

**DEPARTMENT OF METALLURGICAL AND MATERIALS ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI - 620 015**

27.12.2013

Minutes of the Pre-Bid conference

Tender Notification No.: NITT /F.NO: 014/UG LAB MODERNISATION/PLAN 2013-2014/MME


The pre-bid conference was held on 27.12.2013 at 11.00 a.m. in the committee room of MME to discuss the specification published in the tender. All other terms and conditions mentioned in the tender document remains same.

Based on the discussion, the committee recommends the following amendments to the specification.

Specification for Scratch tester Facility

ITEM	Original tender specification SPECIFICATIONS	Amended specification
Power supply	220-240 V / 50 Hz/1P	No amendment
Load Range	0 – 20 N	No amendment
Tangential force range	0 – 20 N	No amendment
Stroke(X)	0 – 50 mm	No amendment
Scratch speed	0 –10 mm/sec	No amendment
Pitch (Y)	0 – 50 mm	No amendment
Loading rate	0 – 20 N/sec	No amendment
Sample size	60*60*10 mm (L*W*T)	No amendment
Stylus	Diamond indenter Rockwell C, with tip radius R200 micrometer.	No amendment
Machine dimension	300*250*500mm (L*B*H)	Maximum
Weight	20 kg	No amendment
Operating temperature	15° C - 40° C	No amendment
Storage temperature	-10° C - 40° C	No amendment
Video microscope magnification	200x, 800x, 4000x with 12" LCD screen	10x, 50x, 200x
Video Microscope Camera	Color 1028 x 1024 with LCD screen	No amendment
Software	Windows	No amendment
> additional facilities include :		No amendment
	<ul style="list-style-type: none"> • Acoustic emission sensor - It consists of transducer and signal processing electronics to record AE level. • Image Acquisition System (IAS) - It consists of a microscope camera and Scratch View® software modules. Area of image capture per frame is 4x3 mm, with pixel size of 2048 x 1536. For scratch length greater than 4mm, multiple overlapping images are captured to cover entire scratch. These images are stitched together for end to end panoramic image of scratch. This image is sized to fit on data-graph for identification of events on scar with changes in Fn, Ft, Ae, R and z. Image and graph composite presentation has synchronized zoom • Scratch depth sensor - It consists of displacement sensor and signal processing 	No amendment

electronics. • Data can be exported in ASCII to other software. Vibrosorb -anti vibration table, Desktop PC with interface data transfer & Data acquisition peripheral device output data cable acquisition mode should be quoted along with main system.		
Protocol Printer	Fast protocol printout directly from touch screen on color laser printer	No amendment
Full technical specification with pamphlets required		No amendment


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