO.
1.	SCOPE	3
2.	REFERENCE DOCUMENTS	3
3	PERSONNEL QUALIFICATION	3
4	EQUIPMENT AND ACCESSORIES	3
5	CALIBRATION REFERENCE STANDARD	4
6	CALIBRATION	5
7	SURFACE PREPARATION	6
8	EVALUATION	6
9	POST EXAMINATION PROCESSING	7
10	DOCUMENTATION AND RECORDS	7

(Note: This ECT Procedure is in draft mode and may not be treated final till approval from NPCIL)



1.0 SCOPE

- 1.1 This document describes the procedure for testing of ferrous low finned section of Tube:

Fin OD 25.3 Fin height 1.27 mm Root thickness 1.42 mm 27 Fin per inch Fin Tip thickness 0.2mm
using Eddy current testing by using multi frequency through **encircling coil technique**.

- 1.2 The tubes will be tested in the final drawn condition, heat treated or at the point specified in the customer specification.
- 1.3 The detectable discontinuities include cracks, pits, lamination, pinholes, blisters etc. which cause changes in the eddy current flow and gets detected by the sensor coil and a signal is passed on to the indication system of the equipment.
- 1.4 The automatic paint marking system should be available in the equipment to mark the defective locations on the tube body after getting a suitable signal from the equipment's control system.

2.0 REFERENCE DOCUMENTS

- 2.1 ASME BPV code, Section V, Article 8
- 2.2 ASNT Document SNT-TC-I A,
- 2.3 ASTM E 309
- 2.4 ASTM E 426
- 2.5 ASTM A 1012
- 2.6 ASTM A 1016

3.0 PERSONNEL QUALIFICATION

- 3.1 Personnel conducting the test and recording test results shall be qualified and certified to ECT Level II (ISNT/ASNT) as per latest edition of SNT-TC-IA. The Level II operator is required to perform the test and record test results in accordance with approved ECT Procedure from NPCIL. Vendor shall be responsible to acquire BHEL and NPCIL approval of their ECT procedure.

4.0 EQUIPMENT AND ACCESSORIES

A. Eddy Current Tester:

- 4.1 The Eddy Current Tester should be capable of energizing the test coil with alternating current of suitable frequencies and capable of sensing the changes in the electromagnetic response of the sensors.

Eddy Current Tester should have of the following basic capabilities:

- a) At least single Frequency excitation of the coil system used for testing (Analog or Digital)
- b) Frequency selection range should be adequate to cover the product range (tubes) being tested. (viz. 1KHz to 1 MHz). (Tubes of different conductivity values and different wall thickness will require different frequencies of excitation for ECT)
- c) Capability of adjusting the Frequency, sensitivity /Gain / amplification, Phase (if required) for setting up the test requirement.



- d) Capability of defect annunciation and adjusting the signal threshold for the defect signal i.e. Whenever the signal crosses the threshold level appropriate annunciation should be activated e.g. Hooter, lamp any other annunciator / paint marker as supplied by equipment manufacturer. (preferable)
- e) Signal Display capability preferably with online recording - either by using meters, lamps, LED's, strip charts, CRT display, Computer screen etc.
- f) Capabilities for tube end detection and/or suppression of end effects. g) Optionally LP / HP filters may be available with the equipment to help in suppressing unwanted noise generated due to electrical / mechanical disturbances.

B. Equipment Make:

The following equipment may be used: Flawmark - M/S Technofour, Defectomat, Circograph – M/S Dr Foester, Magnetic Analysis Corporation. Other make may be used provided it meets the requirements mentioned in this procedure.

