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GOVERNMENT OF INDIA		
केन्द्रीय कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान		
CENTRAL FARM MACHINERY TRAINING & TESTING INSTITUTE		
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MINISTRY OF AGRICULTURE AND FARMERS WELFARE		
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DEPARTMENT OF AGRICULTURE, COOPERATION AND FARMER WELFARE		
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TRACTOR NAGAR, P.O., BUDNI (M.P.) 466 – 445		
(An ISO : 9001-2015 Certified Institute)		

Tender No. 8-6/2003-2004-CPS(T) Pt-II

Dated: 22.04.2020

TENDER NOTICE

Composite Tender (technical & commercial) as a single bid are invited through e-tendering process by Director, CFMT&TI, Budni from I.S.O certified manufacturers/agencies or experienced firms to supply the following equipments. The items are to be supplied exactly as per the requirement mentioned in the specification. **The tenders may be submitted electronically on the central procurement portal <https://eprocure.gov.in>**

Objective: To measure mechanical vibration of assemblies and components of agricultural tractors in terms of horizontal & vertical displacement in microns as per BIS: 5994	
S.No.	Requirements
i) Digital Vibration Meter	
1.	Mechanical vibration meter with tri- axial magnetic base piezoelectric accelerometer to measure vibration in three mutually perpendicular axis (X, Y and Z)
2.	Measurement of Acceleration, Velocity and Displacement
3.	Suitable for measurement of vibrations on Agricultural Machines
4.	<u>Measuring range</u> : Acceleration – 0.03 to 10 mm/sec ² Velocity – 0.03 to 10 mm/sec Displacement – 0.003 to /10 mm
5.	<u>Frequency Range</u> : Acceleration – 0.3 to 15 kHz Velocity – 0.3 to 15 kHz Displacement – 3Hz to 1 kHz
6.	<u>Display</u> – 4 Digit, 7 Segment LCD at least 10mm character Height
7.	<u>Mode of Display</u> -True RMS and equivalent Peak for displacement, velocity and acceleration
8.	<u>Accuracy</u> - ± 2 %
9.	<u>Power supply</u> – 12V/6 V DC (Internal)
10.	<u>Calibration</u> – Self Calibration Check & External Calibration clip

ii) Tri-axial Piezo-electric Accelerometer				
	X	Y	Z	Axis
Reference Sensitivity at 159.2 Hz (w=1000s'). RMS AND 24 ⁰ C	0.981 9.62	1.007 9.87	0.999 9.80	pC/ms ⁻² pC/g
Lower frequency limit	Determined by the amplifier used			
Upper frequency limit (+10%)	12	12	12	kHz
Mounted Resonance Frequency	40	40	40	kHz
Transverse Sensitivity re reference sensitivity (at 30 Hz, 100 ms ⁻²)	3.4	3.6	1.6	%
Transverse Resonance Frequency	14	14	14	kHz
Resonance frequency	34.1	34.4	32.7	kHz
Quality factor @ f _{res}	352	349	9	
Amplitude slope	-2.1	-2.0	-2.1	%/dec
Measuring range :				
Max. operational stock	± 10 kms ⁻² peak (±1000 a peak)			
Max. continuous sinusoidal	5 kms ⁻² peak (500 g peak)			
Electrical				
Capacitance of transducer (exc. Cable)	1000 pF			
Insulation Resistance sensing elements	>20 Gohm			
Environmental :				
Temperature Range:	-74 to +250 ⁰ C			
Temp. Transient Sensitivity	0.4 ms ⁻² / ⁰ C			
Magnetic Sensitivity	4 ms ⁻² /T			
Base Strain Sensitivity	0.02 ms ⁻² /µe			
Max. Non-destructive shock	100 k ms ⁻² peak			
Humidity	90-% RH non-condensing			
Mechanical				
Case Material	Titanium ASTM Grade 2			
Sensing Element	Piezoelectric, Type PZ 23			
Construction	Delta Shear			
Sealing	Sealed			
Weight	55 gram			
Electrical connectors	3 x 10 – 32 UNF-2A			
Mounting Thread	10-32UNF-2B			
Mounting surface Flatness	<3µm			
Mounting Torque	Max. 3.5 Nm			

Note: Calibration certificate issued by NABL accredited testing agency/laboratory should be provided.

Essential Pre-requisite:

1. Tenders should be uploaded in CPP portal <https://eprocure.gov.in> super-
scribing the tender no, item SI. No. if any, and due date.
2. The Director, reserves all rights to cancel any or all the tenders without assigning any reason whatsoever.

