DEPARTMENT OF PRODUCTION ENGINEERING NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI - 620 015

21.11.2013

Tender Notification No.: NITT/F.NO:RES003/PLAN2013-14/PRO

dt: 15.11.2013

With reference to the above tender notification and the pre-bid conference held on 21.11.2013 at 3.00 PM in the committee room of CECASE, the following amendments are made. All other terms and conditions mentioned in the tender document remains same.

Specification for Lubricated wear tester

Original tender specification	Amended specification
(i) Equipment specification	*
Set-up : Pin/Ball-on-Disc (as shown in Figure 1)	
Pin diameter and Length (mm) (minimum): 4-8 and 20-25 (Suitable	No amendment
provisions should be provided to heat the pin upto 400°C or more)	No amendment
Ball diameter (mm) (minimum) : 8	
Disc diameter and thickness (mm) : 80 (minimum) and 6-8	
Wear track diameter (mm) (minimum): 60-80	
Rotational speed of disc (RPM) (minimum range): 100-800 (variable)	
Test load (N) (minimum range) : 10-80 (in steps of 5 N)	
Depth of wear (μm) (minimum range) : 0-2000 (@ 1μm resolution)	
Lubrication circulation system : Should consist of lubrication pump	
with discharge rate 0-80 ml/min (minimum), adjustable nozzle, splash guard	
and collection tank of 2-3 Litres capacity.	
Environment chamber: A closed chamber around the pin-discpair to study the	
atmospheric effect of inert gas, product of combustion, humidity and fog lubrication. It should be provided with suitable view-port which could also	
sustain pH about 7. Suitable arrangements should be provided to heat the	
chamber upto 500°C or more.	3
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Mandatory Requirements:	
• Standard data acquisition software to collect data such as frictional force,	No amendment
depth of wear and temperature. The software should include post processing	
of data such as viewing, comparing and exporting.	
 Suitable probes/sensors for on-line measurement of frictional force and depth of wear. 	
of wear.	
(ii) System Requirements	
Processor :3rd Generation Intel® Core™ i5-3340s processor (6M Cache, 3.3	
GHz)	No amendment

Operating System: Windows 7 Single Language, English

Memory: 4GB DDR3 SDRAM, 1600MHz-1X4GB

Hard Drive : 3.5" 1TB 7200RPM SATA Hard Drive, 1X1TB

Video Card : NVIDIA® GeForce® GT 620 1GB DDR3

Optical Drive: 12.7" SATA tray load DVD+/-RW

Monitor: 23" FH1920 x 1080 (Full HD) Non Touch., with wireless keyboard

and mouse.

Webcam: Integrated 1.0 mega pixel

Speaker: HD Audio with Waves MaxxAudio® 3

UPS : 1 KVA

Note: The following additional documents are mandatory for technical qualification. Otherwise the bid will be technically rejected.

a) References (with full postal address and name of the contact person with phone, FAX numbers, and E-Mail id) from at least two end-users to whom the quoted model was supplied during the last three years ending 31.03.2013.

Note: The following additional documents are mandatory for technical qualification. Otherwise the bid will be technically rejected.

a) References (with full postal address and name of the contact person with phone, FAX numbers, and E-Mail id) from at least two end-users to whom the quoted model / similar model was supplied during the last three years ending 31.03.2013.



Figure 1. Pin-on disc and ball-on disc set-up.

Dr. M. Duraiselvam

Associate Professor & Initiating Faculty Department of Production Engineering NITT