4.2 Drive mechanism:

The drive mechanism should be capable of passing the tube through the test coil with uniform speed with minimum vibration of coil and tube maintaining the concentricity. The tube handling mechanism should preferably have the capabilities mentioned below. However, any alternate arrangement meeting the mentioned requirements is acceptable:

- a) Drive Speed adjustment capability: This facility is useful in adjusting the tube travel speed through the test coil / coils. It is to be set optimally to meet the data acquisition capabilities of the Eddy current tester. The fastest speed allowed is one at which all the artificial defects on the Reference tube are faithfully detected when this Reference tube passes through test coil / coils at the set speed.
- b) Tube cantering adjustment: This is a mechanical adjustment (of drive rollers) to enable the tube under test to travel through the test coil / coils in a concentric manner. This is established when the system is able to faithfully detect identical defects placed 120° / 90° circumferentially and separated axially, with almost equivalent sensitivity.
- c) Defect marking - Spray gun capability: This is to facilitate identifying the axial location of the defect on the tube being tested. Here the spray gun is activated when the signal crosses the set threshold for the defects and the spot on the tube (containing the defect) gets painted in appropriate colour. The drive mechanism introduces an appropriate delay to account for the gap between the test coil and the placement of the paint spray gun and the drive speed.
- d) Sorting - segregation capability: This is an online mechanical arrangement which is coupled to the tube handling system. It sends the Acceptable tubes to one bin and the rejected tubes to another bin based on signal received from the Eddy current tester
- e) Demagnetisation facility: The test setup shall have inbuilt demagnetisation facility to completely remove any residual magnetisation.

C Coils/ Probe:

- a) Encircling coils or probes are used in the equipment for Eddy Current Testing of Tubes during manufacturing stage. The Encircling coils may be single or multiple in number depending on the Make and model of the Equipment being used. The inside geometry of the coil should closely approximate the surface geometry of the specimen. Moreover, when the specimen is passed through the coil the specimen should be effectively concentric with the coil. The gap between the coil inner surface and specimen outer surface should be minimal. However, it should permit free passage of the specimen through the coil. This configuration scans the entire circumference of the tube which passes the coil but with a lower sensitivity as compared to rotating probe head arrangement especially for larger diameter tubes / pipes. This is the simplest configuration and is most widely be used.

$$\text{Fill factor} = (\text{Specimen OD} / \text{Coil ID})^2$$

The Fill factor should be of the order of 80- to 95%.

- b) The probe coil / probe head arrangement consists of Exciter coil / probe and sensor probe arrangement. The spacing between the coil assembly and the specimen surface should be small and uniform. This gap is called the Lift off. This arrangement using fixed probe coils is used to perform inspection in a linear frack as required during inspection of Welds on welded pipes. However appropriate arrangement / control is needed to keep the weld in proximity with the probe coils. A signal derived from the an additional (second) frequency in the test equipment may be used to compensate the variation in the lift off.
- c) Probe coils may be mounted on rotating head and will perform inspection in a circular fashion thus scanning the entire circumference of the pipe / tube. This configuration provides better sensitivity and resolution for larger diameter pipes / tubes. The scan becomes helical when the probe-head rotates and simultaneously the tube moves linearly through the probe-head. However, the desired scan track width and circumferential area scanned is decided by a combination of the rotating speed of the probe and the linear travel speed of the tube through the probe arrangement. Settings for these parameters are to be decided based on the guidelines provided by the manufacturer of the Eddy Current Test equipment.
- d) A variant to the rotating probe-head is an array probe with multiple stationary probes mounted at regular intervals on the circumference and excited sequentially to simulate a rotating electromagnetic field or excited simultaneously and coupled to a multi-channel eddy current tester. This arrangement may also be used based on the guidelines provided by the manufacturer of the Eddy Current Test equipment and mutual agreement between supplier and purchaser.

