

# Problem info

Problem type: AC Magnetics , frequency: 1000000 Hz,

Geometry model class: Plane-Parallel

Problem database file names:

- Problem: *Double-wire.pbm*
- Geometry: *Double-wire.mod*
- Material Data: *Double-wire.dhe*
- Material Data 2 (library): *none*
- Electric circuit: *none*

Results taken from other problems:

- *none*

# Geometry model

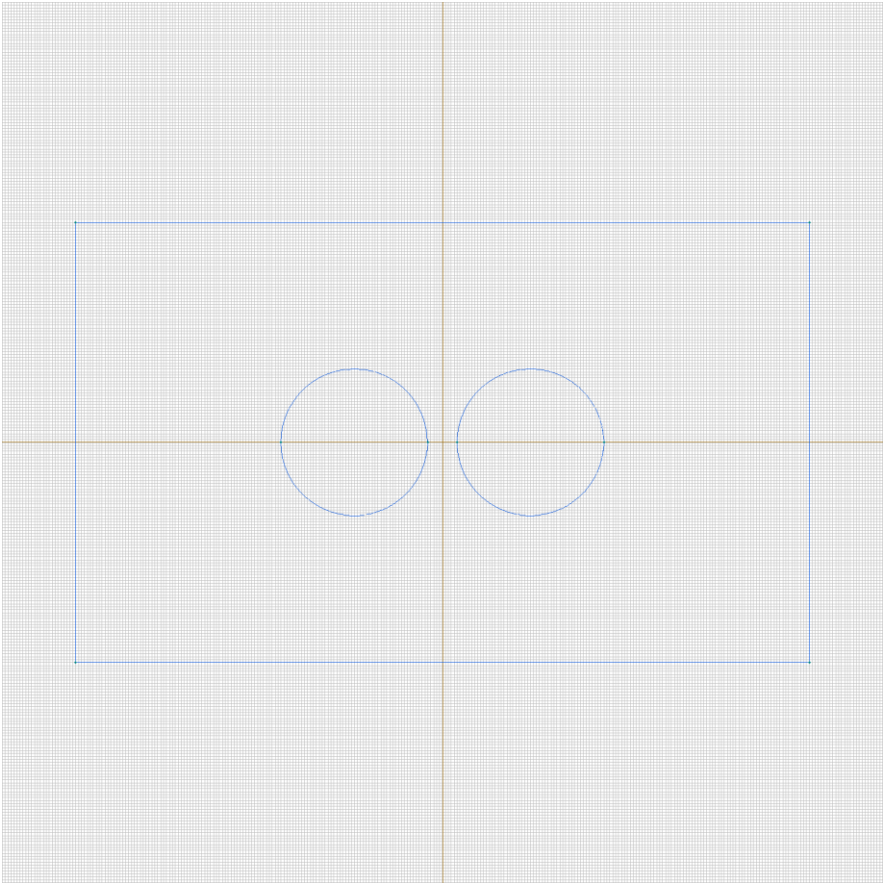


Table 1. Geometry model statistics

	With Label	Total
Blocks	2	3
Edges	1	8
Vertices	0	8

Number of nodes: 52843.

# Labelled objects

There are following labelled objects in the geometry model (Material Data file could contain more labels, but only those labels that assigned to geometric objects are listed)

Blocks:

- [Air](#)
- [Wire1](#)
- 

Edges:

- [border](#)
- 

Vertices:

Detailed information about each label is listed below.

Labelled objects: block "Air"

