

Problem info

Problem type: Magnetostatics

Geometry model class: Plane-Parallel

Problem database file names:

- Problem: *Perio1.pbm*
- Geometry: *Perio1.mod*
- Material Data: *Perio1.dms*
- Material Data 2 (library): *none*
- Electric circuit: *none*

Results taken from other problems:

- *none*

Geometry model

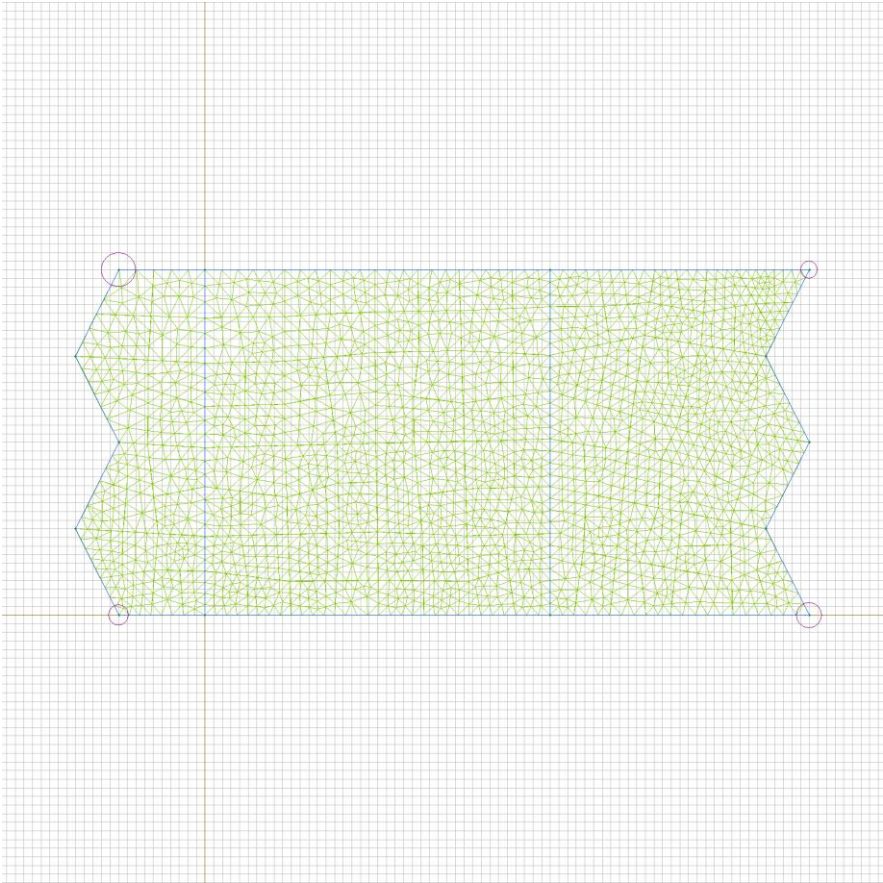


Table 1. Geometry model statistics

	With Label	Total
Blocks	2	3
Edges	2	16
Vertices	0	14

Number of nodes: 1905.

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:

- [Source +](#)
- [Source -](#)
-

Edges:

- [A = 0](#)
- [Periodic](#)
-

Vertices:

Detailed information about each label is listed below.

