

Calculation:

- Cylinder Volume:
 - Calculate the internal volume of the sample container as follows:

$$V = \frac{\pi d^2 h}{4}$$

Where:

V = internal cylinder volume, in³, (mm³)

d = internal cylinder diameter, in. (mm), and

h = cylinder height, in. (mm).

- MATX_d or Average Macro Texture Depth
 - Calculate the average macro texture depth as follows:

$$\text{MATX}_d = \frac{4V}{\pi D^2}$$

Where:

MATX_d = Mean texture depth of pavement macrotexture, in. (mm).

V = sample volume, in³, (mm³), and

D = average diameter of the test area covered by the glass spheres, in. (mm).

An example of one test area location for calculating the mean texture depth of the pavement macrotexture is below:

Volume of glass spheres, V: _____ mm³

Dia. 1: _____ mm Dia. 2 _____ mm Dia. 3: _____ mm Dia. 4: _____ mm

Average Diameter, D_{avg}: mm

Avg. Macro Texture Depth MATX₄ _____ mm