

Enquiry No. 9241400182

BHARAT HEAVY ELECTRICALS LIMITED

TIRUCHIRAPPALLI-620 014

MAINTENANCE & SERVICES

Dt: 26-11-2014

Annexure-I

Sub: Tenders are invited from reputed contractors for ceramic coating on SS Studs and Washers for test section flange of ScTF

Scope of Work

Sl. No.	Work Description	Qty in Nos.
1	REMOVING THE DAMAGED CERAMIC COATING IN USED SS STUDS AND CARRYING OUT FRESH CERAMIC COATING AS PER DRAWING NO. 3-02-323-00290 FOR USED SS STUDS	28
2	CARRYING OUT FRESH CERAMIC COATING AS PER DRAWING NO. 3-02-323-00290 FOR UNUSED SS STUDS	6
3	CARRYING OUT FRESH CERAMIC COATING AS PER DRAWING NO. 3-02-323-00330 FOR UNUSED SS WASHERS	48

Technical / Scope Bid:

Company Profile

1.	Name of the Contractor	
2.	Address	
3.	Phone No.	
4.	E-mail Address	
5.	BHEL Vendor Code	

Qualification Criteria

Sl. No.	Tenderers shall fill up the columns [Yes/No] for confirmation	YES	NO
1	Average annual financial turnover during the last 3 years ending 31 st March 14, should be at least Rs.60, 000/- . (proof should be enclosed)		
2	Experience of having successfully completed similar (plasma coating of ceramic over stainless steel cylindrical and flat components) works during the last 7 years ending 31 st October 14, should be either of the following: <ul style="list-style-type: none"> • Three similar (plasma coating of ceramic over stainless steel cylindrical and flat components) completed works costing not less than the amount equal to Rs.80,000/- <li style="text-align: center;">Or • Two similar (plasma coating of ceramic over stainless steel cylindrical and flat components) completed works costing not less than the amount equal to Rs.1,00,000/- <li style="text-align: center;">Or • One similar (plasma coating of ceramic over stainless steel cylindrical and flat components) completed work costing not less than the amount equal to Rs.1,60,000/-. (proof should be enclosed)		
3	I.T return acknowledged by I.T department for the last 2 years.		
4	PF No. & Date (Document to be attached)-if such contracts executed already		
5	ESI No. & Date (Document to be attached) - if such contracts executed already		
6	Service Tax certificate (Document to be attached) - if such contracts executed already		
7	Labour licence (Central / State Government) should be submitted before commencement of work		
8	PAN CARD copy		

In case the tenderers not fulfilling the above conditions, the offers liable for rejection. The semi-filled incomplete tender documents will be rejected.