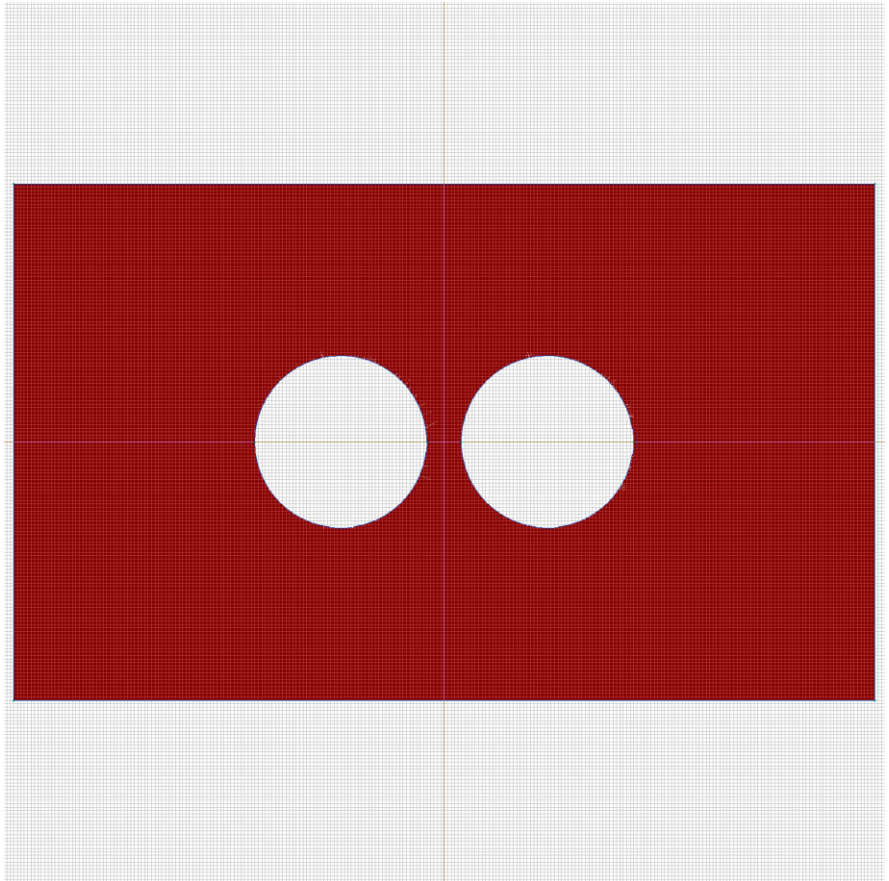
There are (1) objects with this label

Relative magnetic permeability:  $\mu_x=1$ ,  $\mu_y=1$

Electric conductivity:  $\sigma=0$  [S/m]

Current density:  $j=0$  [A/m<sup>2</sup>], phase 0 [deg]

Conductor's connection: in parallel



Labelled objects: block "Wire1"

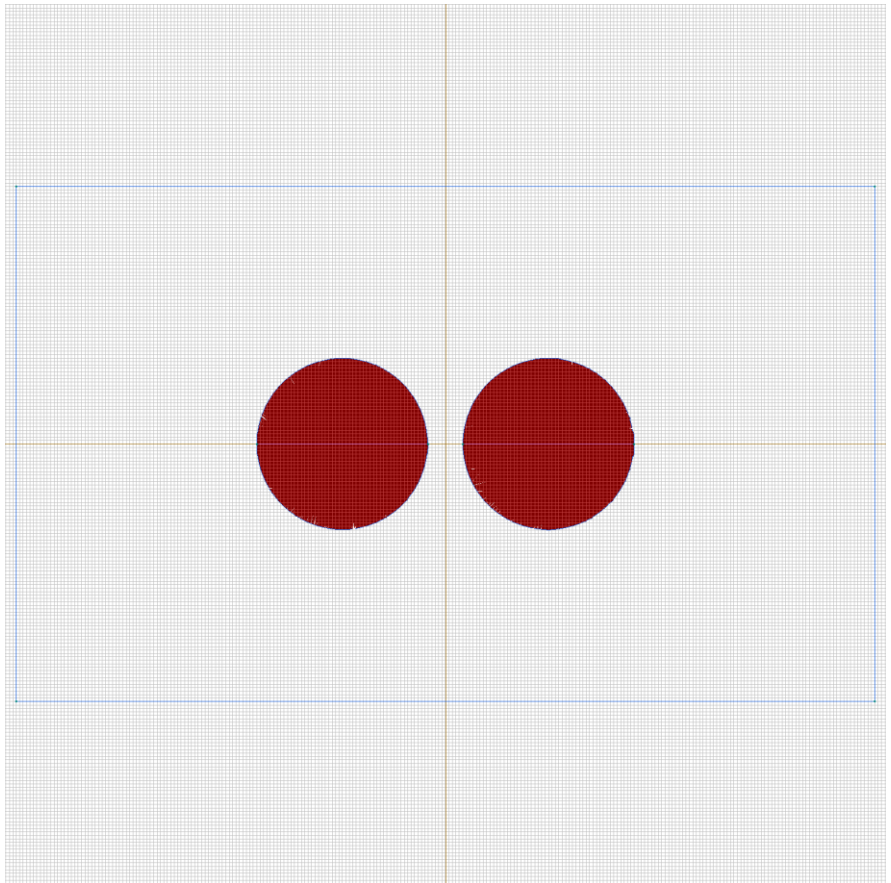
There are (2) objects with this label

Relative magnetic permeability:  $\mu_x=1$ ,  $\mu_y=1$

Electric conductivity:  $\sigma=56000000$  [S/m]

Total current:  $I=1$  [A], phase 0 [deg]

