

PROCEEDINGS OF THE PRE-BID CONFERENCE HELD ON 6TH FEBRUARY 2019 AT MATERIAL SCIENCE CONFERENCE HALL, CSIR-NAL TOWARDS PROCUREMENT OF BENCH TYPE VERTICAL OPTICAL PROFILE PROJECTOR WITH ACCESSORIES.

The Pre-bid Conference was held and the following T&PC members attended the meeting: -

Sl. No.	Name & Designation		Role
1	Dr. C. M. Ananda	Chief Scientist/Head ALD	Chairman
2	Mr. Vineet Kumar	Chief Scientists, C-CADD	Member
3	Dr. Soumendhu Jana	Sr. Pr. Scientist, PR	Member
4	Dr. S. Ravishankar	Chief Scientist/Head APMF	Invitee
5	Mr. P.V. Shashi Kumar	CSIR-Consultant	Expert - Invitee
6	Mr. R. Ravindran	CSIR-NAL (Retired) Retired	Expert - Invitee
7	Smt. B R Radha	Sr. Technical Officer-3	Member- Convenor (TSC)
8	FAO or his representative		Member
9	Mr. H.V. Sundar	COSP	Member
10	Mr. M. J. Nandeesh	SPO	Member - Convenor (T&PC)

The list of Prospective bidders who attended the Pre-bid Conference is as per **Annexure-I**.

At the outset, the Chairman welcomed all the Members and the representatives of the Bidders and briefed in general the scope of the Project and thereafter requested **SPO** to brief the Bidders on the salient features of the commercial terms. The Indenting Officer to read out the clarification sought by the bidders and the replied thereto as detailed in **Annexure-II (Part A: Technical Clarification and Part B: Commercial Clarification, if any)**.

The representatives present were satisfied with the replies given and it was informed that the corrections / additions / clarifications given, as discussed during the Pre-Bid Conference would be hosted on the website of CSIR-NAL and all prospective bidders are required to take cognizance of the proceedings of the Pre-Bid Conference before formulating and submitting their bids as stipulated in bidding Documents.

The meeting ended with a vote of thanks to the Chair.

Encl: as above.

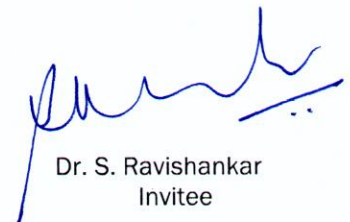

M. J. Nandeesh
SPO



H.V. Sundar
COSP


FAO


Vineet Kumar
Member


Dr. Soumendhu Jana
Member


Dr. S. Ravishankar
Invitee


P.V. Shashi Kumar
Expert - Invitee


R. Ravindran
Expert - Invitee


B R Radha
Member


Dr. C. M. Ananda
Chairman

CSIR-NATIONAL AEROSPACE LABORATORIES
BENGALURU - 560 017

TENDER NO.: NAL/PUR/APMF/429/18-Z

ANNEXURE - I

DATE & TIME : 06-02-2019 @ 10.00 AM

VENUE : Material Science Conference Hall CSIR-NAL, Kodihalli, Bengaluru

Pre-Bid Conference towards Procurement of Bench Type Vertical Optical Profile Projector with Accessories.

ATTENDANCE SHEET - T&PC MEMBERS

Sr. No.	Name		Signature
1	Dr. C. M. Ananda, Chief Scientist/Head ALD	Chairman	C.M. Ananda 06/02/19
2	Mr. Vineet Kumar, Chief Scientists, C-CADD	Member	
3	Dr. Soumendhu Jana, Sr. Pr. Scientist, PR	Member	
4	Dr. S. Ravishankar, Chief Scientist/Head APMF	Invitee	
5	Mr. P.V. Shashi Kumar, CSIR-Consultant	Expert - Invitee	
6	Mr. R. Ravindran, CSIR-NAL (Retired) Retired	Expert - Invitee	
7	Smt. B R Radha, Sr. Technical Officer-3	Member- Convenor -TSC	
8	FAO or his representative	Member	
9	Mr. H.V. Sundar, CoSP	Member	
10	Mr. M. J, Nandeesh, SPO	Member-Convenor T&PC	

NATIONAL AEROSPACE LABORATORIES
BENGALURU - 560 017

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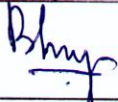


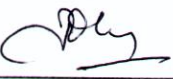

DATE & TIME : 06-02-2019 @ 10.00 AM

VENUE : Material Science Conference Hall CSIR-NAL, Kodihalli, Bengaluru

ANNEXURE - I

Pre-Bid Conference towards Procurement of Bench Type Vertical Optical Profile Projector with Accessories.

