**Input parameters**

– PEC radius;

– signal amplitude;

– working frequency;

– thickness of the test object;

Material characteristics PEC (#0005):

– sound propagation speed in the PEC;

– material density;

– Acoustic Impedance.

Material characteristics TO (#0009):

– sound propagation speed in the test object;

– material density;

- FSPL;

– Acoustic Impedance.

**Calculation of the electro-acoustic path**

Wavelength in the TO:

Fresnel Distance:

Fraunhofer Distance:

Surface area of the PEC:

Calculation of the transmission coefficient of an ultrasonic beam in intensity:

Acoustic coefficient of attenuation:

Amplitude of the received signal: