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/ACD/284/21-Y

Dated: 15-Nov-2021

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.

SI.No.	Description of Items	Unit	Quantity		
1	Stainless steel sheets and rods of SS316 grade	Set	01		
2	Commercial grade aluminum sheets.	Set	01		
Please refer annexure for detailed specification.					

Single / Double Bid	Single	Tender Type	Open
Bid Security (EMD) (in INR)	Bid Security Declaration should be enclosed with quotation	Bid submission end date	06-Dec-2021 10.00 Hrs
Performance Security	Nil	Bid opening date	07-Dec-2021 11.00 Hrs

- 01. Tender Documents may be downloaded from Central Public Procurement Portal <u>https://www.etenders.gov.in</u>. Aspiring Bidders who have not enrolled/ registered in e- procurement should enroll/ register before participating through the website <u>https://www.etenders.gov.in</u>. 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)/Quotations received after the due date and time **shall be summarily rejected**. The Bidder shall comply the terms and conditions of the tender, failing which, the offer shall be liable for rejection.
- 05. The bids of those Bidders failing to comply with the following clauses will be summarily rejected.
 - a. The Bidders proposing to supply finished products directly/indirectly from vendors of countries sharing the land border with India should submit copy of registration done with the Ministry of Home Affairs and Ministry of External Affairs.
 - b. If the Products supplied are not from vendors of countries sharing land border with India, the Bidders have to enclose a declaration to that effect.

पी बी सं. 1779, एचएएल एयरपोर्ट रोड, कोडिहल्ली, बेंगलुरु - 560 017, भारत, P B No 1779, HAL Airport Road, Kodihalli, Bengaluru - 560 017, INDIA फोन / Phone : (का./ Off) : +91 - 80 - 2508 6040 - 45, फैक्स / FAX : +91-80-2526 961



CSIR-National Aerospace Laboratories, Bengaluru-560 017, INDIA

- 06. Bidders are requested to refer to the instruction regarding Procurement Policies for Make in India issued by Ministry of Commerce and Industry, Department of Industrial Policy and Promotion dated. 28-May-2018 and 4-Jun-2020 and guidelines as and when issued.
- 07. The prospective bidders are requested to refer to the Standard Terms and Conditions available on NAL Internet (<u>www.nal.res.in</u>) under the icon Tender-Purchase before formulating and submitting their bids
- 08. 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.

Controller of Stores & Purchase For and on behalf of CSIR

NAL/PUR/ACD/284/21-Y

Annexure- A

Technical Specification of Metallic Material

1. Scope of the Technical Specification

This specification lists the technical requirements for the manufacture, inspection, testing, packing and supply of steel material as per dimensions and properties listed in this specification and conforming to the standards and additional requirements set herein.

2. Scope of the Order

The scope of order includes:

- 2.1 Supply of material according to this technical specification,
- 2.2 Acceptance tests and supply of test certificates for all the tests mentioned in this document
- 2.3 Packaging for safe transport to the Purchaser's site.

3. Technical Requirements

3.1 Stainless steel Material Designation and Grade

Reputed make structural stainless steel material confirming to SS316 grade with surface finish and cut approximately to the sizes as mentioned in Table 1. The SS materials shall have hardness in the range of 80-100 HRB.

3.2 Aluminum Material Designation and Grade

Reputed make commercial aluminum material with surface finish and cut approximately to the sizes as mentioned in Table 2.

4. Terms and Conditions:

- a. Quotation should be given for all the materials on weight basis (price/kg)
- Material should accompany, Manufacturer test certificate indicating its chemical composition test, mechanical test and any heat/cold treatment test
- c. No partial shipment allowed. Item should be supplied within 3 weeks ARO
- d. Item should be delivered to NAL central stores without any additional cost
- e. The material shall be devoid of any surface defects i.e. burrs, pitting, laminations, cracks, penetration marks, non-uniform surface.

5. Packing

The material shall be packed properly to prevent damage during transit. Damaged material received at site shall be rejected and supplier shall arrange for replacement of the same without additional cost implications.

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6. Acceptance

The material will be accepted on fulfilment of following conditions:

- a. Mill Certificate and third party test certificate shall conform to applicable standards.
- b. Hardness check at CSIR-NAL

Table-1: Material Dimensions	and Quantity	for Stainless Steel
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SI. No.	DESCRIPTION	Thickness /Dia. (in mm)	Size (L x W) /L	Qty. (In No's)	Weight (in kg)	Specification
1	Stainless steel sheets	Thickness 0.3 mm	4ft wide x 40ft long	1 Roll	36	
		Thickness 0.8 mm	8ft x4ft	05	95	
		Thickness 4 mm	8ft x4ft	05	475	S316 Grade
2	Stainless steel rods	Dia. 16 mm	12 ft	06	29	(Ref. Annexure-1 for
		Dia. 25 mm	12 ft	06	72	detail
		Dia. 40 mm	12 ft	06	184	specification)
		Dia. 50 mm	12 ft	06	287	
		Dia. 65 mm	12 ft	06	485	

Table-3: Material Dimensions and Quantity for Aluminum

SI. No.	DESCRIPTION	Thickness (in mm)	Size (L x W)	Qty. (In No's)	Weight (in kg)	Specification	
1	Aluminum sheets	Thickness 0.2 mm	3ft wide x 200ft long	1 Roll	50	Commercial grade	
		Aluminum sheets	Thickness 6 mm	10ft x 5ft	15	1129	IS 19500 /
		Thickness 10 mm	10ft x 5ft	10	1254	(Ref. Annexure-2)	

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Annexure-1

Specification for SS316 Grade Stainless Steel

1.	Material	:	Stainless steel sheets / rods		
2.	Grade		SS316		
3.	Chemical	:	C : 0.08 - 0.1 Ni : 10 - 14		
	Composition		Si : 0.75 - 1 Mo : 2 - 3		
	(% by weight)		Cr : 16 - 18 Mn : 1.8 - 2		
4.	Delivery tolerance	:	±10% of the order quantity		
5.	Tensile strength at	:	~525 MPa		
	RT				
6.	Yield strength	:	~220 MPa		
7.	Modulus of elasticity	:	~190 GPa		
8.	Hardness	:	220-250 VHN (Vickers Micro hardness) / 80-90		
			Rockwell B		
9.	Surface finish	:	Surface shall be free from cracks, ripples, burns, pits,		
			straightening marks etc.		
10.	Surface roughness	:	Maximum of 50µm		
11.	Magnetism	:	Non magnetic		
12.	Defects	:	Material should be defect free from any crack, inclusions		
			etc. and to be straight. Material with bend / wrinkle wil		
			not be accepted		

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Annexure-2

Specification for Commercial Grade Aluminium

1.	Material	:	Commercial Grade Unalloyed Aluminium			
2.	Grade	:	IS 19500 / IS 19000 / A1050 / A1100 or equivalent			
3.	Chemical	:	AI : 99-99.5% Others : 0.5-1%			
	Composition					
4.	Delivery tolerance	:	±10% of the order quantity			
5.	Tensile strength at	:	~125 MPa			
	RT					
6.	Yield strength	:	~100 MPa			
7.	% Elongation	:	~12%			
8.	Hardness	:	30-40 Brinell			
9.	Surface finish	:	Surface shall be free from cracks, ripples, burns, pits,			
			straightening marks etc.			
10.	Surface roughness	:	Maximum of 50µm			
11.	Defects	:	Material should be defect free from any crack, inclusions			
			etc. and to be straight. Bend / wrinkle material will not be			
			accepted			

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