

## Scope of Work for Up-gradation of Clemex CMT Microhardness Tester

<b>1</b>	<p><b>Product details and specification:</b></p> <p>Camera:</p> <p>a) High resolution – high Speed Camera:Resolution - 1280 X 1024 pixel</p> <p>b) Camera thread adaptable to Clemex CMT Microhardness Tester</p> <p>CLEMEX CMT Software Upgradation</p> <p>a) Automatic Micro hardness Testing application – Vickers and Knoop</p> <p>b) Compatible with windows 10/11</p> <p>c) Multiple indent pattern creation facility for hardness profile measurement</p> <p>d) Provision to insert multiple cut off Hardness values</p> <p>e) Automatic Case depth measurement for multiple indent patterns</p> <p>f) Auto-detection of indents</p> <p>g) Hardness Conversion facility – HRC, HRB, HRA compliance with ASTM E-140</p> <p>h) Automatic conversion to appropriate scale bar with changing magnification.</p> <p>i) T-Bar tool rotates Indent traverses to any angle to ensure its perpendicularity with the sample's edge.</p> <p>j) Linear Measurement and full annotations tools.</p> <p>k) Image storage in JPEG, TIF, BMP</p> <p>l) Image Stitching. Mosaic image creation of large sample.</p> <p>m) Automatic and direct measurements on stitched images.</p> <p>n) Auto focusing.</p> <p>o) Automatic Shading correction ensuring even illumination of capturing images.</p> <p>p) Custom Indentation pattern making facility. Custom patterns can be saved and called for future application.</p> <p>q) Control of hardness tester through software like magnification change, taking indentation etc..</p>
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1.3	<p>Motorized stage controller for X Y and Z axis.</p> <p>Controller should be compatible to existing Motorized stage of 100 x 60mm travel at 0.5 micron per step</p> <p>3 Axis Joystick controller for X, Y and Z axis control</p>
1.4	<p>Control PC for microhardness Tester:</p> <p>Minimum specification: Branded PC of Business segment</p> <p>PC - Core i7 Processor 6MB Cache memory, minimum 4 USB 3.0 port, 1 RS 232 Serial port, 2 USB 2 port, 1TB HDD, 16 GB RAM, 24" LED monitor, Windows(R) 10 Professional 64 bit Media Kit Microsoft(R) Office 2019 ( Word , Excel and PowerPoint )with license. With</p>



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