

Spec No HCM/19-20/PC/MNR/IV/01

SCOPE of Supply : INDUSTRIAL VIDEOSCOPE with Accessories for ready to use COMPLYING WITH SPECIFICATION AS MENTIONED BELOW:-				
SI NO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY BIDDER	OFFERED	DEVIATIONS
1.0	Purpose: The industrial Videoscope (Qty -1 No including all accessories in ready to use mode) is intended for visual inspection at intricate and in accessible areas as mentioned below :-			
1.1	Drilling: For boroscopic examination of Hole surface after drilling of Tubesheet.(Hole dia 12.76 mm, Thickness Varies from 150 mm to 310 mm)	TO NOTE		
1.2	Tube Expansion: For boroscopic examination inside tubes after expansion.(Outside Dia of Tubes 12.6 mm & Thickness=1 mm)	TO NOTE		
1.3	Examination insides Tubes of Outside Dia 12.6 mm & Thickness 1mm of length 8 Mtr Approx.	TO NOTE		
2	Scope of Supply: The system should consist of video-probe (with CCD located at the tip of the probe), camera control unit function, handy LCD Screen monitor (Size not less than 4 " inch) , LED light source, Motorized control Joystick for angulations and others essential accessories for viewing as well as image capturing & video recording in dark condition . Equipment should comply below specification .Refer Annexure -1 for Bill of Quantity.	TO CONFIRM.		
3.0	Pre-Qualifying Conditions:-			

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3.1	Only those BIDDER who have manufactured, supplied at least 1 No. of Industrial video Boroscope/Industrial Videoscope with flexible cable, 4 Way Motorized articulation and display screen of 4 Inch or above in the last 8 years as on the tender due date of opening of Techno-commercial bid. For startups & Micro and Small vendors experience criteria will remain same.	TO CONFIRM			
3.2	Note: 1. BHEL prefers Bidders should be OEM, 2. In case the bidder is authorized representative of OEM then Authorization letter with an agreement required & Qualifying document of OEM will be acceptable for authorized bidders. 3. No concessions are provided to MSME Traders.	To Note.			
3.3	Tender participation as OEM/ authorized dealer.	To Specify			
	(A) Name of the customer / company where similar machine is supplied	To Specify			
	(B) PO no				
	(C) Month & Year of commissioning/supply	TO Specify. PO copy Required			
	(D) All Bidders has to submit at least 1 performance Certificate from any of their customers from above PO'S, for satisfactory performance of for at least 1 year during last 8 years as on the tender due date.	To Specify. Invoice copy/Commissioning report required. Performance certificate/Satisfactory Performance mail required.			

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3.4	BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false/incorrect, the offer shall be rejected.	To Note.			
3.5	(A) Bidder Should have on average Turnover of Rs 5 lakhs or more for last 3 consecutive financial years ending march 2019 & it should be supported by Annual report (Balance Sheet and Profit & Loss Account). In case of Foreign bidders, business information report issued by D & B/ Experian etc to be submitted along with offer.				
	(B) For Startups & Micro and Small vendors (both for Manufacturers and Traders) exemptions are provided from the condition in 3.5 (A).				
4.0	Flexible Video Probe:	To confirm			
4.1	Diameter: less than 6.2 mm Suitable for our application	To confirm and Specify			
4.2	Flexible cable Length: Min. 8 metre	To confirm and Specify			
4.3	Image sensor: High resolution CCD.	To confirm and Specify			
4.4	Viewing tip adaptors (interchangeable) of diameter as compatible with the probe as required:	To confirm.			
5.0	Construction: The equipment shall be reliable to work in tough environments and it should be sturdy.	To confirm.			

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5.1	Unit Protection: IP65 rating, Test Certificate for the same required with technical bid.	To Confirm and Provide.			
6.0	Flexible Insertion cable Braiding: Tungsten braided	To Confirm and Specify			
7.0	Angulations / Articulation: Min 100 degree , 4 way , Motorized Control through joy stick only,	To Confirm and Specify			
8.00	Standard optical Tips:				
8.1	Forward/Straight tip: Direction of view: 0° Field of view: 120° or above, Depth of Focus: 5 mm to 120 mm or better.	To Confirm and Specify			
8.2	Side tip:- Direction of view: 90° Field of view: 120° or above Depth of Focus: 4 mm to 100 mm or better	To Confirm and Specify			
9.0	Light source:				

per attached

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9.1	LED/High Intensity laser diode at the at the tip for normal viewing	To Confirm and Specify			
9.2	Brightness control	To Confirm			
10.0	Processor:				
10.1	VGA / S-video out / Composite BNC	TO CONFIRM.			
10.2	Full motion recording & play back, Capturing still images	TO CONFIRM.			
11.0	Image storing capacity & Image Control:				
11.1	1 GB flash memory & SDHC memory card upto 32 GB.	To Confirm and Specify			
11.2	Video & still image storing with mpeg & jpeg formats etc.	To Confirm and Specify			
12.0	Display of the equipment: Integral LCD Multi color display of size 4 inch or above . Display VGA(640 X 480 Pixels)	To Confirm and Specify			
12.1	Zoom Level :3X or better	To Confirm and Specify			
13.0	Video output: Full motion Video recording and play back	To Confirm			
14.0	Input Power supply: AC: 100- 240V, 50-60 Hz	To Confirm			

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15.0	Standby Li-ion battery Rechargeable with minimum backup of at least 90 minutes.	To Confirm			
16.0	White balancing: Factory Default & user defined	To Confirm			
17.0	Carrying case: Rugged ABC, impact resisting inner liner casing.	To Confirm			
18.0	Weight: Weight of the Instrument along with LCD monitor, probe & Battery excluding carrying case should not be more than 8 kg	To Confirm & Specify.			
19.0	Factory Inspection Certificate shall be submitted to BHEL for verification. The equipment shall be dispatched by the vendor only after clearance from BHEL. The equipment shall be offered for inspection by BHEL at vendor's works prior to dispatch if required by BHEL.	To Confirm			

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20.0	Operation and Instruction manuals (in English) for the equipment shall be supplied in both hard copy - 3 sets and soft copy - 1 no. in CD or pen drive. Operating Language of the Instrument-English	To Confirm			
21.0	Training & Commissioning: Supplier to take full responsibility for carrying out erection, start up, testing of the machine and all types of supplied equipment's, test piece if required. The machine is to be erected at the site by the supplier with their own manpower, tools & tackles etc. Other erection equipment's like mobile crane if required, measuring instruments & devices for testing & commissioning of machines should be brought by the supplier on returnable basis. Training & operation and maintenance of the equipment shall be imparted to BHEL staff by the vendor's representative on free of cost basis for one day. Service requirement like air, water, electricity will be provided by BHEL at one point to be indicated by the supplier in advance. Completed commissioning & demonstration of all the features of machine/equipment's to the entire satisfaction of BHEL is the sole responsibility of vendors at BHEL Bhopal work. Complete commissioning, testing including all the test is in the scope of supplier.	To Confirm			

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22.0	Guarantee: The performance of the equipment shall be guaranteed for a period of 12 months from the date of commissioning at BHEL or 18 months from dispatch whichever is later.	To Confirm			
23.0	Vendor to specify the offered make & model No	To Specify.			
24.0	OTHER PARTICULARS				
24.1	Details on Standards followed in Manufacturing and Testing of Industrial Videoscope.	TO SPECIFY			
24.2	Number of Industrial Videoscope supplied during last 8 years.	TO SPECIFY			
24.3	The BIDDER shall give details about supply of similar equipment to other BHEL units if any with Make, Model and Year of Supply & Commissioning etc.	TO SPECIFY			
24.4	Servicing facility to be available in India Details on Service-After-Sales Set-Up in India (Address of Agents/Service Centers), to be furnished Compulsorily.	TO SPECIFY			
24.5	Any Additional Data to supplement the manufacturing capability of the BIDDER.	TO SPECIFY			
24.6	Spares: The supplier shall provide a list of essential spares with specification – size and qty. It is optional and shall not be considered for evaluation of L1 bidder.	TO SPECIFY			