GOVERNMENT ENGINEERING COLLEGE , THRISSUR NOTICE INVITING TENDER

No.D2/2101/17/GECTCR Dated: 05/01/2018

Tender No.: D2/140/17-18

Superscription : Mini internal mixer/ Torque rheometer-Drive and

control unit for the determination of rheological

properties of molten plastics or other fluid

materials along with accessories.

Bidding fee : Rs.12390/-(Rs.10500/-+18%Tax)

EMD required : Rs.140625/-

Address of the Officer to : THE PRINCIPAL, GOVERNMENT ENGINEERING

whom hardcopy is to COLLEGE, THRISSUR-680009

be sent.

Specification Details

Sl No	Item with description	Quantity(Numbers)
1	Drive and control unit for the determination of rheological properties of molten plastics or other fluid materials. It shall have Precise torque measurement for mixer and extruder tests through the built-in torque sensor. Measuring systems like mixers and extruders shall be connected by means of the drive coupling and electrical cables. The devices shall automatically recognized through the plug & play concept of the software. The individual limits of the measuring systems shall be recognized by the software and set as alarm values. Instrument handling: Motor / Heater enable and disable with button. Monitor Software shall be included in the standard delivery package. Standard interface.it should have USB PC interface for data collection and control by a host PC. CAN open Bus for communication with system components. Technical data: Motor power: 3-4kW Max speed: 200 1/min Max torque: 270 Nm Heating zones: 4 (configured as controller or sensor) Mains supply: 3x400V +/- 10%; 50-60Hz, N, PE Max. current: 32 A Accessories: Cable and converter for USB port, Manual in English Dimension Dimension (W/H/D): 660/580/750 mm Weight 147 kg	1
	Mixer Test and Data Evaluation for Windows.	
	Software package to measure and evaluate scientific and	
	routine data. Mixer tests shall be pre-programmed, run and evaluated using one of the templates. Basic mixer	

rheogram evaluation for daily routine analysis shall be determined by means of pre-defined configurable evaluation routines. Routines for determining the plastifying-, fusion-, thermostability-, flow- and cross-linking-, flow- and curing-, stability- as well as absorption-behaviour shall be made available.

Easy exchange of rotors through quick release coupling and safe cleaning. The bushings shall be interchangeable for different temperature ranges and applications.

Technical data:

Chamber volume: 120 cm³ (gross) Material: 1.4301 stainless steel)

Max. torque: 160 Nm

Overload protection electrical . Max screw speed: 200 1/min

Gear ratio 3:2

Temperature range: RT...400 °C

Internal control zones: 3 (heating/cooling) Cooling: magnetic valve Gear box cooling: optional Dimension and

weight:

Dimensions (W/D/H): 480/250/320 mm

Weight: 24.5 kg

Roller rotors:

Rotor volume: 50-52 cm³

Application: medium to high shear range Maximum torque:

160 Nm

Material: stainless steel (1.4122)

Mixer cleaning tray with holder to collect sample material. During the cleaning process the mixer components can be stored on this tray.

Manual ram for the feeding of the mixer sensors. Vertical loading device Gear driven ram

General conditions

- 1. Price: Should include all charges and taxes specifically stated.
- 2. Payment will be made only after the successful supply, installation and testing.
- 3. F.O.R: Govt. Engineering College, Thrissur.
- 4. Agreement: Preliminary Agreement in Rs.200/- Kerala Stamp Paper.
- 5. Date of opening of tender: In case the proposed date declared as holiday, the tender will be opened on the next working day.
- 6. After E-tendering the hard copy of all documents should be submitted before the date of opening of the tender to the Principal, Government Engineering College, Thrissur.
- 7. Items to be supplied at Chemical Engineering Department of Govt. Engineering College, Thrissur.
- 8. The items should have a minimum guarantee period of one year from the date of installation and successful performance.
- 9. Installation, successful demonstration and training required.
- 10. Delivery Period: Immediately after the date of receipt of supply order.
- 11. Agreement & 5% Security deposit needed.

NB: The Tender procedure will be made as per Rules mentioned in the Revised Store Purchase Manual. The bidders should participate this tender through E-Tendering System. Tender cost and EMD should be submitted only through online. For more details Contact Ph.0487 2334144

Superscription - Tender No D2/140/17-18 for Purchase of			
Mini internal mixer/ Torque rheometer-Drive and control unit for			
	Chemical		
	Engineering		
Due date and time for receipt of tender	12/01/2018 04.00 pm		
Date and time for opening of tender	18/01/2018 11.00 am		
Date upto which the rates are to be firm	90 days from opening of tender		
Price of tender form	Rs.12390/-		
Price of duplicate copy			
Address of Officer from whom tender forms	E tender only		
are to be obtained and to whom tenders are			
to be sent:			

for more details and specification see https://etenders.kerala.gov.in/nicgep/app

Principal