

TENDER

for

Supply of Electrical items for Test Bench <u>Tender No. NTSC(C)/EC/02/2011-12</u>

Issued by

NSIC TECHNICAL SERVICES CENTRE,
THE NATIONAL SMALL INDUSTRIES CORPORATION LTD.,
(A GOVT. OF INDIA ENTERPRISE)
SECTOR B-24, GUINDY INDUSTRIAL ESTATE
EKKADUTHANGAL, CHENNAI – 600 032.

TEL: 044-22252335/6/7 FAX: 044-22254500 **E-Mail**: ntscche@nsic.co.in **Website**: www.nsic.co.in



NSIC TECHNICAL SERVICES CENTRE NATIONAL SMALL INDUSTRIES CORPORATION LTD.

(A Govt. of India Enterprise)

Sector-B-24. Guindy Industrial Estate, Ekkaduthangal, Chennai – 600 032. Phone: 22252335/6/7 Fax: 22254500 E Mail: ntscche@nsic.co.in Website: www.nsic.co.in Dated: 30-01-2012

Ref. No: NTSC (C)/EC/02/2011-12

INDEX

SI.No.	Description	Page No.
1	Cover Page	1
2	Index	2
3	Notice Inviting Tender	3
4	Instructions to the Tenderers	4
5	Form of Tender	5
6	Commercial and General Terms & Conditions	6 - 7
7	Annexure	8- 9



NSIC TECHNICAL SERVICES CENTRE NATIONAL SMALL INDUSTRIES CORPORATION LTD.

(A Govt. of India Enterprise)

Sector-B-24. Guindy Industrial Estate, Ekkaduthangal, Chennai – 600 032. Phone: 22252335/6/7 Fax: 22254500 E Mail: ntscche@nsic.co.in Website: www.nsic.co.in

Ref. No: NTSC (C)/EC/02/2011-12 Dated: 30-01-2012

NOTICE INVITING TENDER

Sealed tenders are hereby invited on behalf of the General Manager, NSIC Technical Services Centre (NTSC), Sector B-24, Guindy Industrial Estate Ekkaduthangal, Chennai – 600032 from the reputed firms/agencies/companies who are interested in supplying Electrical items for Test Bench as per list given at Annexure so as to reach the General Manager, NTSC, Chennai – 600 032 upto **3.00 p.m. on 08-02-2012.** The details as summarized below:-

a)	Name of the Electrical items	As per Annexure
b)	Earnest Money Deposit	5% of the quoted price against each item & should be rounded off to the nearest 500 rupees on higher side. (Example: if calculated EMD is Rs.501 then Rs.1000 is to be deposited as EMD against each item).
c)	Cost of Tender Document	Rs. 500/- (non-refundable)
d)	System of Tender submission	Two bid system – Technical Bid and Financial Bid separately in two sealed covers superscribing "TECHNICAL BID for the supply of Electrical items for Test Bench" and "FINANCIAL BID for the supply of Electrical items for Test Bench". Both envelopes should be kept in a third cover superscribing "Tender for the supply of Electrical items for Test Bench".
e)	Supply of equipments	Within three weeks from the date of awarding the order
f)	Last date of submission of completed tender documents	08-02-2012 up to 3.00 P.M.
g)	Date of issue of Tender	31-01-2012 From 10.30 A.M



NSIC TECHNICAL SERVICES CENTRE NATIONAL SMALL INDUSTRIES CORPORATION LTD.

(A Govt. of India Enterprise)

Sector-B-24. Guindy Industrial Estate, Ekkaduthangal, Chennai – 600 032. Phone: 22252335/6/7 Fax: 22254500 E Mail: ntscche@nsic.co.in Website: www.nsic.co.in

Ref. No: NTSC (C)/EC/02/2011-12 Dated: 30-01-2012

INSTRUCTIONS TO THE TENDERERS

The Tender shall be submitted in accordance with these instructions and any tender not conforming thereto is liable to be rejected. These instructions shall form the part of the tender and contract.

- 1. The tender should be submitted in Two bid system **Technical Bid** and **Financial Bid** separately in two sealed covers superscribing "TECHNICAL BID for the supply of Electrical items for Test Bench" and "FINANCIAL BID for the supply of Electrical items for Test Bench". Both envelopes should be kept in a third cover superscribing "**Tender for the supply of Electrical items for Test Bench**".
 - The Technical Bids will be opened at the first instance and evaluated by the Competent Committee or Authority. At the second stage, Financial Bids of the technically qualified Bidders only will be opened for further evaluation and ranking before awarding the contract.
- 2. Tender Documents may be obtained in person from our office against payment of Rs.500/- by cash or crossed Demand Draft/Pay Order in favour of "NSIC Ltd. A/c NTSC." payable at Chennai and also can be downloaded from our web site www.nsic.co.in from 31-01-2012.
- 3. The tender shall be completed in all respects (should be signed and dated by the Authorized Signatory in all pages). The tender received without tender fee and EMD shall be rejected outright.
- 4. Earnest Money deposit: 5% of the quoted price against each item should be rounded off to the nearest 500 rupees on higher side. (Example: if calculated EMD is Rs.501 then Rs.1000/- is to be deposited as EMD against each item) shall be submitted along with the tender as Earnest Money Deposit by Demand Draft/Pay Order in favour of "NSIC Ltd A/c NTSC." payable at Chennai.
- 5. The Tendering firms/agencies are required to enclose attested photocopies of the following documents, failing which their bids will be summarily/out-rightly rejected:
 - a. Copy of CST/VAT/TIN Registration Certificates;
 - b. Copy of Income Tax Return.