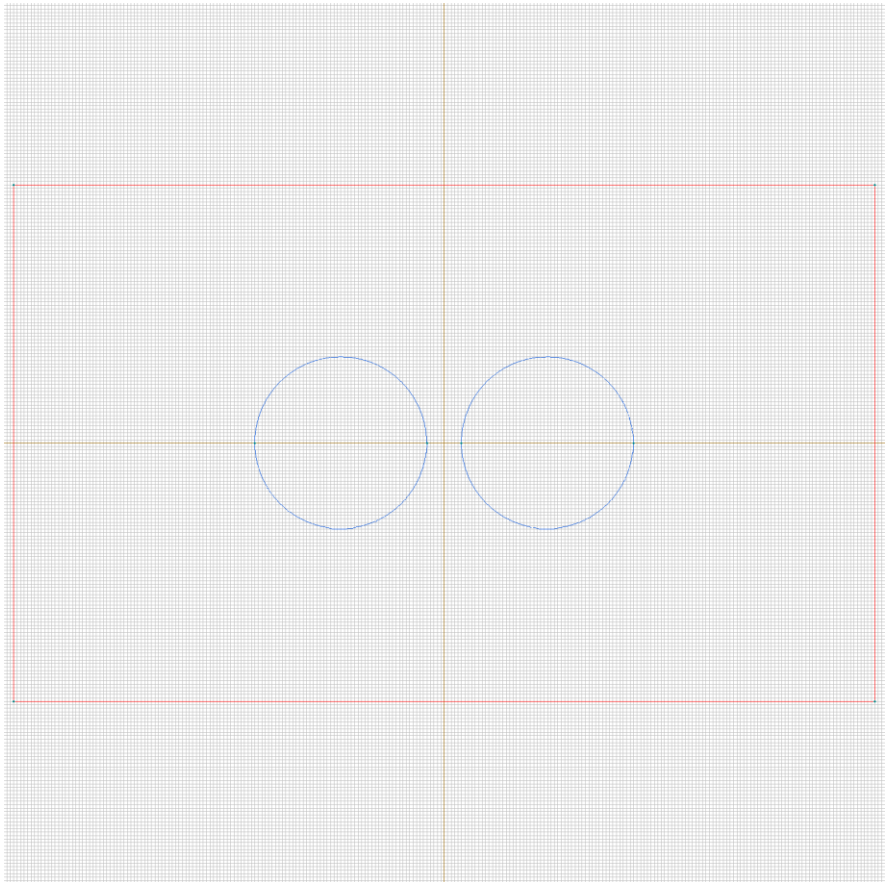
Conductor's connection: in parallel



Labelled objects: edge "border"

There are (4) objects with this label

Magnetic potential:  $A=0$  [Wb/m], phase 0 [deg]

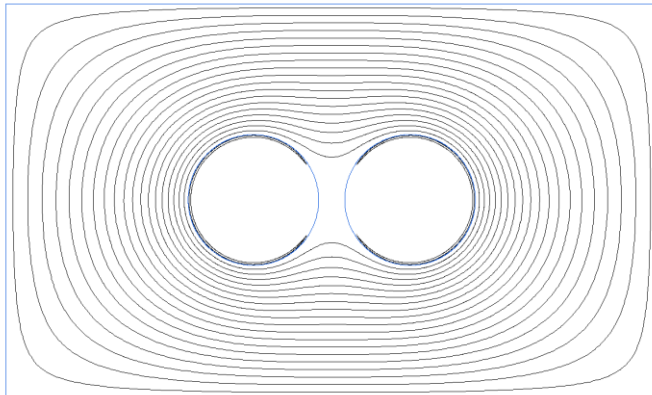






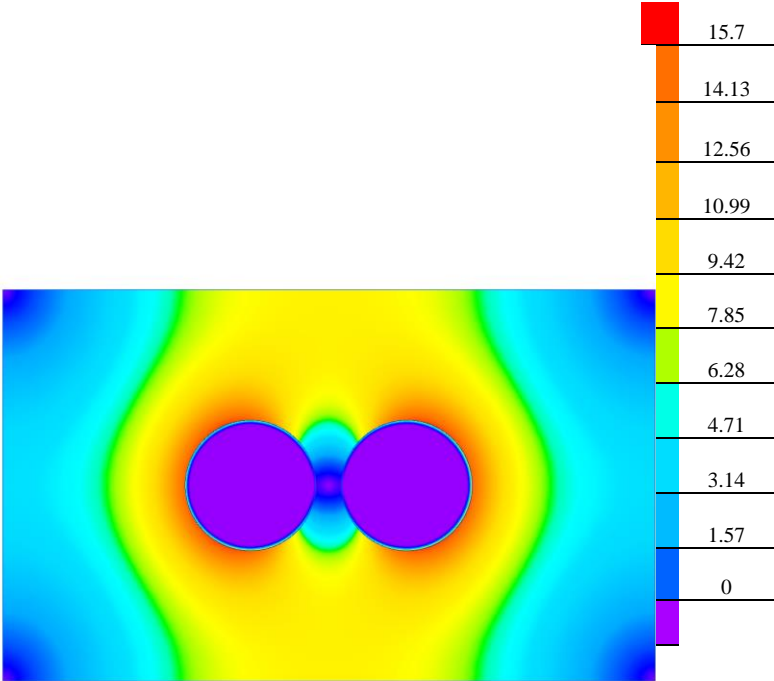
# Results

Field lines



# Results

Color map of Strength  $|H|$  [A/m]



# Nonlinear dependencies

No non-linear dependencies are used in this problem data