

CORRIGENDUM

This is in reference to **Tender Ref. No. NSIC-TSC (A)/ATI/2019-20/38** dated **20.10.2020** for Supply, Installation & Commissioning of **Robot for Material Handling (Pick and Place)**.

It is hereby informed that there is an **amendment** in Annexure-A and Annexure-C of the Tender documents as listed below and the last date of submission of Bids has been extended from **11.11.2020** to **25.11.2020**. Bidders may accordingly take note and bid for the same.

ANNEXURE-A

Details of requirements and technical specifications of machines

Robot for Material handling (Pick and Place)

<u>Robotic Pick and place Cell Configuration</u>			
Sl. No.	Title	Specifications	Qty.
1	2 Finger Pneumatic Gripper with Gripper Assembly unit	To be provided for Pick & Place function and Training compatible with the Robot.	1
2	Teaching Table with teaching point details & Panel	To be provided	1
3	Electrical control panel	To be provided	1
4	Safety Fence	To be provided compatible with Robot dimensions	1
5	Safety Access Gate	To be provided	1
6	Sensors	All necessary sensors to be provided	1
7	Cable tray	To be provided compatible with Robot	1
8	Supply of Pneumatic Accessories	Pneumatic Accessories to be provided compatible with Robot.	1
9	VSIT for Robotic Cells	10kVA, 3Ph+N, Air cooled. I/p - 340-480V.O/p - 415V.	1



10	Robot Simulation Software with cycle time analysis, collision detection, offline programming, reachability	Minimum 15 users	1
11	Robot Application	Pick and Place / Material Handling	1

Sl. No.	Title	Specifications	Qty.
Robot Specifications For Handling Cell			
1	Robot Type	Solid Arm	1
2	Payload	7-10 Kg	
3	No. Of Axis	6	
4	Brakes in all robot axes	6	
5	Reach	Min 1000 mm or better	
6	Pos. repeatability	± 0.1 mm or better	
7	Protection rating	IP 65 or better	
8	Mounting Position	Floor	
9	Motion range		
	Axis 1	±170° to ±360°	
	Axis 2	+100° to -250°	
	Axis 3	±80° to ±350°	
	Axis 4	±180° to ±400°	
	Axis 5	±100° to ±410°	
	Axis 6	±200° to ±720°	
10	Speed with rated payload		
	Axis 1	100-220°/s	
	Axis 2	100-250°/s	
	Axis 3	110-250°/s	



	Axis 4	200-400°/s	
	Axis 5	250-410°/s	
	Axis 6	250-610°/s	
11	Oil filled gearboxes		
Controller specification			
12	Windows 10 embedded based controller compatible with the Robot		
13	Electronic calibration / mastering facility with single tool for mastering all axes		
14	Event Logging Facility - Required compatible with the robot		
15	USB Drive for data backup - Required compatible with the robot		
16	AC Servo drives for 6 degrees of freedom - Required compatible with the robot		
17	Ports for additional keyboard, mouse and external monitor present in robot controller - To be provided		
18	Built in diagnostic tool for drive bus, Servo drive, RDC failure analysis/troubleshooting - To be provided		
19	Back Up batteries for power failure inside the controller, data backup - To be provided		
20	Different type of bus systems supported - Ethernet IP, Profibus etc. - To be provided		
Teach Pendant Specifications			
21	Hot Pluggable Teach pendant		
22	Six Dimensions Mouse for jogging		
23	Touch screen display	To be provided	
24	Integrated USB Connection	To be provided	

The above list of standard accessories are tentative and the bidder shall have authority to supply additional accessories as they deemed fit for the successful operation of the machine after the supply at site.



FORMAT & REQUIREMENTS FOR SUBMITTING TECHNICAL BID

1. **Tender Ref. No:**
2. **Name of Bidder:**
3. **Complete office address/contact numbers/Email ID/Mobile Number of Bidder:**
4. **Tender fee payment details**(if tender document downloaded from website)
Details of DD/RTGS/NEFT by which tender fee paid.....
5. **Confirmation of acceptance of Technical Specifications for the supply of machine:**

#	Technical Specifications	Acceptance to the Specification as placed at Annexure-A and agreed to supply with required Quantity (write YES/ NO only)	If marked "NO" in the column before, specify the deviation in specification of the machine offered for the supply.
1	2 Finger Pneumatic Gripper with Gripper Assembly unit		
2	Teaching Table with teaching point details & Panel		
3	Electrical control panel		
4	Safety Fence		
5	Safety Access Gate		
6	Sensors		
7	Cable tray		
8	Supply of Pneumatic Accessories		
9	VSIT for Robotic Cells		
10	Robot Simulation Software with cycle time analysis, collision detection, offline programming, reachability		
11	Robot Application		
12	Robot Type		



13	Payload		
14	No. Of Axis		
15	Brakes in all robot axes		
16	Maximum Reach		
17	Pos. repeatability		
18	Protection rating		
19	Mounting Position		
20	Motion range		
A	Axis 1		
B	Axis 2		
C	Axis 3		
D	Axis 4		
E	Axis 5		
F	Axis 6		
21	Speed with rated payload		
A	Axis 1		
B	Axis 2		
C	Axis 3		
D	Axis 4		
E	Axis 5		
F	Axis 6		
22	Oil filled gearboxes		
23	Windows 10 embedded based controller compatible with the Robot		
24	Electronic calibration / mastering facility with single tool for mastering all axes		
25	Event Logging Facility - Required		

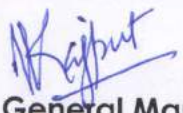
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	compatible with the robot		
26	USB Drive for data backup – Required compatible with the robot		
27	AC Servo drives for 6 degrees of freedom - Required compatible with the robot		
28	Ports for additional keyboard, mouse and external monitor present in robot controller – To be provided		
29	Built in diagnostic tool for drive bus, Servo drive, RDC failure analysis/troubleshooting – To be provided		
30	Back Up batteries for power failure inside the controller, data backup – To be provided		
31	Different type of bus systems supported – Ethernet IP, Profibus etc. – To be provided		
32	Hot Pluggable Teach pendant		
33	Six Dimensions Mouse for jogging		
34	Touch screen display		
35	Integrated USB Connection		

The above list of standard accessories are tentative and the bidder shall have authority to supply additional accessories as they deemed fit for the successful operation of the machine after the supply at site.

NOTE:

All other details, specifications, Terms & Conditions shall remain the same as in the Original Tender.


Deputy General Manager
NSIC Technical Services Centre,
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Aligarh – 202001, U.P.