

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



CSIR - NAL Estd. 1959
ISO 9001 : 2015
Certified Organization

INVITATION FOR BIDS/NIT

Tender No. NAL/PUR/CSMST/475/19-Y

Dated: 20-Dec-19

CSIR- National Aerospace Laboratories (NAL), Bengaluru, India is one of the premier laboratories under Council of Scientific and Industrial Research (CSIR), an autonomous body under 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 online quotation for procurement of the following item(s) for day to day research work.

Sl.No.	Description of Items	Unit	Qty
1	Composite Fabrication / Repair tool Kit with Foam Programming - Please refer Annexure for detailed specification.	Set	1
Single / Double Bid		Single	
Bid Security (EMD) (in INR)		Bid Security Declaration should be enclosed with quotation.	
Performance Security		10% of the purchase order value	

01. Tender Documents may be downloaded from Central Public Procurement Portal <https://www.etenders.gov.in>. Aspiring Bidders who have not enrolled/ registered in e- procurement should enroll/ register before participating through the website <https://www.etenders.gov.in>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission'.
02. Tenderers can access tender documents on the website (For searching in the NIC site <https://www.etenders.gov.in>, kindly go to Tender Search option, select tender type and select ' Council of Scientific and Industrial Research' in organization tab and select NAL-Bengaluru-CSIR in department type Thereafter, Click on "Search" button to view all CSIR-NAL, Bengaluru tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website <https://www.etenders.gov.in> as per the schedule given in the next page.
03. 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 authorization letter from their principal. To maintain sanctity of tendering system, one Indian Agent cannot represent two different Foreign principals in one tender.
04. Unsolicited / conditional / unsigned tenders (Quotations) **shall not** be considered. Quotations received after the due date and time **shall be summarily rejected**.
05. The Bidder shall comply the terms and conditions of the tender, failing which, the **offer** shall be liable for rejection.
06. The Director, CSIR- National Aerospace Laboratories., Bengaluru reserves the right to accept any or all the tenders either in part or in full or to split the order without assigning any reasons there for.

Raman Kumar
Section Officer (S&P)

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<http://www.nal.res.in>



purchasek@nal.res.in



SCHEDULE CUM CRITICAL DATE SHEET

1	Name of Organization	CSIR-National Aerospace Laboratories, Bengaluru	
2	Tender Reference No	NAL/PUR/CSMST/475/19-Y dated: 20-Dec-19	
3	Tender Type (Open/Limited/EOI/Auction/Single)	Open	
4	Type/Form of Contract (Work / Supply / Auction / Service / Buy / Empanelment / Sell)	Supply	
5	No of Covers (One/Two/Three/Four)	One	
6	Tender Category (Services/Good/Works)	Goods	
7	Allow Resubmission (Only in online mode within scheduled period)	Yes	
8	Allow Withdrawal (Only in online mode within scheduled period)	Yes	
9	Allow Offline Submission	No	
10	Work Item Title	Composite Fabrication / Repair tool Kit with Foam Programming	
11	Work Description	Composite Fabrication / Repair tool Kit with Foam Programming	
12	Delivery Schedule	40 days from the date of purchase order	
13	Product Category (Civil Works / Electrical Works / Fleet Management / Computer Systems)	R & D Equipment	
14	Is Multi Currency Allowed	Yes	
15	a) Tender Publishing Date -	23-Dec-19	1800 Hrs
	b) Document Download Start Date-	23-Dec-19	1800 Hrs
	c) Bid Submission Start Date-	23-Dec-19	1800 Hrs
	d) Bid Submission End Date-	13-Jan-20	1000 Hrs
	e) Bid Opening Date-	14-Jan-20	1100 Hrs
16	Bid Validity Days	90 days	
17	Address for communication	Stores and Purchase Officer CSIR-National Aerospace Laboratories, HAL Airport Road, Kodihalli, Bengaluru - 560017	
18	Inviting Officer	Director, CSIR-NAL	
19	Contact No	25086040, 25086041	
20	E-mail Address	purchaseek@nal.res.in	
21	Detailed specification of item	Refer Invitation for bids / NIT	
22	Tender Terms & Conditions & Instruction for online bid submission	The prospective bidders are requested to refer to the Standard Tender Document available on NAL Internet (www.nal.res.in) under the icon Tender-Purchase before formulating and submitting their bids	

Specification of "Composite Fabrication/Repair Tool Kit with Foam Programming"**A) Technical Details (list of Items)**