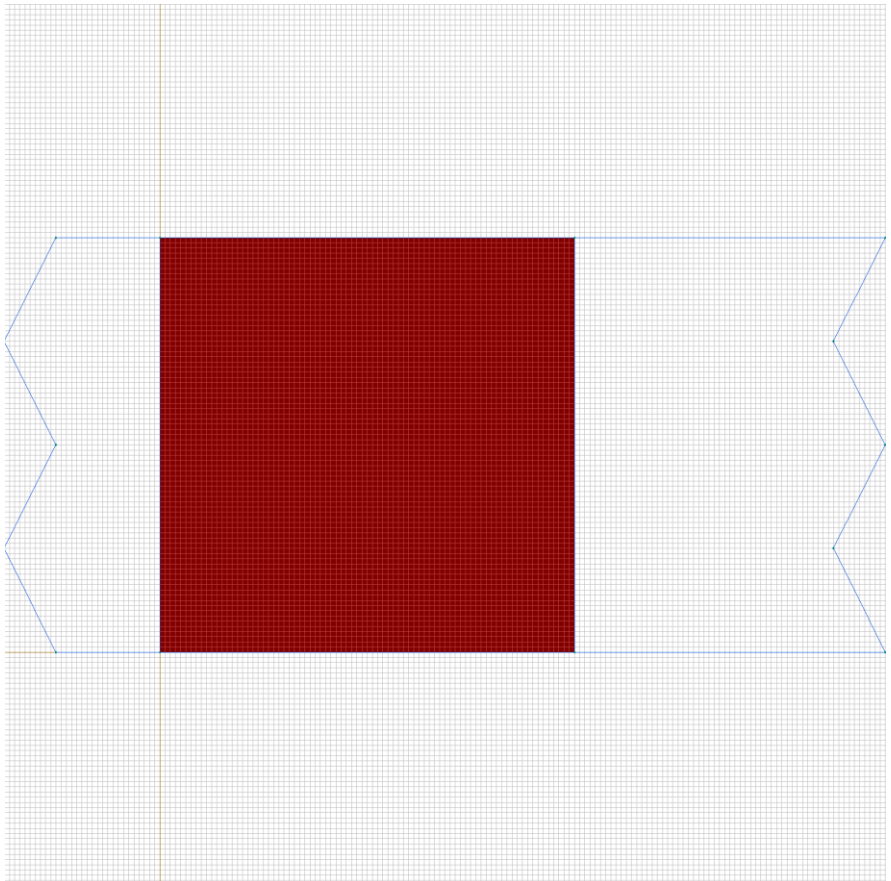
Labelled objects: block "Source +"

There are (1) objects with this label

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

Current density: $j=1000$ [A/m²]

Conductor's connection: in parallel



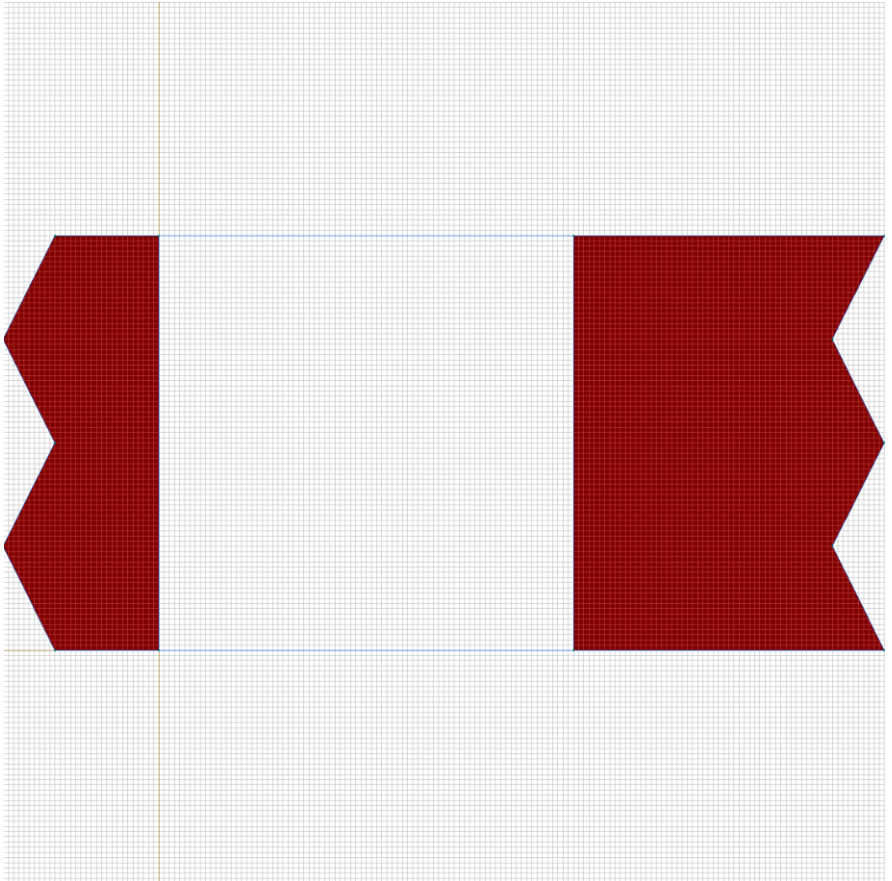
Labelled objects: block "Source -"