FORM OF TENDER

Tο

The General Manager NSIC - Technical Services Centre Sector B-24, Guindy Industrial Estate Ekkaduthangal, Chennai – 600 032

Dear Sir,

Subject: Offer for supply of Electrical items for Test Bench

Tender No: <u>NTSC (C)/EC/02/2011-12</u>

HAVING EXAMINED AND PERUSED THE FOLLOWING DOCUMENTS

- 1. Notice Inviting Tender
- 2. Instruction To The Tenderers
- 3. Form Of Tender
- 4. Terms & Conditions For supply

I/We hereby submit our quoted rates in the enclosed format as Annexure. The validity of the offer is 30 days from the last date of submission of tenders. Should our tender be accepted I/We agree that:-

- 1. Earnest Money Deposit shall be retained by NSIC-Technical Services Centre on account of Security Deposit.
- 2. The tender document alongwith your delivery instructions shall constitute to bind contract between us and NSIC Technical services Centre, Chennai.
- 3. In the event of failure to deliver the items within the stipulated time of three weeks period in full, liquidated damages at the rate of **1.00** percent per week of delay with a maximum of 10 percent will be levied for the delayed supplies.
- 4. Earnest money will be refunded to us without any interest thereof, if our tender is not accepted.

Enclosed Annexure-A

AUTHORISED SIGNATURE Seal of the Firm/supplier



NSIC TECHNICAL SERVICES CENTRE NATIONAL SMALL INDUSTRIES CORPORATION LTD.

(A Govt. of India Enterprise)

Sector-B-24. Guindy Industrial Estate, Ekkaduthangal, Chennai – 600 032.

Phone: 22252335/6/7 Fax: 22254500 E Mail: ntscche@nsic.co.in Website: www.nsic.co.in

Ref. No: NTSC (C)/EC/02/2011-12

Dated: 30-01-2012

COMMERCIAL AND GENERAL TERMS & CONDITIONS

Subject: Offer for supply of Electrical items for Test Bench

Tender No: <u>NTSC (C)/EC/02/2011-12</u>

Sealed Tenders are hereby invited for supply of Electrical items for Test Bench as per following terms & conditions:

- 1. Tenderers shall submit their offers in two bid system in sealed cover superscribed as "Tender for supply of Electrical items for Test Bench" as explained in INSTRUCTIONS TO THE TENDERERS at NSIC Technical Services Centre, (NTSC) Chennai on or before 08-02-2012 upto 3.00 P.M.
- 2. Tenderers are strictly advised to quote their rates separately for individual items in their Financial Bid. There are four items (Annexure).
- 3. The Tender should be accompanied with Earnest Money Deposit equivalent to 5% of the quoted price against each item as explained in INSTRUCTIONS TO THE TENDERERS and the total of each item's EMD should be deposited in the form of a Demand Draft/Pay Order in favour of "NSIC Ltd A/c NTSC." payable at Chennai. No Cheque or cash shall be accepted. EMD should be annexed with the Technical Bid. The offers without EMD will be rejected.
- 4. The validity of the offer shall be **30 days** from the date of award of the order.
- 5. General Manager, NSIC-TSC, Chennai reserves all the rights to accept or reject any or all the offers. The Centre is also not bound to accept the lowest offer.
- 6. The offer should be made in the Tender form enclosed and marked as tender No. NTSC (C)/EC/02/2011-12 dated 30-01-2012.
- 7. The Tenders will be opened at NTSC-Chennai on **08-02-2012 at 4.00 P.M.** The Tenderers or their authorized representative (One person only) may be present at the time of opening of the tender.
- 10. The EMD deposited by the successful Tenderer shall be adjusted for the Security Deposit. The EMD of unsuccessful Tenderers will be refunded after issue of order to the successful Tenderer.

- 11. The successful Tenderers shall deliver the items to NTSC- Chennai within three weeks from the date of issue of order. In case the items are not supplied within the stipulated period, the **Security Deposit shall be forfeited**.
- 12. Payment Terms: 75% of the order value against delivery. Balance amount after installation, commissioning and satisfactory report of working.
- 13. All the communication shall be addressed to:

The General Manager,

NSIC TECHNICAL SERVICES CENTRE, SECTOR B-24, GUINDY INDUSTRIAL ESTATE EKKADUTHANGAL, CHENNAI – 600 032.