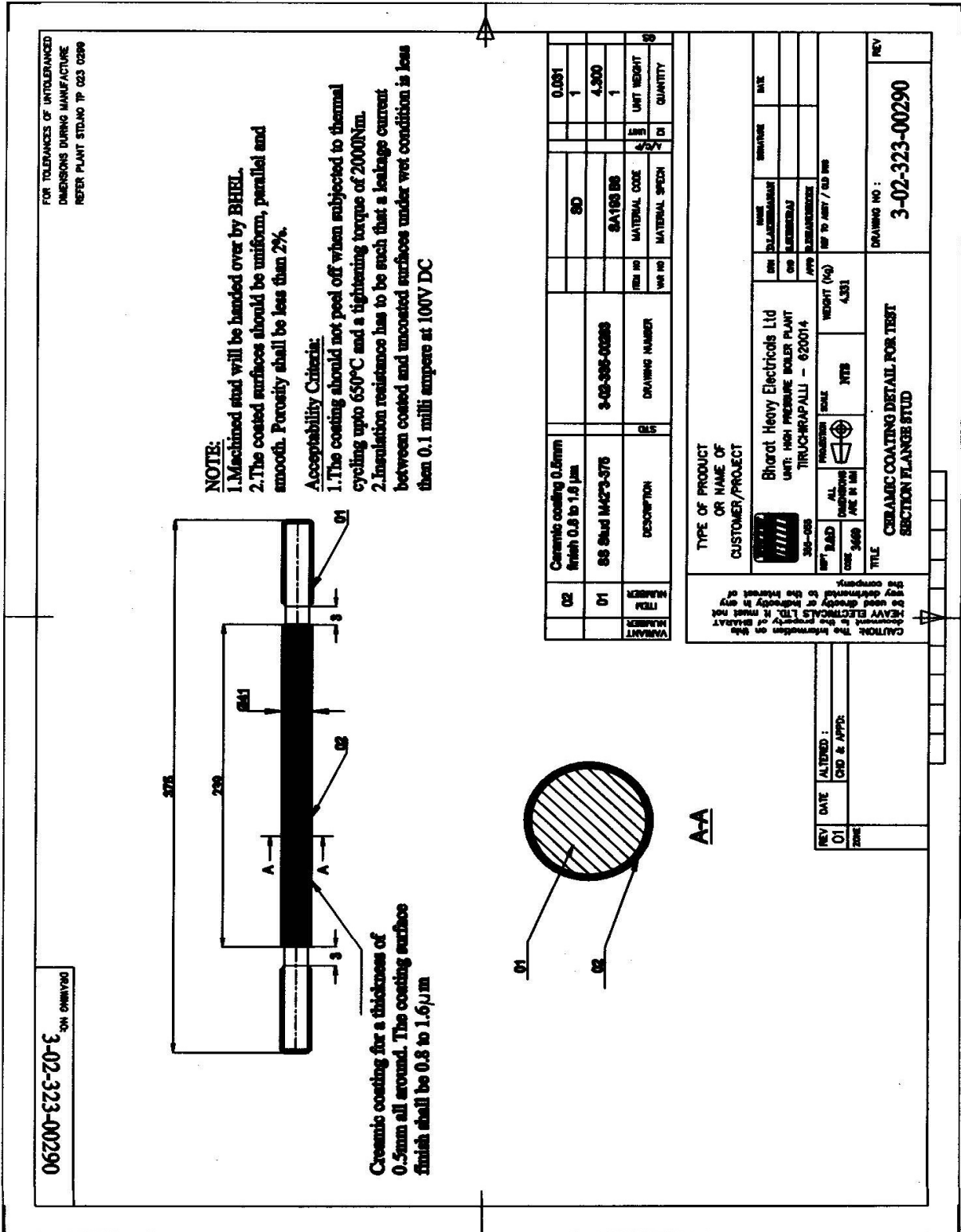
Price Bid format

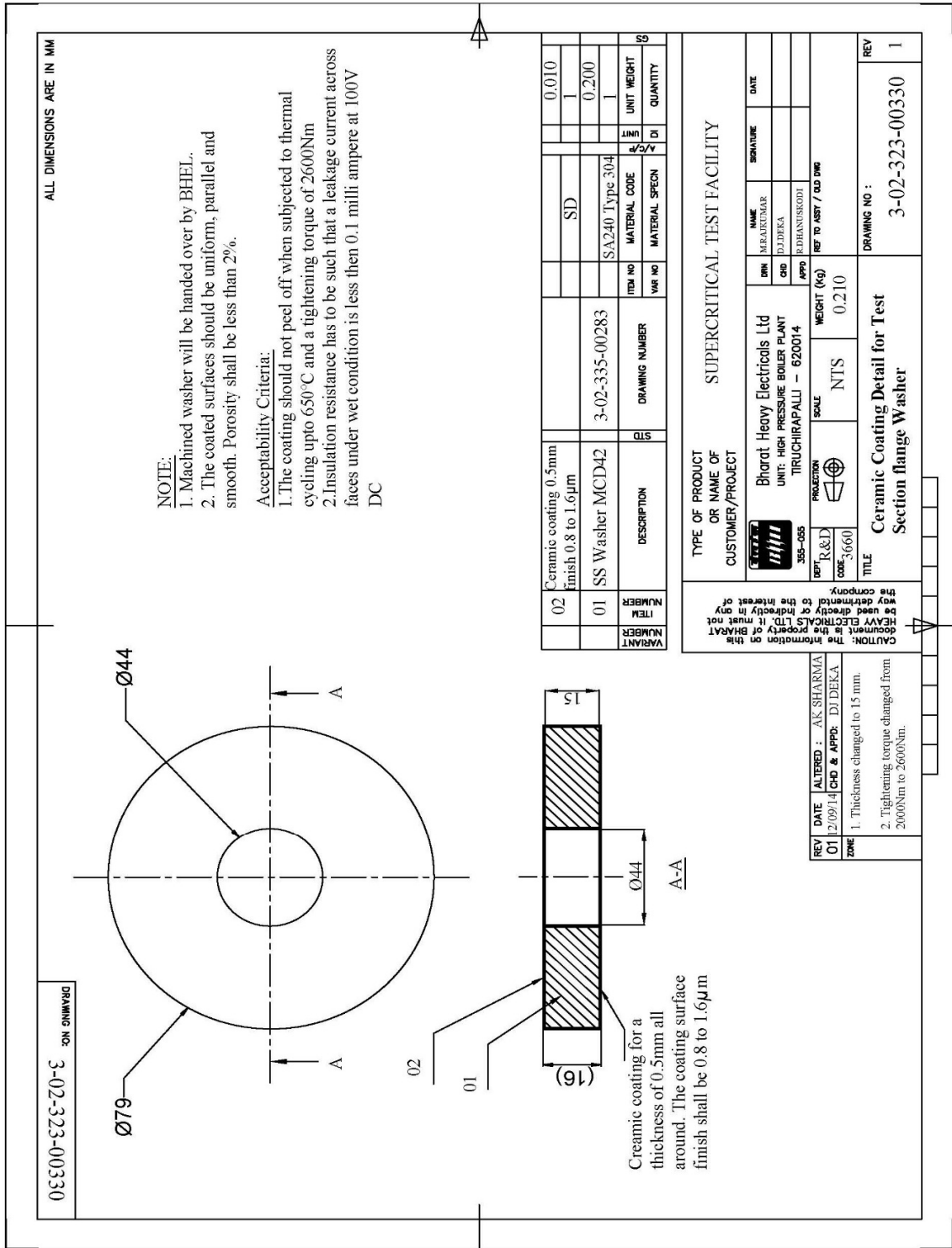
Sl. No.	Work Description	QTY	UNIT	RATE/ Nos.	Rate Quote per piece (in Rs.)	Total Rate Quote per Item (in Rs.)
1	REMOVING THE DAMAGED CERAMIC COATING IN USED SS STUDS AND CARRYING OUT FRESH CERAMIC COATING AS PER DRAWING NO. 3-02-323-00290 FOR USED SS STUDS	28	No.	Rate/No.		
2	CARRYING OUT FRESH CERAMIC COATING AS PER DRAWING NO. 3-02-323-00290 FOR UNUSED SS STUDS	6	No.	Rate/No.		
3	CARRYING OUT FRESH CERAMIC COATING AS PER DRAWING NO. 3-02-323-00330 FOR UNUSED SS WASHERS	48	No.	Rate/No.		

Terms and conditions related to the above work:

1. Collection of 28 Nos. used (coated) and 6 Nos. unused (uncoated) SS studs and 48 Nos. unused SS washers from BHEL, Trichy. Total cost of the material is Rs.60, 000/-.
2. Freight and insurance for all the transportation of the materials are at vendor's scope. Total weight of the material is 170 kg.
3. Vendor has to produce bank guarantee for Rs.60, 000/- before collecting the material from Trichy. Bank guarantee will be released only after successful acceptance and the completion of guarantee period.
4. Damaged ceramic coating in the used studs is to be removed by following suitable method and the surface needs to be prepared to ensure quality of coating. No inspection by BHEL for the surface finish before coating. Supplier has to ensure required surface finish suitable for a quality coating.