<u>Tool Trolley</u>			
Sl No	Tools	Nos	Annexure 1
Ratchets			
1	Ratchets (1/4 Inch) Large hand	1	1
2	Ratchets (1/4 inch) Small Hand	1	1,2
Wrenches			
3	Ratcheting Combination Standard Handle	1	2
4	Torque Slim line Open End Wrench Set	1	3
5	Align Key Double Ball Hex Key Set	1	3
Torque			
6	Flex-Head Torque Wrench (1/4" Drive) Digital	1	3,4
7	Flex-Head Torque Wrench (1/2" Drive) Digital	1	4
Screw Driver			
8	Screw Driver	1	5
Pliers & Cutter Set			
9	Pliers and Cutter Set	1	5
Punches Chisels/Hammers			
10	STAMING SET (0-9)	1	6
11	STAMING SET (A-Z)	1	6
12	Soft Grip Hammer	1	6,7
13	Mallet Hammer	1	7
14	Claw Hammer	1	7,8
General Handle Tools			
15	Swiss Pattern Needle Files	1	8
16	Bastard Cut Individual Files (Round Files)	1	8
17	Bastard Cut Individual Files (Mill Files)	1	9
18	Bastard Cut Individual Files (Half Round Files)	1	9
19	Striking Scrapers And Putty Knives	1	9
Power Tools			
20	Cordless Impact Wrenches	1	10
21	Diamond Cutter	1	10,11
22	Drilling (Motor) 450 Watts, 5800 RPM	1	11
Accessories			
23	Blow Guns	1	11,12
Measuring Item			
24	Measuring Feeler Gauges	1	12
Sander			
25	Self-Vacuum random orbital sander	1	12,13
Tool Trolley			
26	Tool Trolley With Foam Programming for all the tools	1	13



B) Commercial Details

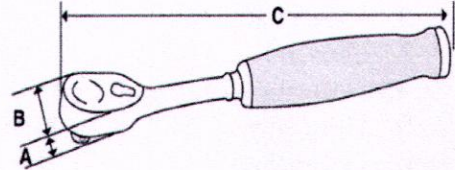
- Following points are to be satisfied by the vendor otherwise their quotation may not be considered for evaluation.
- Items being offered should be a standard product of the manufacturer
- Parties should quote with detailed specification and manufacturer's catalogue.
- All Hand Tools should be of ANSI Standards.
- The supplier should be original manufacturer or their authorized agents. The authorized agents should give the authorization letter from the manufacturer otherwise, their quotation will not be considered.
- The supplier shall provide the list of customers to whom the similar items are already been supplied.
- Supplier should give details of guarantee or warranty of the product and accessories.
- A copy of the calibration chart for the torque wrenches and drivers shall be sent before shipment for verification and clearance.
- The Bidder needs to quote for the complete range. Partial quotes will not be preferred.
- All the tools should come inside a tool trolley with foam programming for each tool inside the trolley



1) Ratchets (1/4 Inch) Soft Grip Long Handle Ratchet

Specification

1. Square drive 2/4 inches
2. Dimension A head depth 8/17 inches
3. Dimension B head width 16/17 inches
4. Dimension C length 7 - 8/8 inches
5. Gear teeth 72
6. Swing Arc 5 degrees
7. Handle gripper collar - Black & Red
8. Chrome finish surface



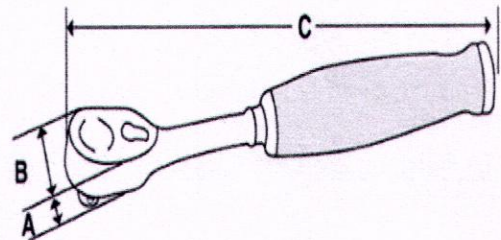
Features Should Comply

1. Soft grip handle should be comfort
2. Field replaceable should be full-length shank to provide maximum handle strength
3. Long lasting and rugged internal mechanism
4. 72-tooth ratchet gear (5° gear action)

2) Ratchets (1/4 inch) Soft Grip Extra-Long Handle Ratchets

Specifications

1. Square Drive 2/4 inches
2. Dimension A head depth 8/17 inches
3. Dimension B head width 16/17 inches
4. Dimension C length 9 – 4/5 inches
5. Gear teeth 72
6. Swing Arc 5 degrees
7. Handle gripper collar - Black & Red collar
8. Chrome finish surface



Features Should Comply

1. Soft grip handle
2. Sealed head to keep the mechanism free of dirt and other contaminants

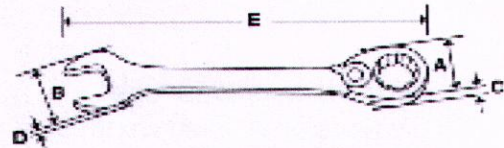
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3) Ratcheting Combination Standard Handle**Specification**

