

Specifications of Equipment for Tender Bid cum Quotation

Name of Equipment/ Assembly	Large Pull-Out Test Apparatus for Geosynthetics (Capacity 100 kN)
Related Standards to be accorded	IS 16380, ASTM D 6706-01
Features/Capabilities /Specifications	<p>The assembly shall have the following features:</p> <ul style="list-style-type: none"> • Suitable accessories for testing pull-out interface properties of Geogrids /GI Strips / Geosynthetics/geotextile in Soil. • Normal Load upto 300 kN • Pull out force upto 100 kN with Variable Pull speeds • Programmable rate of strain from 0.1-100 mm/min. • Assembly to dock variable test box size (i) 650 mm × 450 mm (ii) 750 mm × 750 mm, (iii) 1000 mm × 1000 mm with minimum height of 500 mm and embedment length of 500 mm, comprising altering the size of the box and detachable Perspex/acrylic sheets on all sides. • Flexible pneumatic diaphragm-loading device for Normal load • Floor space arrangement for different size of specimens. • Rugged & stable fabrication. • Chain-pulley-crane arrangement for sample transfer (Capacity 2 Ton). • Rain fall method apparatus for sampling with granular materials. • Displacement Measurement Devices Comprising – 04 LVDTs (100 mm stroke) • 02 Load Cell (i) capacity of 300 kN (ii) capacity of 100 kN with least count of 1 N. • Robust & accurate 16 channel Data Acquisition System with data logging for atleast 10 set of tests • Digital display for viewing real time data. • System password to be provided for calibration. • Computer system along with the following <ul style="list-style-type: none"> ○ Desktop/laptop computer. ○ Compatible software for analysis ○ Configurable controlling unit system for DAQ ○ Printing kiosk
Make	Clear mention Make in the bid
Electrical Supply Requirement	<ul style="list-style-type: none"> • Electricity supply requirements (voltage and phase) shall be clearly mentioned • Mention in case of Requirement of UPS (Uninterrupted Power Supply) with capacity
Size and Weight	<ul style="list-style-type: none"> • Mention area required for positioning of equipment. • Mention total weight of the equipment. • Mention specific requirement of foundation/pedestal for resting the equipment, if any. • Mentioned need of vibration isolated, if needed
Water and Air Supply Requirements	<ul style="list-style-type: none"> • Mention the requirement to supply of compressed air, if any. • Mention the requirement and arrangement of water supply, if any.

Compatibility of parts	<ul style="list-style-type: none"> • In case of accessories from make differing to the make of equipment, compatibility shall be checked and certified by the bidder.
Calibration Certificates, Technical Manual and SOP	<ul style="list-style-type: none"> • The calibration certificates shall be provided with equipment and accessories. • Validity of calibration certificate for all devices shall not be less than one year. • Technical manual and Standard Operating Procedure document shall be provided.