## **TECHNICAL SPECIFICATIONS**

[*The bidder shall fill the last three columns given below.* Bidder's failure to provide the information requested in these columns may be a reason for the rejection of the bid. If any discrepancy is observed between the information provided by the bidder below and the other technical information attached to the bid, the information provided herein shall take precedence.]

## 1. Universal Testing Machine - 01 No.

Description	Specification		If No, Bidders response	
Make				
Model				
Country of Origin	(Specify)			
Country of Manufacture	(Specify)			
		Conformity		
Specification Details		Yes	No	
Tensile Loading Capac	eity: 500 kN			
Compression Loading Capacity: 1000 kN				
Load measurement acc	$euracy \le 1\%$			
Tensile jaws: Should thickness more than 40	have appropriate jaws to clamp specimen mm			
Distance between grips in Tensile Mode >300 mm				

Length of adoptable specimen in tensile mode >500 mm	
Length of adoptable specimen in compression mode>800 mm	
Ram travel in compression mode>300 mm	
Clearance between machine columns>600 mm	
Maximum Moving Speed: 200mm/min	
Should have effective resolution with Closed-loop	
Machine type: Electro Hydraulic Servo or any other equivalent system	
Number of channels for load sensors for pressure transducers, load cells and displacement transducers $\ge 8$	
Power Supply: Should comply with Sri Lankan standards, should specify whether single or multi-phase needed	
Compatible software to control all the testing options remotely and includes real Time Management user interface environment allowing and able to connect PC	
Software should be included testing under load/stress control and displacement control (by using the displacement transducers supplied with the machine). Also real time monitoring of test data, stress/time, stress/axial strain, stress/lateral strain graphs.	
Enough Storage memory for single and multiple tests: specify	
Sampling rate> 100 per second	
Data transferring: USB Ports specify the numbers	

Front and rear fragment guard: Compulsory	
Machine compliance standards: EN 10002-1,EN 10002-2,N 10002-4, ISO6892, ASTM A370	
Complete training of the machine with all the testing should be carried out by the supplier and relevant samples	
Comprehensive Instructions manual in English Language	
Availability of spare parts from the manufacturer	
Manufacturer calibration certificate should be supplied. Also local calibration should be carried out and checked for the reliability of the readings	
Mounting, installation and complete demonstration should be carried out by the supplier	
<ul> <li>Accessories (Optional: specify the prices separately for each item)</li> <li>Calibration load cell for the machine</li> <li>Distance pieces for compression testing</li> <li>Lower platens and upper platens with spherical seat: Specify the dimension: should be more than 500 mm</li> <li>Displacement transducers 50 mm: Should be compatible with the software and the machine channels hardware</li> <li>Displacement transducers 100 mm: Should be compatible with the software and the machine channels hardware</li> <li>Displacement transducers 150 mm: Should be compatible with the software and the machine channels hardware</li> <li>Displacement transducers 150 mm: Should be compatible with the software and the machine channels hardware</li> </ul>	
Warranty: Total warranty of five years is required with minimum three years of manufacturer's warranty certificate.	

Bidder's Name & Signature:	

Name of the Company: Date and Company seal

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