

PROCEEDINGS OF THE PRE-BID CONFERENCE HELD ON 27TH NOVEMBER 2018 AT AEROELASTIC CONFERENCE HALL, TECHNOLOGY BLOCK, GROUND FLOOR, CSIR-NAL TOWARDS PROCUREMENT OF MATERIAL TESTING MACHINE WITH ENVIRONMENTAL CHAMBER/ HIGH TEMPERATURE FURNACE.

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

Sl. No.	Name & Designation		Role
1	Dr. M. Ramesh Kumar	Chief Scientist, ACD	Chairman
2	Dr. S. Venkateswarlu	Principal Scientist, STTD	Member
3	Mr. P. Siva Subbarao	Principal Scientist, STTD	Member
4	Mr. S. Venkatesh	Sr. Scientist, ACD	Member
5	Mr. N. Jagannathan	Sr. Scientist, STTD	Member
6	Mr. Mutturaj H Medar,	Scientist, STTD	Member
7	Mr. K Panbarasu	Sr. Technical Officer, STTD	Member
8	Dr. C.N. Sathyanarayana	Chief Scientist, STTD	Member - PL
9	FAO or his representative		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


FAO


Dr. S. Venkateswarlu
Member


P. Siva Subbarao
Member



S. Venkatesh
Member


N. Jagannathan
Member


Mutturaj H Medar
Member


K Panbarasu
Member


Dr. C.N. Sathyanarayana
Member 27/11/18


Dr. M. Ramesh Kumar
Chairman 27/11/18

**CSIR-NATIONAL AEROSPACE LABORATORIES
BENGALURU - 560 017**

TENDER NO.: NAL/PUR/STTD/164/18-Z



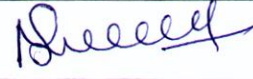

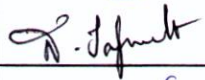


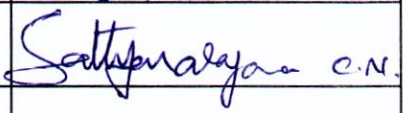
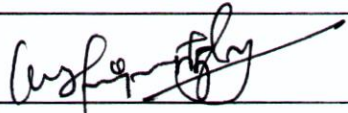
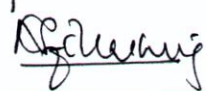
ANNEXURE - I

DATE & TIME : 27-11-2018 @ 2:00 PM

VENUE: Aeroelastic Conference Hall, Technology Block, Ground Floor, CSIR-NAL- Bangalore

**Pre-Bid Conference for procurement of Material Testing Machine with Environmental Chamber/
High Temperature Furnace**

ATTENDANCE SHEET - T&PC MEMBERS

Sr. No.	Name		Signature
1	Dr. M. Ramesh Kumar, Chief Scientist, ACD	Chairman	 27/11/18
2	Dr. S. Venkateswarlu, Principal Scientist, STTD	Member	
3	Mr. P. Siva Subbarao Principal Scientist, STTD	Member	
4	Mr. S. Venkatesh, Sr. Scientist, ACD	Member	
5	Mr. N. Jagannathan, Sr. Scientist, STTD	Member	
6	Mr. Mutturaj H Medar, Scientist, STTD	Member	
7	Mr. K Panbarasu, Sr. Technical Officer, STTD	Member	
8	Dr. C.N. Sathyanarayana , Chief Scientist, STTD	Member	
9	Dr. S. Raja, Chief Scientist, STTD	Member- Convenor -TSC	
10	FAO or his representative	Member	
11	Mr. M. J, Nandeesh, SPO	Member- Convenor T&PC	

NATIONAL AEROSPACE LABORATORIES
BENGALURU - 560 017

ANNEXURE - I




TENDER NO.: NAL/PUR/STTD/164/18-Z

DATE & TIME : 27-11-2018 @ 2:00 PM

VENUE: Aeroelastic Conference Hall, Technology Block, Ground Floor, CSIR-NAL- Bangalore

Pre-Bid Conference for procurement of Material Testing Machine with Environmental Chamber/ High Temperature Furnace

ATTENDANCE SHEET - PROSPECTIVE BIDDERS

Sr. No.	Name of the Firm	Name & Designation of Representative	Email ID	Signature
1	AIMIL LIMITED	ARJUN S St. Business Manager	arjunsomanac@aimil.com	
2	AIMIL LIMITED	Arjun Ramachandran Sales Engineer	arjunr@aimil.com	
3	BISS Pvt Ltd	ROHIT DASH Product Manager	rohit@biss.in	Rohit Dash
4	ADAMS TECHNOLOGIES PVT LTD	AMAR KUMAR.M Regional Sales Manager	amar@adamstech.in	
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**CSIR-NATIONAL AEROSPACE LABORATORIES
BENGALURU**