TEL: 22252335/6/7 FAX: 22254500

EMAIL: ntscche@nsic.co.in Website : www.nsic.co.in

- 14. The decision of the NSIC Technical Services Centre, Chennai will be final and binding on the Tenderers.
- 15. In the event of any dispute the legal matter shall be subjected to the jurisdiction of Chennai / Chennai court only.

Subject: Offer for supply of Electrical items for Test Bench Tender No: NTSC (C)/EC/02/2011-12

SI.			
No.	Description		
1	a) Three phase squirrel cage induction motors – two Nos. 5.5 kW / 415 V, 4 pole – make: SIEMENS/ABB/Hindustan motors/kirloskar/any International Standard make		
	One energy efficient and another Conventional motor. Both the motors should be of high energy		
	efficiency (80% and above for conventional motor and 88% and above for energy efficient motor).		
	The energy efficient motor should conform to applicable international / Indian <i>standards</i> .		
	b) Eddy current Retarder Dynamo-meter – one No., any International Standard make		
	Braking Torque 74 Nm/7.5 KgM Rated absorption Power 11 KW / 15 HP		
	Rated absorption Fower 11 KW / 13 TIF Rated speed 1500 RPM,		
	Max speed 5000 RPM		
	Speed measurement accuracy: 1 RPM resolution		
	Torque measurement precision ±0.5%.(F.S.), 1 Nm Resolution		
	Torque sensing: Force sensor reaction type		
	Torque sensor specification: Full bridge, 350 Ohms resistance, Strain Gauge type,		
	10V DC excitation, 2mV/V output		
	Torque sensor cell accuracy: class 0.2		
	Mode of cooling: Forced air cooled by axial fan Direction of axis rotation: Bi-direction – Clockwise & Anticlockwise		
	Moment of Inertia 0.22 Kg/M ²		
	Torque calibrating arms		
	C) Control panel containing switches / knobs to vary various parameters, like frequency, voltage,		
	dynamometer loading etc with appropriate software for Motor Testing.		
	Electronic controller for Dynamometer, Load potentiometer, Interlock with cooling fan &		
	Annunciaters, wiring, terminals & Mains isolator		
	Input power (Motor Power Sensor to sense Motor KW – to monitor Motor input power & for calculation of efficiency) & output power, speed, torque, efficiency would be displayed on monitor &		
	stored in table & Graphs in MS Excel format.		
	Facility to view/print observation tables & Graphs		
	Facility to save the date in Excel format		
	Motor speed control, Torque control is by soft Potentiometer with + & - to preset		
	PC Auto & PC - Manual mode selector Soft push button switch on Monitor screen		
	Power Analyser to monitor Voltage, current, frequency, input & output power in KVA, KVAR & KW,		
	THD and Power Factor within the accuracy of 0.5% d) Laptop (HP/Lenovo/Ace/Dell) loaded with appropriate software with necessary interface & Data		
	acquisition and analysis with graphic output. I/P Power Vs Eff, PF, Current, speed etc. Licensed		
	Windows OS (XP/7), minimum 250GB HD, DDR 4GB, Processor–Core 2 Duo/latest, Monitor–		
	Min.15" & PCI card with necessary Digital & Analogue Input & output with Motor test software.		
	e) Printer: Laser jet color Printer (international standard make)		
	f) Test Bed table to mount Dynamo meter & two Motors of 5.5 Kw each, with sliding facility to		
	change the motor for testing one by one.		
	Cardan Shaft – universal joint with spline to connect Dynamometer to Motor – for height alignments & shaft adaptors to suit Motor shaft diameter.		
	X Y axis Motor mounting adjustment to accommodate different mountings dimensions of Motor.		
	g) Cables & Wires: Cable loom with flexible PVC pipe Shielded Control cables for all type of		
	sensors & dynamometer controller with male female connectors with flexible conduct of length and		
	all types of armoured cables and wires for connection to each others as per requirement with		
	appropriate length & size.		

2	Energy Efficient Variable Frequency Drive (VFD): make SIEMSNS/ABB/TECO/ any International Standard make
	7.5 kW, 3 phase, 415V AC, 50 Hz with line choke MCB, Drive ON/OFF Push button, speed increase & decrease push button which will be connected to the input of the motors. The VFD should be of reputed make and world-class standard, with good life time and minimum maintenance. The drive and options shall comply with the applicable requirement of the latest standards.
3	Autotransformer: make AE/Jindal/ any International Standard make
	Rating 15 kVA, 3 Phase, Input voltage 415V with variable output 0 – 450 V, air cool, controlled by servo motor – manual & automatic both,
4	Digital resistance measurement Meter / Digital Micro Ohm Meter: capable of measuring stator
	resistances in the range of milli and micro Ohms in minimum five steps for offline measurement. Display should be in 3.5 digit.

Note: The items of SI.No. 1 should be quoted as one package. All equipments should conform to International standards.

---000000000---