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09 October 2025

Tender Name: Dilatometer based on push-rod method

S.No	Existing	To be read as
1	<p>The maximum sample length will be 50 mm. The minimum sample diameter will be 10 mm, and the maximum will be 50 mm. Sample holder(s) for sample diameters ranging from 10 mm to 50 mm are to be provided. If required, to accommodate larger diameters (50 mm), sample holders and protection tubes shall be provided based on temperature range and material compatibility.</p> <p>Safety aspects: It is extremely challenging to determine the thermal cracking/thermal fracture temperatures of cementitious materials and aggregates due to the presence of different mineral phases. Therefore, under no condition, the thermal cracking/failure of the material damage the sample holder, sensors and other parts of the instrument during measurement. The protection should be provided accordingly.</p>	<p>The maximum sample length will be 50 mm. The minimum sample diameter will be 10 mm, and the maximum will be 20 mm. Sample holder(s) for sample diameters ranging from 10 mm to 20 mm are to be provided. If required, to accommodate larger diameters (20 mm), sample holders and protection tubes should be provided based on temperature range and material compatibility.</p> <p>Safety aspects: It is extremely challenging to determine the thermal cracking/thermal fracture temperatures of cementitious materials and aggregates due to the presence of different mineral phases. Therefore, under no condition, the thermal cracking/failure of the material damage the sample holder, sensors and other parts of the instrument during measurement. The protection should be provided accordingly.</p>
2	<p>The displacement system will be an LVDT. The length resolution shall be 10 nm or better with a dynamic measuring range of 4 mm or more. For a competitive price, a higher measurement range with the mentioned accuracy will be given priority.</p>	<p>The displacement system will be an LVDT. The length resolution shall be 10 nm or better with a dynamic measuring range of 2.5 mm or more. For a competitive price, a higher measurement range with the mentioned accuracy will be given priority.</p>

3	The measurements will be carried out in vacuum, air, nitrogen, helium and in the presence of other inert or oxidizing environments. Appropriate accessories shall be supplied to conduct measurements under these regimes.	<p>The measurements will be carried out in vacuum, air, nitrogen, helium and in the presence of other inert or oxidizing environments. Appropriate accessories shall be supplied to conduct measurements under these regimes.</p> <p>Flow rate of nitrogen and other purging inert gases should be customizable and programmable, ranging from 20 ml/min to 300 ml/min</p>
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The last date for submission of the tender document has been extended up to **29th October 2025 @ 4 PM.**

Purchase Committee