1. Size 10 - 19
2. Dimension A head depth 25 – 35 mm
3. Dimension B head width 28 – 41 mm
4. Dimension C head depth 8 – 12 mm
5. Dimension D head depth 7 – 10 mm
6. Dimension E length 230 – 300 mm

Features Should Comply

1. Nickel-chrome finish surface
2. Wrench handle should be sized for optimum length, comfort and balance
3. Tool Manufactured should be special alloy steel, precision forged, heat treated, and nickel-chrome finish for optimum strength and durability
4. Longer-length, wrench handle to sized for optimum comfort and balance, and to provides increased leverage, especially in tight spaces



A= Ratcheting Box Outside Dia.

B= Open End Outside Dia.

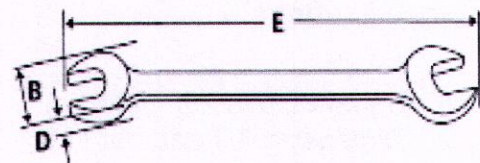
C= Ratcheting Box Head Depth

D= Open End Head Depth

E= Length

4) Torque Slim Line Open End Wrench Set**Specification**

1. Number of wrench: 11 pc
2. Wrench size 6 – 36
3. Chrome finish surface



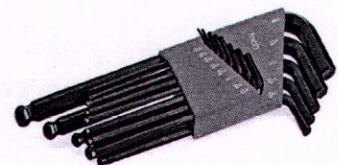
B= Outside Dia.

D= Open End Head Depth

E= Length

5) Align Key Double Ball Hex Key Set**Specification**

1. L – Shaped Combination Hex Wrench 0.05 – 9/64
2. L-Shaped Ball Hex Wrench 13 pc Set
3. Includes: 0.05, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, and 3/8" sizes



6) Flex-Head Torque Wrench (1/4" Drive) Digital

Specification

1. Gear action 5°
2. Gear teeth 72
3. Head depth 8/17 inches
4. Length 18 inches
5. Head width 8/7 inches
6. Head type sealed flex head
7. Handel grip collar - Black & Red



Features Should Comply

1. Angle range: 0 – 360°
2. Torque-then-angle should be torque fasteners and then switch to angle without removing the torque wrench from the fastener
3. Textured grip offers to comfortable
4. Ratchet mechanism features

7) Flex-Head Torque Wrench (1/2" Drive) Digital

Specification

1. Gear Action 5°
2. Gear Teeth 80
3. Head depth 4/5 inches
4. Length 18 inches
5. Head width 6/8 inches
6. Head type sealed flex head
7. Handel grip collar - Black & Red



Features Should Comply

1. Angle range: 0 – 360°
2. Torque-then-angle should be torque fasteners and then switch to angle without removing the torque wrench from the fastener
3. Textured grip offers to comfortable
4. Flared end prevents your hand from slipping off during high-leverage applications
5. Ratchet mechanism features Low-profile buttons protect against accidental activation



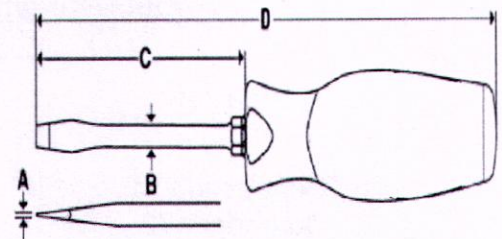
8) Screw Driver

Specification

1. Flat Tip .040" hard grip red screwdriver
2. Flat Tip .035" hard grip red screwdriver
3. Flat Tip .040" hard grip red screwdriver
4. Flat Tip .050" hard grip red screwdriver
5. Flat Tip .055" hard grip red screwdriver
6. 2 Hard grip red screwdriver

Features Should Comply

1. 8 pc Hard grip combination red screwdriver set
2. Flat tip, plus (3) screwdrivers in a storage tray



A= Tip Thickness

B= Blade Dia,

C= Blade Length,

D= Length

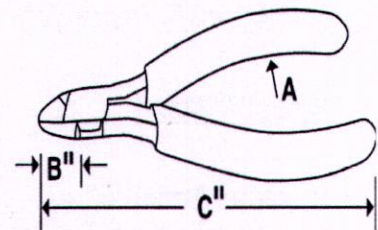
9) Pliers And Cutter Set

Specification

1. 4pc Pliers/ Cutters
2. Adjustable joint interlocking channel pliers (10 – 1/6)
3. 7" Needle nose pliers (Red)
4. 8" Talon grip combination Slip-Joint Pliers (Red)