ATTENDANCE SHEET - PROSPECTIVE BIDDERS

Sr. No.	Name of the Firm	Name & Designation of Representative	Mobile No. & Email ID	Signature
1	D.A. SHASHIDHAR MI TU TOYO	D.A. SHASHIDHAR Asst. Vice President	9343769218 shashidhar@mitutoyo.com	
2	Carl Zeiss India (Pvt) Ltd.	V. Rajashankara Business development	9821189243 rajashankara.v@zeiss.com	
3	Trimos metrology Shankar Gouda	Executive product specialist Support	9164331336 shankargouda-v@trimosmetrology.net	
4	Trimos metrology. (I) Pvt Ltd.	Product Manager Shahnawaz Khan.	902900692. shahnawaz_k@trimosmetrology.net	
5	Sirius Technologies Bangalore	JOBY MATHEW SALES MANAGER	767688899 joby@sirius-tech.in	
6	Machine Tools (I) LTD BANGALORE	M. BALA SUBRAMANIAN Asst. MANAGER	9353056401 m.bala@machtools.com	
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Certified

**Council of Scientific and Industrial Research
NATIONAL AEROSPACE LABORATORIES**

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Email: purchasek@nal.res.in

TECHNICAL CORRIGENDUM

**Tender Reference No. NAL/PUR/APMF/429/18-Z Dated 23-JAN-2019
Tender ID : 2019_CSIR_21447_1**

In continuation of CSIR-National Aerospace Laboratories Tender No. NAL/PUR/APMF/429/18-Z Dated 23-JAN-2019 for **“Supply of Bench type Vertical Optical Profile Projector”**

Pre-Bid meeting was held on 06-02-2019 at CSIR-NAL, Kodihalli Campus, Bangalore-560017.
The following are the changes to be considered by the bidders.

Sl. No.	Existing Description	Amended Description after Pre-Bid meeting held on 6-02-2019	Existing Specification	Amended Specification after Pre-Bid meeting held on 6-02-2019
4.1 A	<u>System Requirements</u>			
2.	Digital Protractor and Digital Counter	Digital Protractor and Digital display	Digital readout required for angular and linear positions.	Digital readout / display required for angular and linear positions.
3.	Counter Resolution	Display Resolution	Digital Counter : 0.001 mm or finer Digital Protractor : 1 min. or finer	Linear : 0.001 mm or finer Angular: 1 min. or finer
4.	Focusing	Focusing	Focusing by hand wheel and power driven. Range : 50 mm or more	Focusing by hand wheel and power driven / Auto focus. Range : 50 mm or more

5.	Stage Accuracy	Accuracy	Linear :± (6 + L/25) µm, L in mm Angular accuracy : Vendor to provide details.	Linear :± (6 + L/25) µm, L in mm
6.	Stage table size	Stage table size	450 mm X 275 mm or more	400 mm x 225 mm or more.
8.	Work stage Traverse range (XY Range)	Work stage Traverse range (XY Range)	X axis :250 mm or more Y axis : 150 mm or more	X axis :250 mm or more Y axis : 125 mm or more
13.	Magnification Accuracy	Magnification Accuracy	Profile: 0.1% or less Surface: 0.15% or less	Profile: ± 0.1% or less Surface: ± 0.15% or less
17.	Accessories required			
	a) Rotary Table	a) Rotary Table	Rotary table compatible to the quoted model. Effective Glass diameter: Ø250 mm or more. Reading Range: 360° Loading capacity: 3kg or more	Rotary table compatible to the quoted model. Effective Glass diameter: Ø200 mm or more. Reading Range: 360°. Loading capacity: 3kg or more.
	c) Overlay charts	c) Overlay charts	Radius, Thread, angle and grid, required.	Radius, Thread, angle and grid, required. Vendor to provide details.
18.	Accessories - Optional			
	a) Standard Glass Scale	Standard Glass Scales	Calibrated Standard Glass Scale for Checking Magnification accuracy with calibration certificate from NABL Accredited Laboratory. Size: 50 mm Graduation: 0.1 mm Accuracy : (6 +L/50)µm, L in mm.	Calibrated Standard Glass Scale with calibration certificate from Accredited Laboratory. a) Size: 50 mm Graduation: 0.1 mm Accuracy : (3+L/100)µm or better, L in mm. b) Size: 300 mm Graduation: 0.5 mm