There are (2) objects with this label

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

Current density: $j=-1000$ [A/m²]

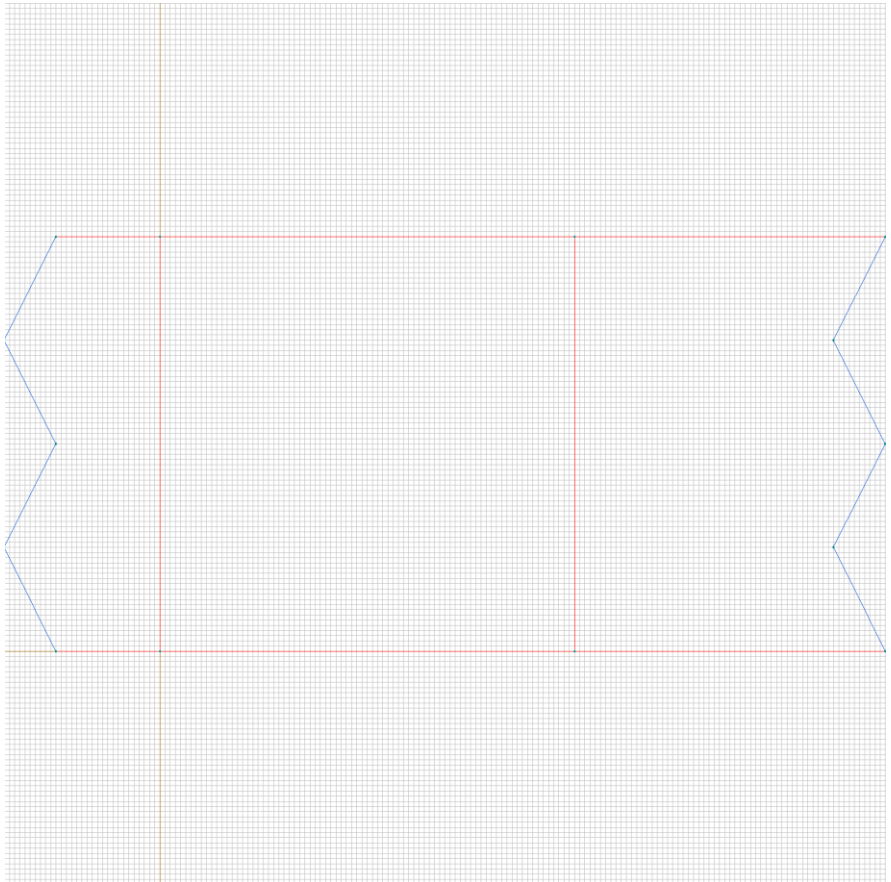
Conductor's connection: in parallel



Labelled objects: edge "A = 0"