5. After removing the damaged coating and cleaning the surfaces, ceramic coating of thickness 0.5 mm with a surface finish of $0.8 \mu m$ - $1.6 \mu m$ shall be done on the studs and washers as per the attached Drawing Nos. 3-02-323-00290 and 3-02-323-00330 respectively.
6. The coated surfaces should be uniform, parallel and smooth. Porosity should be less than 2%.
7. The coating should not peel off when subjected to thermal cycling up to $650^{\circ}C$ and a tightening torque of 2600 NM.
8. Electrical insulation resistance of the ceramic coating should be such that leakage current across faces under wet condition is less than 0.1 milli ampere at 100V DC.
9. For inspection of the parameters given in Sl. No. 5, 6, 7 and 8, initially one each of studs and washers should be coated and sent to BHEL at vendor's cost for inspection and testing. After getting clearance from BHEL, coating of balance studs and washers can be taken up. If the sample pieces do not meet the requirement as mentioned above, vendor has to collect the samples from BHEL Trichy and recoat and resend the same for further inspection.
10. Final inspection of all pieces will be at BHEL Trichy after delivery. Vendor has to repair / recoat rejected pieces at his cost.
11. **After completing the coating work, the material is to be delivered to R&D (MHD Campus), BHEL Trichy - 620014, Tamilnadu.**
12. While handling, coating and transporting the material, care must be taken to protect the threaded portion and the shank of the SS studs from damages and dimensional changes.