5.0 CALIBRATION REFERENCE STANDARDS

- 5.1 The reference standard must have the same material, same nominal diameter, same wall thickness and the same heat treatment conditions as the tested tubes. A reference tube drawing is made for each purchase order. The reference tube is marked with reference tube drawing number. The defects shall be machined in such a way that the indication of each of them is separated and distinct without any mutual interference or amplification. The dimensions and shape of the reference defects are defined by on behalf agreed upon specifications and standards. The reference standard must be manufactured and marked according to the reference standard drawings.
- 5.2 Calibration Standards used shall contain artificial discontinuities as per ANNEXURE-I.
- 5.3 **The calibration reference standard shall contain three holes of diameter (0.797 mm) equally spaced (0°, 120°, 240°) circumferentially separated by a sufficient distance around the tube and longitudinally separated by sufficient distance to obtain distinct indication from each hole. These holes must offset radially through the enhanced wall, always between two holes. One of the holes must be placed in the weld.**
- 5.4 Artificial discontinuities in calibration reference standards shall be spaced axially so they can be differentiated from each other and from the ends of the tube.
- 5.6 The as-built dimensions of the discontinuities and the applicable eddy current equipment response shall become part of the permanent record of the calibration reference standard.
- 5.7 Each calibration reference standard shall be permanently identified with a serial number.
- 5.8 Calibration reference standards shall contain the artificial discontinuities as described. These artificial discontinuities are used as reference for selection of test frequency and proper setting of the sensitivity control of the equipment.



- 5.9 Calibration reference standard of convenient length (Minimum 4 Feet) shall be prepared from a length of acceptable tube of same alloy, size and surface finish of the tubes to be examined.
- 6.0 Prior to the introduction of artificial discontinuities, into the standard tube, it shall be inspected to ensure that it is free from defects that mask or complicate the Indications received from the artificial defects. If any defect indications are found, another acceptable tube shall be chosen.

6.0 CALIBRATION

- 6.1 Prior to an inspection, the test instrument should be set up and calibrated with appropriate coil configuration and the calibration reference standard.
- 6.2 Calibration shall be verified at the beginning of the testing, any change in the test system setting, change of shift, equipment repair, interruption due to power loss or shutdown, after one shift of continuous production testing. Checked once in 4 hours during operation, at the end of the test period or when improper operation is suspected.
- 6.3 If the test instrument is found to be out of calibration upon check (every 4 hours), all tubes inspected since last valid calibration verification shall be re-examined.
- 6.4 Instrument Controls: Any control, which affects instrument response (e.g. Filter, Reject, clipping) shall be in the same position for calibration, Calibration checks, instrument linearity check, and examination.
- 6.5 Temperature: During testing the jobs being tested shall be at ambient temperature.
- 6.6 Calibration data shall be included for each type and size of tube tested.
- 6.7 The calibration data shall include the following information:
- a. The machined defects in the calibration standard.
 - b. The Frequency (or frequencies), Gain of the test instrument.
- 6.8 The coil frequency shall be chosen as low as possible (**10 to 30 KHz**) to ensure adequate penetration, and providing good signal to noise ratio (**typically 2.5:1 or higher**) depending on type of alloy. The frequency should be selected such that the standard depth of penetration is at half the wall thickness. SDP formulae is as follows:

$$\delta = (\rho / (f * \mu_r))^{0.5}$$

where δ is standard depth of penetration, ρ is resistivity, f is frequency and μ_r is relative permeability.

- 6.9 **The speed of drive should be set to maximum 8.4 meters/minutes** (which typically depends on data acquisition frequency and digitisation rate) and be used for testing the reference standard tube, and the same speed shall be used when the actual tubes are tested.
- 7.0 The reference calibration tube shall be passed through the Eddy Current System for ensuring proper centring of tube through the coil.
- 7.1 Evaluation shall be set to amplitude mode and phase angle.
- 7.2. Withdraw the calibration reference standard through the coil at the nominal examination speed. Record the responses of the applicable calibration reference standard discontinuities. The responses shall be clearly indicated by the instrument and shall be distinguishable from each other as well.
- 7.3 Adjust frequency if required to get proper phase angle, sensitivity (amplitude) from the artificial discontinuities.