Features Should Comply

1. Cold-forged for increased strength from top to bottom
2. Joints should be positioned close to cutting edge
3. Every set of pliers and cutters is made with special alloy steel
4. Handel gripper collar - Red for easy identification/Marking with permanent pens



10) STAMING SET (0-9)

Specification

1. Characters 0-9
2. Figure Size 3/16 inches
3. Length 2 - 7/16 inches
4. Square Body 5/16 inches
5. Numbers of Stamps: 09

11) STAMING SET (A-Z)

Specification

1. A-Z Steel Stamping Set
2. Characters A-Z
3. Figure Size 3/16 inches
4. Length 2 - 7/16 inches
5. Square body 5/16 inches
6. Number stamps 27

12) Soft Grip Hammer

Specification

1. Length 12 mm
2. Net weight: <1 kg
3. Face dia. 1 - 9/18 mm
4. Head length 4 - 1/8 mm
5. Face dia. 1 - 9/20 inches
6. Head length 4 - 1/8 inches



Features Should Comply

1. Free flowing shot design to improve dead blow action while reducing rebound
2. Compact head has larger surface striking area and heavier caps to improve as 40%
3. Soft grip handle with ribbed

13) Mallet Hammer

Specification

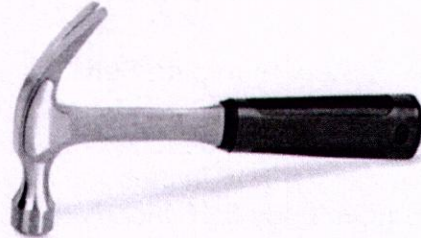
1. Hammer material: rubber
2. Handle: wood
3. Hammer type: mallet hammer
4. Weight of rubber: <500 grams
5. Material: rubber wooden handle
6. Length 3 - 3/4 inches
7. Face dimensions 3 - 1/6 inches
8. Solid-rubber head is 3-3/4" long, 2-1/6" dia.
9. Single gross weight: <1kg



14) Claw Hammer

Specification

1. Claw style curve
2. Handle length 5 inches
3. Head length 130 mm
4. Overall length 14 inches
5. Overall length 350 mm
6. Weight <1kg



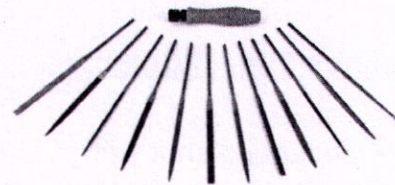
Features Should Comply

1. Drop forged carbon steel head
2. Oversized striking surface
3. Polyurethane should be improving grip and offers abrasion resistance and low temperature

15) Swiss Pattern Needle Files

Specification

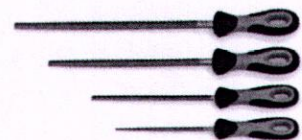
1. 12 Piece standard needle file Set
2. File length: 175 mm
3. Cutting length: 70 mm
4. Handle Dia: 4 mm
5. Set consists of 12 different shape Swiss pattern needle files
6. Round, Triangle, Flat, Hand, Barrette, Slitting, Square, Half-Round, Knife, Oval, Round Edge & Pippin



16) Bastard Cut Individual Files (Round Files)

Specification

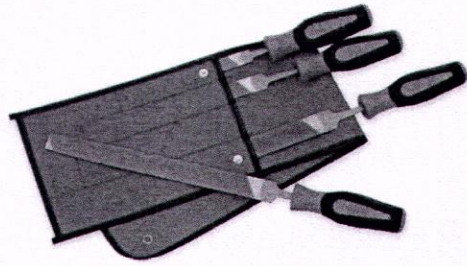
1. Ergonomic handle bastard cut round file 6 inches
2. Ergonomic handle bastard cut round file 8 inches
3. Ergonomic handle bastard cut round file 10 inches
4. Ergonomic handle bastard cut round file 12 inches
5. Handle grip collar - Red & Black

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17) Bastard Cut Individual Files (Mill Files)

Specification

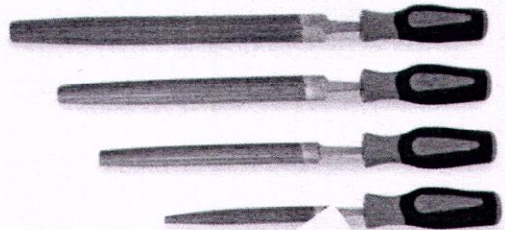
1. Bastard cut mill file 6
2. Bastard cut mill file 8
3. Bastard cut mill file 10
4. Soft grip file handle (Red)
5. Handle grip collar - Red & Black



