

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

**21.11.2013**

**Tender Notification No.: NITT/F.NO:RES001/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 Roller on Roller wear tester**

Original tender specification	Amended specification
<p><b>(i) Equipment specification</b></p> <p>Roller speed (RPM) (minimum range) : 1-1500 (with servo control of user-defined slip-roll sequence)</p> <p>Test load (N) (minimum range) : 0-1000</p> <p>Temperature of lubricant (°C) (minimum range) : RT-100</p> <p>Depth of wear (µm) (minimum range) : 0-2000 (@ 1µm resolution)</p>	<p><b>No amendment</b></p>
<p><b>Mandatory Requirements:</b></p> <ul style="list-style-type: none"> <li>• Interchangeable sample adapters to perform tests in configurations of roller-on-roller, roller-on-pin and roller-on-ball (as shown in <b>Figure 1</b>).</li> <li>• Automated machine control- Capable of controlling user defined slip and roll sequence.</li> <li>• Suitable probes/sensors for on-line measurement of frictional force and depth of wear.</li> <li>• Standard data acquisition software to collect data such as speed of rotation, depth of wear and temperature. The software should include post processing of data such as viewing, comparing and exporting.</li> <li>• Temperature control module should be capable of operating in steps of 2°C.</li> <li>• All spindle drives should be servo controlled.</li> <li>• Suitable lubrication circulation system.</li> <li>• Variable speed option during test.</li> </ul>	<p><b>Mandatory Requirements:</b></p> <ul style="list-style-type: none"> <li>• Interchangeable sample adapters to perform tests in configurations of roller-on-roller, roller-on-pin and roller-on-ball (as shown in <b>Figure 1</b>).</li> <li>• Automated machine control- Capable of controlling user defined slip and roll sequence.</li> <li>• Suitable probes/sensors for on-line measurement of frictional force and depth of wear.</li> <li>• Standard data acquisition software to collect data such as speed of rotation, depth of wear and temperature. The software should include post processing of data such as viewing, comparing and exporting.</li> <li>• Temperature control module should be capable of operating in steps of <b>5°C</b>.</li> <li>• All spindle drives should be servo controlled.</li> <li>• Suitable lubrication circulation system.</li> <li>• Variable speed option during test.</li> </ul>
<p><b>(ii) System Requirements</b></p> <p>Processor :3rd Generation Intel® Core™ i5-3340s processor (6M Cache, 3.3 GHz)</p> <p>Operating System: Windows 7 Single Language, English</p> <p>Memory : 4GB DDR3 SDRAM, 1600MHz-1X4GB</p> <p>Hard Drive : 3.5" 1TB 7200RPM SATA Hard Drive, 1X1TB</p> <p>Video Card : NVIDIA® GeForce® GT 620 1GB DDR3</p>	<p><b>No amendment</b></p>

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. Test configurations of roller-on-roller, roller-on-pin and roller-on-ball.

*M. Duraiselvam*  
21/11/13

**Dr. M. Duraiselvam**  
Associate Professor & Initiating Faculty  
Department of Production Engineering  
NITT