- 7.4 Signal Identification details from each reflector: e.g. Phase angle, amplitude shall be recorded.
- 7.5 After setting the frequency, sensitivity and amplitude feed speed, the same reference standard tube is once again allowed to pass through the coil system and the results are observed. This shall be repeated at least three times by reorienting the tube by 120° rotation each time to ensure the uniform detection sensitivity around the circumference and consistency of result on the audio-visual indication. The phase angle and amplitude of each signal shall be recorded.
- 7.6 If the results are consistent with respect to sensitivity, amplitude, location, the system shall be considered acceptable for examination of tubes from a designated lot.

7.0 SURFACE PREPARATION

- 7.1 The test surface and an area covering the entire scanning area on either side of the test surface shall be free of dirt, grease, rust, lint, weld spatter and other extraneous matter which may interfere with the effectiveness of the test.

8.0 EVALUATION

- 8.1 The tube producing signal amplitude equal to or higher than the lowest signal produced by reference calibration tube shall be rejected.
- 8.2 If the test signal was produced by imperfections such as scratches, surface roughness, dings, straightener marks, loose ID bead and cutting chips, steel die stamps, stop marks, tube reducer ripple, or chattered flash trim, the tubing shall be re-examined.
- 8.3 If the test signal was produced by imperfections that cannot be identified, or was produced by cracks or crack-like imperfections, the tubing shall be rejected.
- 8.4 Systems like an automatic paint marking system should also be used for marking of flaw locations on the tubes.

9.0 POST EXAMINATION PROCESSING

- 9.1 Tubes having unacceptable discontinuities shall be sorted out automatically by the equipment itself.
- 9.2 List of all tubes accepted after retest shall be compiled and submitted separately to BHEL.

10.0 DOCUMENTATION AND RECORDS

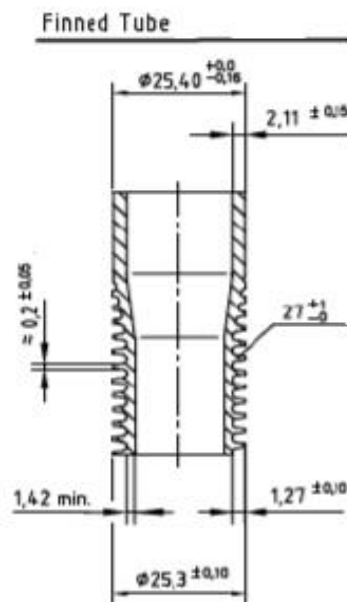
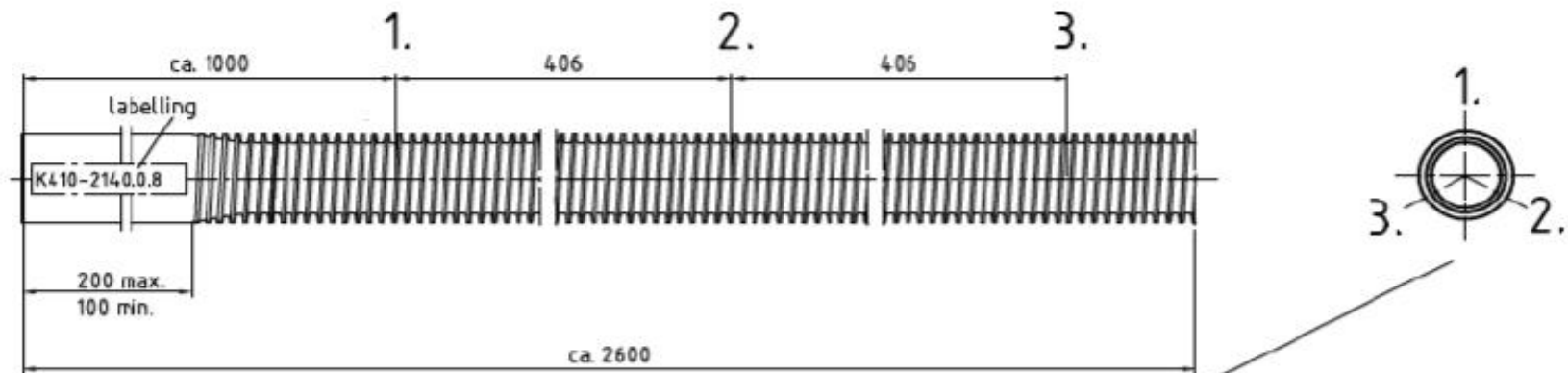
- 10.1 Procedures and equipment used shall be identified sufficiently to permit comparison of the examination results with new examination results run at a later date.
- 10.2 The report shall include initial calibration data for each eddy current examination system or part thereof.
- 10.3 **The ECT report shall include all parameters of test setup as per the satisfaction of NPCIL and BHEL.** The record shall indicate the tubes examined, any scanning limitations, the location and depth of each reported flaw, and the identification and certification level of the operators and data evaluators that conducted each examination or part thereof.



