

Correction of wall and end effects in falling sphere viscometry

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Stokes equation is usually used for the in situ X-ray falling sphere viscometry. In order to correct the effect of infinite size of container, Faxen's formula is commonly applied. However, some researchers use the Faxen correction with end effect term. This correction was firstly appeared in Kingery (1959). He added the end correction to the original Faxen formula, but there was no theoretical explanation. In this presentation, the historical problem of the end effect correction is reviewed.