				Accuracy : $(1.5+L/100)$ μm or better, L in mm.
	b) Reading Scale	Deleted	<p>Calibrated Glass scale for checking the magnified image of a standard scale on the projected screen with calibration certificate from NABL Accredited Laboratory.</p> <p>Size: 300 mm</p> <p>Graduation: 0.5 mm</p> <p>Accuracy : $(15 +L/20)$ μm or better, L in mm.</p>	Deleted
19.	Technical Evaluation [mentioned in Specifications Column from a) to d)] reports of the model quoted by the vendor to be enclosed as part of technical bid.	Technical Evaluation [mentioned in Specifications Column from a) to d)] reports of the model quoted by the vendor to be enclosed as part of technical bid.	<p>a) Vendor to provide linear accuracy report of the stage with standard calibrated Glass scale to full range in steps of 25 mm in both X and Y axis with 20X lens.</p> <p>b) Vendor to provide angular accuracy details using calibrated angle gauge blocks / triangle master up to 60° with 20X lens.</p> <p>c) Vendor to provide Magnification accuracy report with calibrated glass scale for profile and surface illumination with 20X lens.</p> <p>d) Vendor to provide Radius accuracy with calibrated sphere of $\text{Ø}12\text{mm}$ at 20X.</p>	<p>a) Vendor to provide linear accuracy report of the stage with standard calibrated Glass scale to full range in steps of 25 mm in both X and Y axis with 20X lens.</p> <p>b) Vendor to provide angular accuracy details (screen protractor angle) using calibrated angle gauge blocks / triangle master up to 60° with 20X lens.</p> <p>c) Vendor to provide Magnification accuracy report with calibrated glass scale for profile and surface illumination with 20X lens.</p> <p>d) Vendor to provide Radius accuracy with calibrated sphere of $\text{Ø}12\text{mm}$ at 20X.</p>

4.1.1 GENERAL CONDITIONS				
	Existing Description	Amended Description after Pre-Bid meeting held on 6-02-2019	Existing Specification	Amended Specification after Pre-Bid meeting held on 6-02-2019
1	MANUALS	No amendment	One copy of relevant technical manuals & user manuals in English (Soft copy and Hard copy) should be provided.	Two Hard copies of relevant technical manuals & user manuals in English should be provided.

4.3.3 (1) FINAL ACCEPTANCE TESTS				
Sl. No.	Existing Requirements	Amended Requirements after Pre-Bid meeting held on 6-02-2019	Remarks	Amended Remarks after Pre-Bid meeting held on 6-02-2019
4.3.3a	Accuracies and performance tests have to be proved out at NAL.	Accuracies and performance tests have to be proved out at CSIR-NAL, Bangalore.		No amendment

4.6 INCIDENTAL SERVICES				
Sl. No.	Existing Requirements	Amended Requirements after Pre-Bid meeting held on 6-02-2019	Bidder's compliance & Remarks	Amended Bidder's compliance & Remarks after Pre-Bid meeting held on 6-02-2019
i)	On site Comprehensive Warranty			
5.	In case the Equipment / System remains non-operational for more than 7 days then warranty period will be extended for the equivalent period for which	In case the Equipment / System remains non-operational for more than 7 days then warranty period will be extended for the equivalent period for which Equipment / System remains non-operational.		No amendment

	Equipment / System remains non-operational. Warranty extension in such case shall be done without prejudice to any other Term & condition of the contract.	Warranty extension in such case shall be done without prejudice to any other Terms & conditions of the contract.		
ii)	Non Comprehensive AMC :			
1	<p>a) Two years of Non-Comprehensive AMC after completion of regular warranty period of one year, which includes three breakdown / preventive maintenance per year.</p> <p>b) one calibration visit per year which is to be carried out during third visit of preventive maintenance each year.</p> <p>c) provide software up-gradations inclusive of version and release upgrades as part of the Non-comprehensive AMC.</p> <p>To be quoted as option</p>	<p>a) Two years of Non-Comprehensive AMC after completion of regular warranty period of one year, which includes three breakdown / preventive maintenance per year.</p> <p>b) one calibration visit per year which is to be carried out during third visit of preventive maintenance each year.</p> <p>c) provide software up-gradations inclusive of version and release upgrades with relevant one-day training as part of the Non-comprehensive AMC.</p> <p>To be quoted as option</p>		

Other clauses of the bidding document remain unchanged.

SD/-

STORES AND PURCHASE OFFICER

**CSIR-NATIONAL AEROSPACE LABORATORIES
BENGALURU**

COMMERCIAL QUERIES & CLARIFICATION

Tender No. : NAL/PUR/APMF/429/18-Z

Item Description : PROCUREMENT OF BENCH TYPE VERTICAL OPTICAL
PROFILE PROJECTOR WITH ACCESSORIES

Sr. No.	Query / Clarification Sought	Clarification/Amendment
— NIL —		


Controller of Stores & Purchase