There are (8) objects with this label

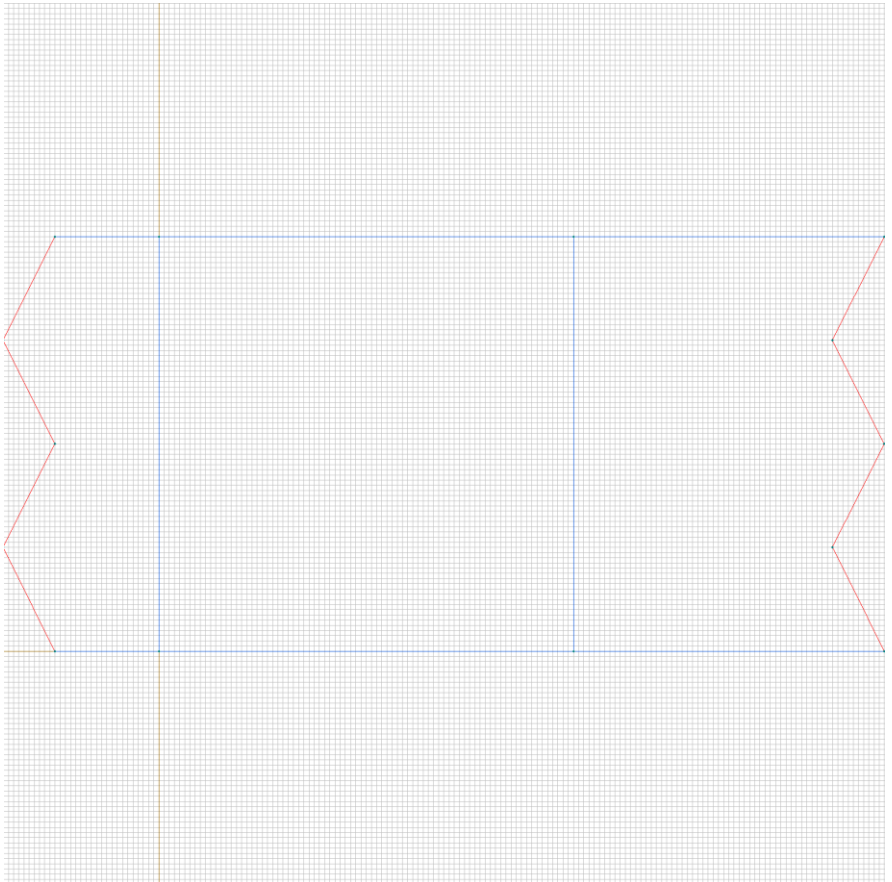
Magnetic potential: $A=0$ [Wb/m]



Labelled objects: edge "Periodic"

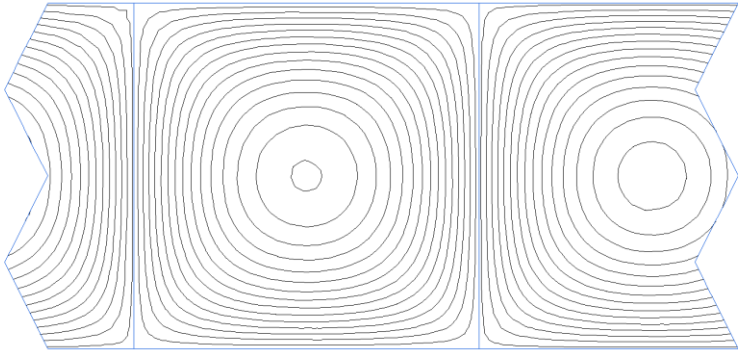
There are (8) objects with this label

Even periodic: $A1=A2$



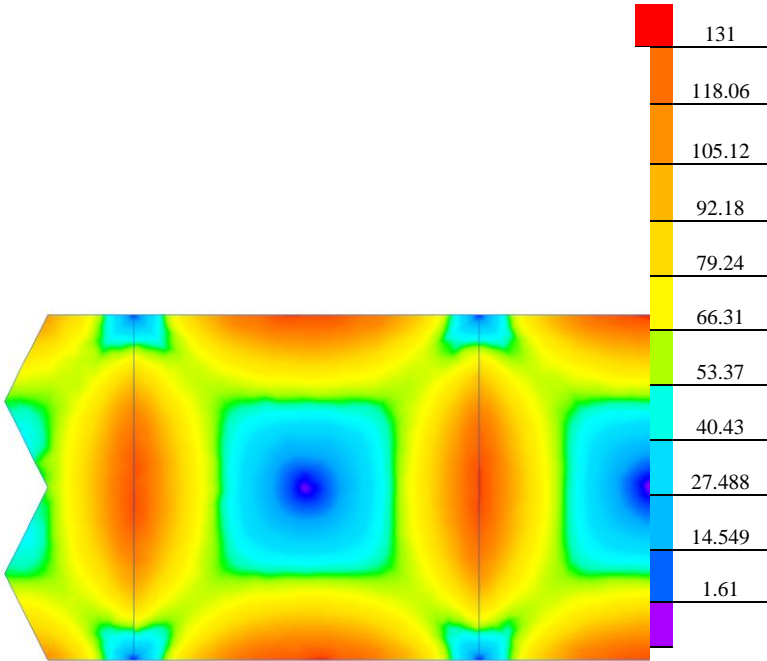
Results

Field lines



Results

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



Nonlinear dependencies

No non-linear dependencies are used in this problem data