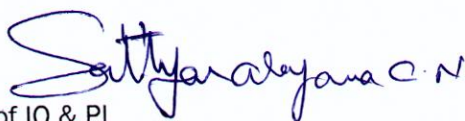
TECHNICAL QUERIES & CLARIFICATION

Tender No. : NAL/PUR/ STTD/164/18-Z

Item Description : Material Testing Machine with Environmental Chamber/
High Temperature Furnace

Sr. No.	Query / Clarification Sought	Clarification/Amendment
1.2	Change in column space from Minimum 650 mm or more to Minimum 635 mm or more	Column space: Minimum 635mm or more
1.4	Change in Frame stiffness from minimum 500kN/mm at 1m from base to minimum 475kN/mm at 0.9m from base	Frame stiffness: High Axial Stiffness of 475kN/mm or more at 0.9m distance from base to crosshead during full reverse stress testing
1.5	Crosshead Adjustment Hydraulically, using Lift Cylinders	Hydraulically/ Electrically operated
1.6	Crosshead Clamp: Manual or Hydraulic	No change
2.3	Axial Alignment : Should have Cam roller guides on the upper end of the actuator	Should have Cam roller guides on the upper end of the actuator or as per standards
2.6	Power consumption: Single Phase, 230V with power consumption of less than 3 KVA at 100kN	The power requirement is only for Main machine which works on UPS. Does not include the power requirements of hydraulic systems
3.3	Change in overload Capacity: 300% or more of full load cell capacity before mechanical failure to 150% or more	No change
4.1	Digital Control System: Fully digital, closed-loop control system based on double precision floating point 64 Bit architecture	Fully digital, closed-loop control system based on double precision floating point 32bit / 64 Bit architecture
4.5	Built-in Waveform Generator Frequency: 0.00001Hz to 1kHz or greater	No change
4.10	Built-in Signal Conditioner: Minimum four conditioners should be supplied for Position, Load, Strain 1 & Strain 2 and there should be provision to add four more	No change
4.21	Grip Control: The hydraulic grip should be electronically controlled	No change
4.24	Standalone operation: A separate control panel for working without PC for minimum possible operations	No change

4.25	Digital I/Os: 4 low level input and 4 low level outputs	No change
6.1	Hydraulic Wedge Grips <ul style="list-style-type: none"> • Suitable specimen holder to conduct static, and LCF test on flat, round, wire, coated fabric and threaded specimens of different dimensions • Suitable for tension and compression including full reverse-stress dynamic testing capability 	<ul style="list-style-type: none"> • Suitable specimen holder to conduct static, and LCF test on flat, round, wire (minimum 0.5mm dia.), coated fabric (minimum 1 to 1.5mm thick) and threaded specimens of different dimensions • Suitable for tension and compression including full reverse-stress dynamic testing capability
6.6	Jaws for Flat Specimen: <ul style="list-style-type: none"> • 50mm wide for specimen thickness of 0 to 15mm or higher (serrated). • 0 to 5mm carbide coated flat jaws 	No change
7.1	Features for Grip controller	No change
7.3	Flow rate: 4.2 l/min under 40 bar & 1 l/min over 40 bar	No change
11.1a	The Low Cycle fatigue software should perform axial strain controlled tests in accordance with ASTM E606 and forthcoming ISO standard ISO/TC164/SC5	The Low Cycle fatigue software should perform axial strain controlled tests in accordance with ASTM E606 and/ or forthcoming ISO standard ISO/TC164/SC5
11.2o	The system and software should have the facility to video capture of the test. In post-test analysis, a scanning cursor on graph allowing the user to select particular points of interest with a viewing of the associated test video frame.	Similar to screen recording
4.1.2	2. A environmental chamber with a digital temperature controller, an observation window, removable wedges, and RS232 interface with cable. The specifications of the furnace should be as follows	2. An environmental chamber with a digital temperature controller, an observation window, removable wedges, and RS232 interface with cable. The specifications of the Chamber should be as follows
	Temperature range: 150° C to + 550° C	Temperature range: -150° C to + 550° C
4.1.4	Operating Temperature: 10° C to +55° C	Operating Temperature: 10° C to +45° C



Signature of IO & PL

**CSIR-NATIONAL AEROSPACE LABORATORIES
BENGALURU**

COMMERCIAL QUERIES & CLARIFICATION

Tender No. : NAL/PUR/STTD/164/18-Z

Item Description : Material Testing Machine with Environmental Chamber/High Temperature Furnace

Sr. No.	Query / Clarification Sought	Clarification/Amendment
1	-----NIL-----	


Stores & Purchase Officer