**TENDERS FOR SUPPLY OF DIGITAL VIBRATION METER WITH PIEZOELECTRIC TRI-AXIAL
ACCELEROMETER FOR TEST LABORATORY AT C.F.M.T.&T.I, TRACTOR NAGAR,
BUDNI(M.P.)-466445 INDIA**

Tender document No:

Date :

From: M/s.

To,
The Director
Central Farm machinery Training & Testing Institute,
Tractor Nagar, Budni(M.P.)-466445

Sir,

With reference to your Tender Notice dated _____ we offer our rates for the supply of test equipment required for testing of agricultural Machineries.

S.No .	Name & description of Test Equipment	Make & Model Type of equipment	Whether ISO Certified company	Qty.	Unit Rate Rs.	Total Cost Rs.
1.	DIGITAL VIBRATION METER WITH TRI AXIAL PIEZO-ELECTRIC ACCELEROMETER AND SUITABLE ACCESSORIES			01 Nos.		

N.B: If required, separate sheet may be added to give more technical details of equipments. These should be on the letter heads of tendered duly stamped and signed.

List of enclosures:-

- 1.
- 2.
- 3.
- 4.

(Authorized Signature)
with full name & designation
& seal

TERMS AND CONDITIONS

1. The composite tender is to be uploaded on **CPP portal(www.eprocure.gov.in)** i.e TECHNICAL SPECIFICATIONS AND COMMERCIAL DETAILS. This tender should indicate technical specifications/details of the offered equipment only with reference to requirement of this office along with rates and commercial terms & conditions. The rates should invariably be quoted for delivery at F.O.R destination at site i.e at Central Farm Machinery Training & Testing Institute, Tractor Nagar, Budni(M.P.)-466445 basis inclusive of packing, forwarding, freight and duly insured. The purchaser will not pay separately for the stores to destination. Taxes, duties and other charges on the above rates if any, should clearly indicated along with commercial bid. The rates must be quoted in Indian Rupees only.
2. **The payment will be made after RECEIPT OF MATERIAL IN GOOD CONDITON.**
3. **The Invoice should contain complete bank account detail and GST number for online payment transaction.**
4. **Proprietary Article Certificate if applicable should be submitted by the manufacturer.**
5. **Authorization letter issued by principal manufacturer to the dealer/distributor should be submitted.**
6. Price of the material to be offered should be firm and fixed till **31st March 2021** and is to be for F.O.R destination CFMT&TI, Budni basis, indicating all taxes and duties.
7. The transit insurance will be the responsibility of the supplier and no separate charges will be paid for it.
8. The validity of tender should be for six months from the date of submitting the tender and it must be expressed and specifically indicated in tender.
9. The warranty should be at least one year from the date of successful installation & commissioning of material.
10. **The time limit for supply of the Test equipments should be indicated in the tender. However, it should not go beyond two to three weeks from the date of supply order.**
11. **Instruction manual, complete printed technical literature with illustration must be provided.**
12. Director, Central Farm Machinery Training & Testing Institute does not pledge to accept the lowest tender and reserves the right for accepting any tender at his discretion.
13. **Failure and termination:-**
 - a) If the supplier fails to supply of the required equipments within the period fixed, Director, C.F.M.T.&.T.I, Budni may without prejudice to his right recover damages for breach of the contract or damages occurred during supply of equipments.
 - b) Cancellation of the supply order: If any equipment/stores or part thereof is found to be below the required specifications or different as mentioned in the quotation, it will be summarily rejected and required specifications are different as mentioned in the quotation, it will be summarily rejected and returned to the supplier at his expenses. If rejected material is not lifted within one month from the date of issue of the communication of rejection, the supplier will have to bear godown rent at the rates prescribed by us.
 - c) Tenders prescribing any deviation from the conditions set forth above will not to be considered.
 - d) Any dispute, arising out of the supply order will be subject to the exclusive jurisdiction of the competent court at Budni(M.P.)
14. **No negotiation will be carried out:** However, the Director, reserves the right to resort to negotiation on price after completing the evaluation of rates under exceptional case where it is observed that price variation is abnormal. Therefore, supplier may quote their final price
15. The bids will be opened as per schedule given in the e-procurement portal. If there is any change in the opening schedule, a corrigendum will be issued prior to the date of opening of commercial bid.
16. The bids prescribing any deviation from the conditions set forth; conditional and also PRIMA FACIE ambiguous will be rejected.
17. The Director, Central Farm Machinery Training & Testing Institute, Budni reserves the right to cancel any or all the tenders and also to cancel the entire process without assigning any reason whatsoever.

DUE DATE AND TIME FIXED FOR RECEIPT AND OPENING OF TENDERS:

1	Date of uploading of tender	22-04-2020
3	Due/last date of receipt of bids	23-05-2020
4	Date of opening of bids	25-05-2020

-For Director-