

### Bid Document

Bid Details	
Bid End Date/Time	25-12-2018 15:00:00
Bid Validity	90 (Days)
Ministry/State Name	Ministry Of Human Resource Development
Department Name	Department Of Higher Education
Organisation Name	Indian Institute Of Technology (iit)
Office Name	Ropar
Total Quantity	2
Item Category	Lathe Machine
MSE Exemption For Years Of Experience And Turnover	Yes

### Lathe Machine ( 2 )

#### Technical Specifications

[\\* As per GeM Category Specification](#)

Specification	Specification Name	Values	Allowed Values
Standards	<b>Lathe Machine Confirming to IS 6893-1988 Latest (For Technical Evaluation)</b>	Yes	Yes
	<b>Lathe Machine Material Confirming to IS 210 Latest (For Casting )</b>	Yes	Yes
	Lubrication System Requirement as per IS:11118	Yes	*
	Cooling System Requirement as per IS :11118	Yes	*
	Positioning Accuracy as per IS:1878 latest for Cumulative Error	Yes	*
	Positioning Accuracy as	Yes	*

	per IS:1878 latest for Repeatability		
	Positioning Accuracy as per IS:1878 latest for Backlash	Yes	*
	Positioning Accuracy as per IS:1878 latest for Minimum Possible Requirement	Yes	*
	Geometric Accuracy as per IS 1878-1971 latest for general purpose lathe	Yes	*
	Geometric Accuracy as per IS 6040-1972 latest for precision lathe	Yes	*
	Machine Bed & Tail Stock casting Grade as per IS 11118-1997 latest	Yes	*
	Tail stock sleeve case hardening steel 15Ni7Cr4M02 as per IS 1118-1997 latest	Yes	*
	Head Stock Drive gears Conformity	confirming to Alloy steel material specification 15 Ni 7 Cr 4 M02 , hardened 58-62 HRC and profile ground with 0.8 micron surface roughness Ra value	*
	Main Spindle Conformity	confirming to C2R grade forged Steel and hardened 58-62 HRC. / ground with 0.8 micron surface roughness Ra value	*
Performance Parameters	Manually Operated Lathe	Yes	*
	Geared Mechanism	Yes	*
	<b>Lathe Machine Type</b>	Center Lathe	Center Lathe, Capstan Turret Lathe, Gap Lathe, Bench Lathe
	<b>Nature of Duty of Operation of Lathe</b>	High Speed Precision Lathe	Light Duty Lathe, High Speed Precision Lathe, Heavy Duty Lathe
	<b>Distance Between centers (mm) x Swing over Bed</b>	1000 x 400	*

<b>(mm)</b>		
<b>Swing Over Bed (in mm)</b>	420	Any applicable numeric value
<b>Center Height in mm</b>	200	Any applicable numeric value
<b>Swing Over Cross Slide in mm</b>	220	Any applicable numeric value
<b>Swing Over Carriage Wing in mm</b>	400	Any applicable numeric value
<b>Swing in Gap in mm</b>	0	Any applicable numeric value
<b>Width of Gap in Front in mm</b>	0	Any applicable numeric value
<b>Type of Bed</b>	Inverted V type	Flat Shaped, Inverted V type
<b>Length of Bed in mm</b>	1950	Any applicable numeric value
<b>Width of Bed in mm</b>	289	Any applicable numeric value
<b>Gap in Bed in mm ( Only for Gap Lathe ) for rest Put 0</b>	0	Any applicable numeric value
<b>Rapid Transverse of saddle &amp; Cross Slide</b>	No	Yes, No
<b>Maximum Feed Force</b>	1030	Any applicable numeric value
<b>Maximum Facing Diameter in mm</b>	430	Any applicable numeric value
<b>Maximum Weight of work piece that can be held between chuck and supported by Live center in kg</b>	150	Any applicable numeric value
<b>Maximum Weight of work piece that can be held between chuck and supported by dead center in kg</b>	350	Any applicable numeric value
<b>Maximum Torque on Spindle in NM</b>	280	Any applicable numeric value
Type of Spindle	-	*
<b>Size of Spindle in mm</b>	133	Any applicable numeric value
Type of Spindle Nose	A2-5 INCHES	*
Taper in Spindle Bore as per IS 2582-1972 with Latest amndmt	-	*

Taper Bore in Spindle Sleeve as per IS 1715-1986 with Latest amndmt	-	*
Bore in Spindle in mm	42	*
Range of Spindle Speed in Forward Direction in rev/min	60 TO 1500	*
Range of Spindle Speed in Reverse Direction in rev/min	60 TO 1500	*
<b>Type of Chuck</b>	3 Jaw Self Centered	3 Jaw Self Centered, 4 Jaw Independent, Specialty Jawed Type
<b>Travel of Cross Slide in mm</b>	215	Any applicable numeric value
<b>Travel of Top Slide in mm</b>	105	Any applicable numeric value
Type of Tool Holder	-	*
Tool Shank Size as per IS 1983:1958 latest in mm x mm	-	*
<b>Main Motor Power in kw</b>	3	Above 3
Rapid Traverse Motor Power in kw	0	*
Type of Cooling	-	*
speed of coolant motor in rev/min	2800	*
Noise emitted by Machine in db as per IS 10998:1984 latest	85	*
Mechanical Guarding as per IS 9474 :1980 latest	Yes	*
In possession of Technical Evaluation report as per IS :11118	Yes	*
Main Spindle Bearing confirming Pre-loaded of Standard make	Yes	*
Confirming of machine towards dynamically balanced spindle and other parts	Yes	*
Spindle Forward/Reverse Drive transmission through	No	*

