

**DEPARTMENT OF CHEMICAL ENGINEERING  
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI - 620 015**

**21.02.2014**

**Minutes of the pre-bid conference**

**Tender Notification No.: NITT/F.No.: RES 025/PLAN 2013-14/CHE dt. 14.02.2014**

The pre-bid conference was held on 21.02.2014 at 09.00 AM in the committee room of Chemical Engineering department to discuss the specification published in the tender.

Based on the discussion, the committee recommends the following amendments to the specification. In addition, the committee recommends the delivery date has to be mentioned as 16 weeks subject to Export License clearance.

**Specification for Particle size analyzer :**

<b><u>Particle description</u></b>	<b><u>Original specification in tender</u></b>	<b><u>Amended specification</u></b>
<b><u>TECHNOLOGY AND MAIN UNIT</u></b>		
PRINCIPLE OF OPERATION	Laser diffraction technology with Mie Algorithm and Modified Mie Algorithm	Not Amended
PARTICLE SIZE RANGE	WET : 10nm to 2000 Microns and DRY : 240nm to 2000 Microns	Not Amended
MODE OF SAMPLE ANALYSIS	Wet mode & Dry Mode	Not Amended
SOURCE TYPE	Solid state laser, with three laser sources; can be a multi laser technology	Gas or Solid State Laser, with three laser sources; can be multi laser technology
LASER WAVELENGTH	780nm and 405nm	780nm to 405nm
DETECTORS	Silicon photo diode detectors with more than 150 detector elements	Silicon photo diode detectors preferably with more than 150 detector elements
SCATTERING ANGLE RANGE	0.03 to 160 Degrees	Not Amended
TYPE OF OPTICAL ALIGNMENT	Automatic alignment	Not Amended
<b><u>SAMPLE DELIVERY SYSTEM - WET</u></b>		
TYPE	Circulation type with centrifugal pump with turbulence stirring	Not Amended
CONTROL AND OPERATION	Fully Automated and SOP controlled operation	Not Amended
ULTRASONIC FACILITY	Should have built-in ultrasonic facility with variable power and time which can be set and controlled through software	Not Amended
VOLUME OF SUSPENSION REQUIRED FOR MEASUREMENT	Less than 250ml	Not Amended
<b><u>SAMPLE DELIVERY SYSTEM - DRY</u></b>		
PARAMETER SETTINGS	Should have facility to set compressed air and flow conditions	Not Amended

ANALYSIS TIME	Programmable from as fast as 10 seconds	Not Amended
<b><u>SOFTWARE</u></b>		Not Amended
SOFTWARE FEATURES	One click operation with simple measurement icons, Real time display of particle distribution measurement, Possibility of simultaneous measurement and data processing, Display of measurement conditions, Data Export facility into ASCII, EXCEL and HTML formats.	Not Amended
TRACEABILITY AND VALIDATION STANDARDS	NIST Traceable standards for both wet and dry applications and BCR Validation standards	NIST Traceable standards for both wet and dry applications or BCR Validation standards
<b><u>DATA PROCESSING AND CONTROL</u></b>		
COMPUTER & PRINTER	Pentium Core2 Duo Processor, 2 GB of DDR RAM, minimum 320 GB Hard Disk Drive, DVD/CD-RW, 4 USB ports, 18.5 inch LCD Monitor, HP Key board, Optical Mouse and Color Inkjet Printer.	Not Amended
ACCESSORIES FOR DRY ANALYSIS	Suitable Air compressor and vacuum unit should be provided by the supplier.	Not Amended
		5% bank guarantee for 5 years towards the supply of spare components after the warranty period.

**Dr. J. Sarat Chandra Babu**