Work Related Drawings





ALL DIMENSIONS ARE IN MM

NOTE:
 1. Machined washer will be handed over by BHEL.
 2. The coated surfaces should be uniform, parallel and smooth. Porosity shall be less than 2%.

Acceptability Criteria:

1. The coating should not peel off when subjected to thermal cycling upto 650°C and a tightening torque of 2600Nm
2. Insulation resistance has to be such that a leakage current across faces under wet condition is less than 0.1 milli ampere at 100V DC

ITEM NUMBER	DESCRIPTION	QTY	DRAWING NUMBER	ITEM NO	MATERIAL CODE	UNIT WEIGHT	QTY
02	Ceramic coating 0.5mm finish 0.8 to 1.6µm		3-02-335-00283		SS	0.200	1
01	SS Washer MCD42				SA240 Type 304	0.200	1

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT
 SUPERCRITICAL TEST FACILITY

UNIT: R&D
 355-005

PROJECTION: NTS

SCALE: NTS

WEIGHT (kg): 0.210

UNIT WEIGHT: 0.210

UNIT: HIGH PRESSURE BOILER PLANT TIRUCHIRAPALLI - 620014

DESIGNER: AK SHARMA
APPD: DI DEKA

DATE: 12/09/14

REVISIONS:
 01 Thickness changed to 15 mm.
 02 Tightening torque changed from 2000Nm to 2600Nm.

TITLE: Ceramic Coating Detail for Test Section flange Washer

DRAWING NO.: 3-02-323-00330

REV: 1

Terms & Conditions related to BHEL

Tender Submission:

1. The tender/bidders are advised to submit their bid well in advance of the tender opening date.
2. The covers should be addressed to **Senior Manager/M&S/Planning, Maintenance & Service, 2&4 Building, BHEL, Tiruchirappalli 620 014**, to reach on or before by 14.00 Hrs. on 22-12-2014 and the same are to be dropped in the Tender Box which is kept in the M&S, Ground Floor, 2&4 Bldg., BHEL, Tiruchirappalli-620014. Tenders will be opened by 14.30 (IST) on 22-12-2014 at M&S, Ground Floor, 2&4 Bldg., BHEL, Tiruchirappalli-620014. BHEL is not responsible for any postal delay. The top of the envelope should contain the respective Enquiry Number.
3. Bidder has to submit both Techno-commercial bid (Part -I) & Price bid (Part -II) in separate covers.
4. The First envelope shall be sealed and super scribed as Techno-Commercial Bid for Ceramic coating on SS Studs and Washers for test section flange of ScTF in BHEL-Trichy.
5. The Second envelope shall contain only Price for the above work as per scope and to be quoted as per the format given in price bid. Any other information in price bid will not be considered. The envelope shall be sealed and super scribed as Price Bid for Ceramic coating on SS Studs and Washers for test section flange of ScTF in BHEL-Trichy.
6. All the above envelopes shall be kept into another cover and sealed. BHEL is not responsible for any postal delay.
7. **Vendor shall sign each and every page of the tender documents and affix seal for having accepted the conditions.**
8. In case same rates are quoted by more than one contractor ranking will be done on the basis of higher amount of tax paid based on IT return submitted for the financial year 2013-14.
9. The contractors may satisfy themselves by thorough study of scope of proposed job work by visiting the work site. There shall not be at any time dispute / complaint of any nature regarding scope of work and interpretation after awarding the job.
10. The agencies are advised to visit the BHEL work site to understand the nature of work / quantum of work in its true perspective to avoid any complications in future. The Contractor shall carefully study all the terms and conditions as given below.
11. The rates shall be firm for the entire period of the contract.
12. If the Contractor is not able to provide the sufficient service as indicated in the bid, the contractor is liable for forfeiture of the security deposit paid.
13. Detailed scope of work covering the contract, contractual & legal Obligations of the Contractor, and general conditions of Job contracts are enclosed. (Refer Techno Commercial Bid & Price Bid)
14. The committee members will consider PRICE BID only after evaluation of TECHNICAL BID.
15. Tender committee's decision is final and canvassing in any form/influencing the committee will be considered as a disqualification and such contractors will not be considered for future enquiry.
16. L1 rate will be considered as final for the award of contract. The entire scope will be awarded as a package to single contractor.
17. BHEL/ Tiruchirappalli reserve the right to alter any of the terms & conditions of the contract and any such changes will be intimated to the contractor from time to time.

