For large diameters, G can be approximated with that for an infinite plane sample (section D.1). The influence of the finite diameter is the greater, the smaller t. Therefore we have the upper limit for the influence of the periferi in the correction factor C_o of section I.1 for a thin, circular slice, and we can write

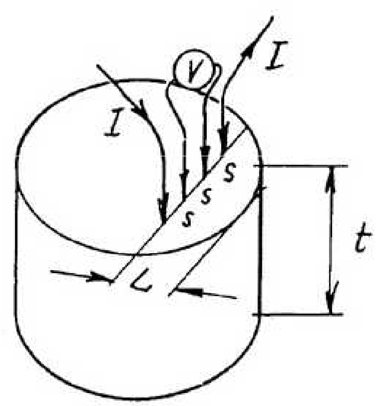
$$\rho = G\,\frac{V}{I}, \qquad 2\pi s\cdot T_1(\tfrac{t}{s})\cdot C_o(\tfrac{d}{s}) \leq G \leq 2\pi s\cdot T_1(\tfrac{t}{s})$$

where:

$2\pi s \cdot T_1(\frac{t}{s})$ is the geometric factor for an infinite plane sample of thickness t, and $C_o(\frac{d}{s})$ is the diameter correction for a thin circular slice of diameter d, when measuring in the center.

$T_1(\frac{t}{s})$ is found in section D.1, and $C_o(\frac{d}{s})$ in section I.1.

H.3) Probe Array Perpendicular to a Diameter at a fixed Distance from the Periferi.



This configuration has not been treated in the literature.

By a reasoning analogous to that in the previous section H.2, we conclude that

$$\rho = G\,\frac{V}{I}, \text{ where } 2\pi s\cdot T_1(\tfrac{t}{s})K_3(\tfrac{L}{s},\tfrac{d}{s}) \leq G \leq 2\pi s\cdot D_T(\tfrac{L}{s},\tfrac{t}{s})$$

where:

$2\pi s \cdot D_T(\frac{L}{s},\frac{t}{s})$ is the geometric factor for a semi-infinite plane sample of thickness t, when the probe array is parallel to the edge at a distance L, (see section E.4), and $2\pi s \cdot T_1(\frac{t}{s})$ is the geometric factor for an infinite plane sample of thickness t (see section D.), and $K_3(\frac{L}{s},\frac{t}{s})$ is the contour correction for the shown configuration, when $t \ll s$ (see section I.4).