

Basic Details

Organisation Chain	Council of Scientific and Industrial Research CSIO Chandigarh Purchase-CSIO-CSIR		
Tender Reference Number	CSIO/3(1)2023-Pur		
Tender ID	2023_CSIR_711332_1		
Tender Type	EOI	Form of contract	Supply
Tender Category	Goods	No. of Covers	1
Payment Mode	Not Applicable	Is Multi Currency Allowed For BOQ	No
Is Multi Currency Allowed For Fee	No		

Cover Details, No. Of Covers - 1

Cover No	Cover	Document Type	Description
1	Fee/PreQual/Technical/Finance	.pdf	Fabrication of Hard Master/Mold for Optical blazed and binary gratings tentative specifications encl
		.xls	Fabrication of Hard Master/Mold for Optical blazed and binary gratings tentative specifications encl

Tender Fee Details, [Total Fee in ₹ * - 0.00]

Tender Fee in ₹	0.00		
Fee Payable To	NA	Fee Payable At	NA
Tender Fee Exemption Allowed	NA		

EMD Fee Details

EMD Amount in ₹	0.00	EMD Exemption Allowed	NA
EMD Fee Type	NA	EMD Percentage	NA
EMD Payable To	NA	EMD Payable At	NA

Work /Item(s)

Title	CSIO/3(1)2023				
Work Description	EOI for Fabrication of Hard Master/Mold for Optical blazed and binary gratings tentative specifications encl				
Pre Qualification Details	Please refer Tender documents.				
Tender Value in ₹		Product Category	Laboratory and scientific equipment	Sub category	NA
Contract Type	Tender	Bid Validity(Days)	90	Period Of Work(Days)	45
Location	Purchase Section CSIR-CSIO Sector 30 Chandigarh	Pincode	160030	Pre Bid Meeting Place	Online Link given in specifications
Pre Bid Meeting Address	Online Link date time given in enclosed specifications	Pre Bid Meeting Date	02-Jun-2023 02:00 PM	Bid Opening Place	Purchase Section CSIR-CSIO Sector-30 Chandigarh

Critical Dates

Publish Date	16-May-2023 11:00 AM	Bid Opening Date	07-Jun-2023 03:30 PM
Document Download / Sale Start Date	16-May-2023 11:00 AM	Document Download / Sale End Date	06-Jun-2023 03:00 PM
Clarification Start Date	16-May-2023 11:00 AM	Clarification End Date	05-Jun-2023 03:00 PM
Bid Submission Start Date	16-May-2023 11:00 AM	Bid Submission End Date	06-Jun-2023 03:00 PM

Tender Documents

NIT Document	S.No	Document Name	Description	Document Size
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			(in KB)
1	Tendernotice_1.pdf	Fabrication of Hard Master/Mold for Optical blazed and binary gratings tentative specifications encl	504.19

Work Item Documents

S.No	Document Type	Document Name	Description	Document Size (in KB)
1	Tender Documents	spec312023.pdf	Fabrication of Hard Master/Mold for Optical blazed and binary gratings tentative specifications encl	504.19

Tender Inviting Authority

Name	Controller of Stores and Purchase
Address	The Director CSIR-CSIO Sector 30 Chandigarh

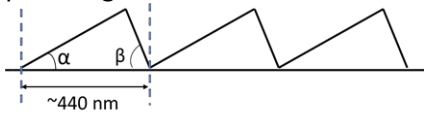
Tender Creator Details

Created By	Mohinder Kumar
Designation	COSP
Created Date	16-May-2023 10:40 AM

Expression of Interest

Pre-indent conference/expression of interest is required for fabrication of hard master/mold for optical blazed and binary gratings with following broad and tentative specifications. The details of the required items are given below:

- Item A: Blazed grating (Quantity 2 Nos.)
- Item B: Binary Grating 1 (Quantity 2Nos.)
- Item C: Binary grating 2 (Quantity 2.Nos.)

Blazed Grating			
S.No	Parameters	Specifications	Tolerances
1.	Substrate and grating material	Silicon	
2.	Substrate Thickness	1 mm or higher	+/- 0.05mm
3.	Grating lines per mm	~ 2275	
4.	Blaze angle	α : 26 degree β : 75 degree 	+/- 0.01 degree
5.	Grating size	1" inch diameter	+/- 0.1mm
Binary Grating 1			
S.No	Parameters	Specifications	Tolerances
6.	Substrate and grating material	Silicon	
7.	Substrate Thickness	1 mm or higher	+/- 0.05mm
8.	Grating Lines per mm	~ 3200	
9.	Grating depth	100 -300nm	+/- 5% of depth
10.	Duty cycle %	25 to 75 (variable over the grating dimension)	
11.	Grating size	50mm x 150 mm	+/- 0.1mm
Binary Grating 2			
S.No	Parameters	Specifications	Tolerances
12.	Substrate and grating material	Silicon	
13.	Substrate Thickness	1mm or high	+/- 0.05mm
14.	Grating Lines per mm	~3000	
15.	Grating depth	100 -300nm	+/- 10nm
16.	Duty cycle %	25-75 (variable over the grating dimension)	
17.	Grating size	150 mm x 150 mm	+/- 0.1mm

Note:

- The specifications will be finalized after expression of interest.
- All Domestic as well as Global OEMs/Representatives/Suppliers are invited for the Eol.
- The OEM/Supplier who can partially fulfill the requirements can also participate in Eol

Acceptance Criteria:

- The supplier shall be responsible for fabrication of the grating as per the given specifications within the performance limits in the scheduled timeline. The supplier shall also be responsible for delivering the product safely to the CSIR-CSIO. Any lapse on the part of this would be the responsibility of the supplier.
- Tests shall be conducted to verify the fabrication quality of the gratings in terms of grating structures profile and dimensions through high resolution Scanning Electron Microscopy (SEM) and Atomic Force Microscopy (AFM) measurements. Supplier shall work out the test methods and the measurement procedures and it should be submitted to CSIR-CSIO for mutual agreement.
- The processes adopted during fabrication shall be adequate to maintain the standards normally associated with optical components. Particular attention shall be paid to fixtures, cleanliness, handling etc.
- The wafer surfaces shall be free from the appearance of cosmetic defects such as digs, scratches and pits.
- Properties of the materials (physical, chemical and optical) used for optical component fabrication and compliance certificates shall be supplied to CSIR-CSIO. The supplier should provide details of the measurement set-ups as well as the measurement conditions along with the appropriate data and the digital data in Excel format of the qualified/accepted component level measurements along with results of witness samples (before and after each qualification test).
- The gratings should meet the performance parameters in the standard lab conditions without any severe degradation of performance. The manufacturer shall also specify the storage conditions necessary to ensure the shelf life. Procedures to be adopted for cleaning shall be specified.
- The components shall retain their environmental durability & mechanical integrity and shall not visually show any sign of chipping, cracking. The acceptance of final product is based upon its compliance with all the specifications/requirements laid down in above Table.
- The Gratings shall be packed carefully in order to protect it from damage during transit.
- Vendors shall provide one unit of each grating before starting machining of second unit of deliverable gratings for each grating (i.e. Grating-1 ,2 and Grating-3), to CSIR-CSIO during the entire course of development. For each of these grating, the relevant parameters will be measured/evaluated at CSIR-CSIO and based on the input from CSIR-CSIO, improvements may be done in the next sample by the vendor/OEM.

The meeting will be held as per schedule given below:-

Date: 2nd June 2023
Time : 2 PM-4PM (IST)
Venue: Online mode,
MS Teams link: <https://teams.live.com/meet/9524053022628>