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18. BHEL/ Tiruchirappalli reserve the right, to cancel or to terminate the contract at any time without assigning any reason.

Payment Terms:

100% payment: Materials along with invoice to be handed over to R&D, after satisfactory completion of work, the payment will be made within 45 days.

Advance Payment: No advance payment shall be arranged for this contract

Period of Contract:

FOUR MONTHS from the date of receipt of work order.

Security Deposit:

Security Deposit should be paid by the contractor. The Security Deposit rate will be as follows:-

a)	Up to Rs. 10 Lakhs	10% of PO Value
b)	Above Rs.10 Lakh & Up to Rs. 50 Lakhs	Rs. 1 Lakh + 7.5% of the amount exceeding Rs. 10 Lakhs
c)	Above Rs.50 Lakh	Rs.4 Lakh + 5% of the amount exceeding Rs. 50 Lakhs

The Earnest Money paid at the time of tender will be adjusted as part of the Security Deposit to a level of 50% of contract value before start of the work and the balance amount recovered by deduction from the running bills of the contractor at the rates mentioned above.

Security Deposit shall not be refunded except in accordance with the terms of Security Bond or Agreement.

Security Deposit may be furnished in anyone of the following terms:

- a) Cash.
- b) Cash Deposit receipt, Pay Order, Demand Draft duly pledged in favour of BHEL.
- c) Post Office cash certificate, National Savings. Certificates, Treasury Savings Deposit Certificates, National Plan Savings Certificates, 12 Years National Defence Certificates and 10 Years Defence Deposit certificates.
- d) Fixed Deposit Receipt issued by State Bank of India / Nationalised Banks.
- e) Bank Guarantee shall be accepted to a value of 50% of the calculated Security Deposit amount only and 50% of Security Deposit shall be in anyone of the form as mentioned above from Sl. No. (a to d).
- f) The Bank Guarantee shall be kept valid until the due date for refund of Security Deposit.
- g) No interest shall be allowed on Security Deposit. BHEL shall not be responsible for any loss of securities due to liquidation for any other reasons, whatsoever or any depreciation in the value of the securities while in their charge or for any loss of interest thereon.
- h) All compensation or other sums of money payable by the Contractor to BHEL under the terms of this contract or under any other contract with BHEL may be deducted from the Security Deposit or realised by the sale of the securities or from the interest arising there from or from any sums which may be due or may become due to the contractor by BHEL and in the event of this Security Deposit being deducted by reason of such deductions or sale, as aforesaid, the Contractor shall, within 7 days thereafter, make good in cash or in securities endorsed as aforesaid, any sum by which the Security Deposit has been reduced.

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Completion Time: Timely completion of work is very important. Hence the contractor has to engage sufficient no. of workers. As per the instructions of site Engineer, if sufficient workers are not brought to the work spot, penalty will be imposed for the delay caused at 10% of contract value and it may even be extended to termination of the contract.

Delayed execution: In case work schedule unreasonably delayed because of non-availability of sufficient man power and non-availability of tools, contract will be terminated and balance work will be got done through some other contractor at the defaulted vendors' risk & cost.

General Terms and Conditions

1. **Gate Pass:** Pass arrangement for labours shall be arranged by the contractor before commencement of the work. The authorized person / supervisor of the contractor is responsible for making the pass arrangement.
2. Applicable Taxes if any should be mentioned separately in the offer.
3. **Liquidated damages:** If the Contractor fails to complete the service/work as per terms & conditions of the order within the delivery schedule, 0.5% of the order value will be deducted for each week of delay or part thereof subject to a maximum of 15% of the total contract value.

IMPORTANT NOTE FOR SERVICE TAX

If you have not registered for service Tax then a declaration shall be submitted by you that you have within the threshold limit.