10.4 ECT Report shall be prepared and signed by an individual qualified and certified to at least NDE Level II and shall contain following information as a minimum:

- a) Contractual document reference like PO no., project no. etc.
- b) Procedure Number and Revision.
- c) Technique used
- d) ECT instrument identification and manufacturer's Sr. No.
- e) Identification mark / serial number of the calibration standard used
- f) examination frequency or frequencies
- g) mode of operation including instrument sample rate, drive voltage, and gain settings
- h) Coil manufacturer's name and manufacturer's part number or coil description, coil size and serial number
- i) scan direction and scanning speed during data acquisition
- j) Channel identification (Channel no., frequency, type of display etc.)
- k) Identification of tubes examined. (Heat no., product specification, material and grade, size of tube ID, OD and wall thickness)
- l) Record of unacceptable tubes (tube identification no., description of flaw, depth, length, location response signal from ECT instrument).
- m) List of acceptable material (tubes)
- n) Any unusual signal or limitation during the examination.
- o) Examination person Identity and Qualification Level.
- p) Date and time of Examination performed





material: acc. to ASME SA-268 (latest edition), TP439 (welded) annealed, bright

WSP-Reference acc. ASTM E-0426-16, Pkt 3.5 in QAP-No. KAIGA-5&6/QAP/41120/00026

3 x $\phi 0,797$ (0,8); at 0° , 120° , and 240° offset radially through the enhanced wall; allways between 2 fins

one of the holes must be placed in the weld

acceptance level: $K \leq 1$

Handwritten signature

PRE-QUALIFICATION REQUIREMENTS (PQR)

EDDY CURRENT TESTING (ECT) of Integral Low Finned Tubes (SA268 TP439 Welded construction) using Encircling Method as per ASTM E309 & ASME SA1016

1. The bidder (as defined below) should have facility to carry out Eddy current testing of Finned Tubes by Encircling method as per draft Reference ECT procedure provided with EOI with full automation.
2. The Bidder should have carried out ECT for finned Tubes by Encircling method at least for one supply in last 5 years. (from due date of enquiry)
3. Bidder to confirm the applicable definition of bidder from below list.
4. Vendors to furnish details as per specification QND/ EOI/ECT/2025/01 Rev.00 Date: 13.12.25.

Definition of Bidder:

1. Testing agency with in-house facility that can be transported to BHEL Bhopal & commissioned there for testing at BHEL Bhopal works.
2. Testing agency with in-house facility & testing to be carried out at its works.
3. Tube manufacturer having requisite in-house testing facility & testing to be carried out at its works.
4. Finned Tube manufacturer having requisite in-house testing facility & testing to be carried out at its works.

Note:

1. Consideration of offer shall be subjected to customer's approval of bidders.
2. Bidder to submit all supporting documents in English. If documents submitted by bidder are in language other than English, a self-attested English translated document should also be submitted.
3. Notwithstanding anything stated above, BHEL reserves the right to assess the capabilities and capacity of the bidder to perform the contract
4. After satisfactory fulfilment of all the above criteria/ requirement, offer shall be considered for further evaluation as per NIT and all the other terms of the tender.