18) Bastard Cut Individual Files (Half Round Files)

Specification

1. Bastard cut half round file 6
2. Bastard cut half round file 8
3. Bastard cut half round file 10
4. Bastard cut half round file 12
5. Soft grip file handle (Red)
6. Handle grip collar - Red & Black



19) Striking Scrapers and Putty Knives

Specification

1. Striking scraper set 3 pc
2. Single bevel striking scraper
3. Dual bevel striking scraper
4. Handle grip collar - Red & Black



20) Cordless Impact Wrenches

Specification

1. Free Speed 2400 – 3000 rpm
2. Torque: up to 250 ft-lb
3. Drill bit size up to 12 mm
4. Battery type monster lithium 4.0 Ah
5. Net weight with battery 8 kg
6. Sound pressure level 100 dB
7. Vibration level < 6 m/s²
8. Battery voltage 18 v
9. Kit includes (2) batteries, charger and tote

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Features Should Comply

1. Should be micro-controller based system to monitor temperature and amperage
2. Should be Ergonomics designed and continuous use without fatigue
3. Should have portable powerhouse that will withstand the toughest conditions whether in or out of the shop

21) Diamond Cutter

Specification

1. RMP Speed: 3000 – 3300 RPM
2. Cutter type Diamond
3. Output Power: 300- 350 Watts
4. Weight of the tool: < 1 kg
5. Depth of capacity: 12-15mm
6. Hose size and Nipple size: 10mm
7. Belt Sander vibration: <2.5m/s²
8. Operating pressure: 3.5-7Bar
9. Cutter Vibration: 2.5m/s²

Features Should Comply

1. Safety guard around the Belt should be provided
2. Type certificate to cut FRP material should be provided
3. Operator manual should be provided

22) Drilling (Motor) 450 Watts, 5800 RPM

Specification

1. RMP Speed: 5800-6300 RPM
2. Output Power: 400-550 Watts
3. Weight of the tool: < 1 kg
4. House size and Nipple size: 6mm
5. Cutter vibrations: <2.5m/s²
6. Operating pressure: 5.5-7Bar

Features Should Comply

1. Type certificate to cut FRP material should be provided
2. Operator manual should be provided



23) Blow Guns

1. Nozzle length: 90 mm
2. Nozzle opening diameter: 3.5 - 4.5 mm
3. Air mounting outlet: Rc1/4
4. Total length: 237 – 300 mm
5. Max Working Pressure: 1.6 – 2 map

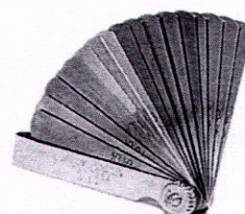
Features Should Comply

1. Built-in valve system improves trigger control
2. Impact-resistant material for long-lasting service
3. Galvanized blow tube for corrosion resistance
4. Handle grip collar - Red & Black

24) Measuring Feeler Gauges

Specification

1. No. of blades 30
2. Blade dimension: 1/2 – 4 inches
3. Blade size: 0014 and 001 – 030 inches



Features Should Comply

1. Should be Includes blade sizes .0014 and .001-.030"
2. Use to adjusting governor gap
3. Double stamped with metric sizes

25) Self Vacuum random orbital sander

Specification

1. RMP Speed: 12000 – 12300 RPM
2. Output Power: 210-300W
3. Weight of the tool: < 1kg
4. House size and Nepal size: 6mm
5. Operating pressure 4-6.3Bar
6. Cuter Vibration: <2.5m/s²
7. Pad Diameter: 150mm



Features Should Comply

1. Safety guard around the disc should be provided
2. Type certificate to cut FRP material should be provided
3. Operator manual should be provided

26) Tool Trolley With Foam Programming For All The Tools

Specification

1. No. of Drawers 13
2. Load capacity: 2400 – 2500
3. Caster size, 6 x 2 inches
4. Net weight: 280±300 kg
5. Tool trolley weight: (1000±100) mm
6. Tool trolley height (900±100) mm
7. Tool trolley depth (500±50) mm
8. Double Slide (1 drawer)



Features Should Comply

1. Double slides on top wide drawer for 250 kg capacity
2. 125 kg ball bearing slides for smooth drawer operations
3. Round key lock for higher security
4. Factory installed aluminum trim for professional appearance
5. Powder coated paint finish with scratch resistant paint formula

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Tender No.: NAL/PUR/CSMST/475/19-Y

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 refuse 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:

1. 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.
2. Bid Security declaration must be signed in by the Proprietor/CEO/MD or equivalent level of Officer of the company.