	Electro Magnetic Double Clutch		
	Spindle Forward/Reverse Drive transmission through Hydraulic Friction Clutch	No	*
	<b>Types of power supply</b>	3 Phase	3 Phase
	<b>Erection and Commisioning Charges included in Offered Prices without Foundation</b>	Yes	Yes
	<b>Warranty in Years</b>	1	1, 2, 3, 4, 5
	<b>Annual Maintenance Contract Rate included for Machine</b>	No	Yes, No
	<b>Period of AMC</b>	0	0, 1, 2, 3, 4, 5
	<b>Coolant Pump output in kw as per IS 2161:1962 Latest</b>	0.12	0.12, 0.18, 0.25, 0.37, 0.5, 0.75, 1.1, 2, 4, 5.5
	Coolant Pump Discharge at maximum working height as per IS 2161:1962 with latest amndmt in l/min	30	*
Dimensional Parameters	<b>Minimum Chucking Diameter in mm</b>	10	Any applicable numeric value
	<b>Maximum Chucking Diameter in mm</b>	400	Any applicable numeric value
	<b>Tail Stock Sleeve Diameter in mm</b>	70	Any applicable numeric value
	Tail Stock Spindle Taper as per IS 1715:1986 with latest	-	*
	<b>Maximum Offset of Tailstock on either side of Center Line in mm</b>	5	Any applicable numeric value
	<b>Sleeve Travel Type(Tail Stock)</b>	Manual	Manual, Power Operated
	Travel of Sleeve in mm	140	*
	Hardness of Bed Guide Ways in HRC	52	*
	Lead Screw Diameter in mm	36	*
	Lead Screw Pitch in	6	*

	mm		
	Longitudinal Lead Screw Feed Range in mm/rev	0.05 TO 2.8	*
	Cross feed Range in mm/rev	0.01 TO 0.62	*
	Metric Thread Range in mm	0.5 TO 14	*
	British Thread Range in TPI	2 TO 56	*
	Module Thread Range in mm	0	*
	Diametral Pitch Range in mm	0	*
	Type of Lubrication	-	*
	<b>Length of Lathe Machine in mm</b>	2300	Any applicable numeric value
	<b>Width of Lathe Machine in mm</b>	1100	Any applicable numeric value
	<b>Height of Lathe Machine in mm</b>	1335	Any applicable numeric value
	<b>Weight of Lathe Machine with electrical and standards Accessories</b>	1300	Any applicable numeric value
	Colour of Lathe machine as per IS 5 :1978 with latest amndmt	-	*
	Machine Confirming Full power cutting load test to full length Turning capacity of Machine	Yes	*
	Availability of Drawing for Foundation	Yes	*
	Lead screw	Ground profile& Pitch accuracy 0.03 mm over a length of 300 mm	*
Standard Accessories	Driving Plate With Peg	Yes	*
	Coolant Equipment & swarf tray	Yes	*
	Splash Guard	Yes	*
	Spindle Reduction Sleeve	Yes	*

	60 Deg Dead Centre-2 Nos	Yes	*
	Quick change tool post with Tool Holders	Yes	*
	Quick indexable Square tool post	Yes	*
	A Set of Operating Instructions Manual & a set of operating tools	Yes	*
Optional Accessories	3 Jaw Self Centering Chuck	Yes	*
	Precision 3 jaw Self Centering Chuck( Hydraulic /Pneumatic complete Chuck )	No	*
	Chuck Guard	Yes	*
	Rear Tool Post	No	*
	Universal face plate	No	*
	Precision Face Plate	Yes	*
	Cast iron Face Plate	No	*
	Collet Chuck & Collets	No	*
	Rear Tool Holder	No	*
	Steady Rest	Yes	*
	Roller Steady Rest	No	*
	Follow Rest	Yes	*
	Longitudinal Stop	No	*
	Roller Stop	No	*
	Taper Turning Attachment	Yes	*
	A Set of Change Gear For DP Threads	No	*
	Multi Copying Attachment	No	*
	Machine Lamp	Yes	*
	Swraf Tray Complete with coolant equipment	No	*
	Four Jaw Chuck	Yes	*
Reports	Availability of Test Report from Central Govt/NABL/ILAC accredited lab to prove conformity to specification	Yes	*
	Test Report No	-	*

Test Report Date	-	*
Name of the Lab	-	*
Address of the Lab	-	*
Copy of Test report to be furnished to the buyer on demand at the time of Supplies	Yes	*

\* Bold specifications are the golden parameters.

### Consignees and Quantity

S.No.	Consignee	Address	Quantity	Delivery Days
1	Vijay Kumar	140001,Room No. 104 , Indian Institute of Technology Ropar, Nangal Road,Rupnangar	2	15

### EMD Detail

Required	No
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### ePBG Detail

Required	No
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### Splitting

Bid splitting not applied.

## Buyer Specific Additional Terms and Conditions

- Scope of supply (Bid price to include all cost components) :** Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)

[This Bid is also governed by the General Terms and Conditions](#)

**---Thank You---**