Problem info

Problem type: Magnetostatics
Geometry model class: Axisymmetric
Problem database file names:

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

Results taken from other problems:

- *none*

Geometry model

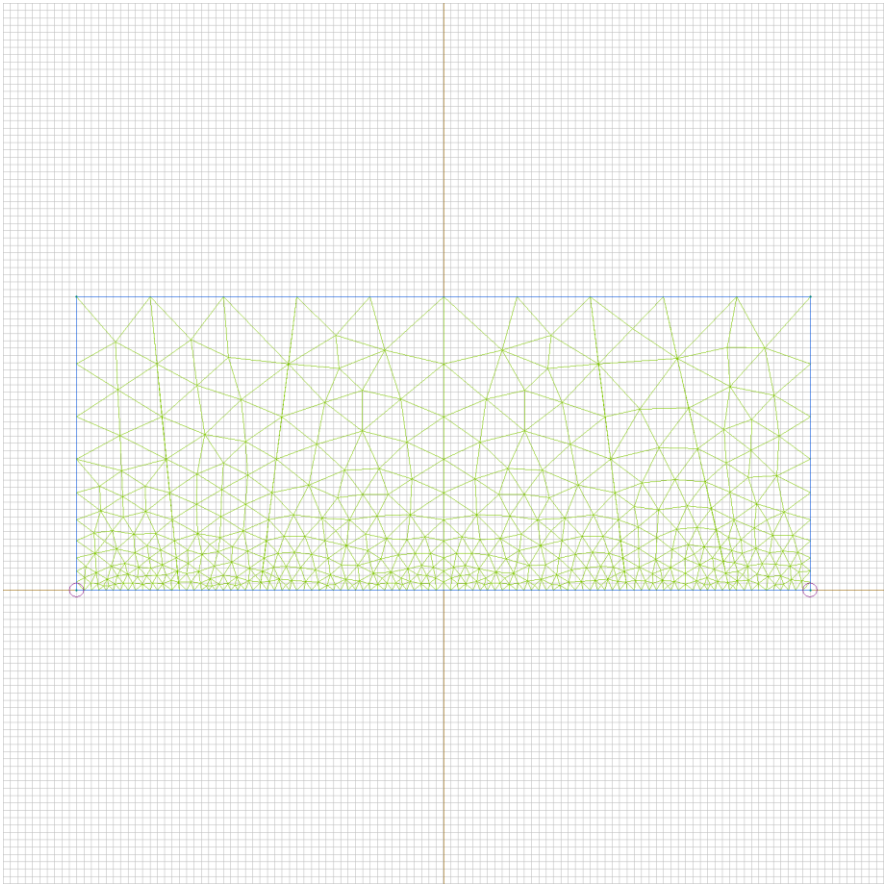


Table 1. Geometry model statistics

	With Label	Total
Blocks	1	1
Edges	2	4
Vertices	0	4

Number of nodes: 505.

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)

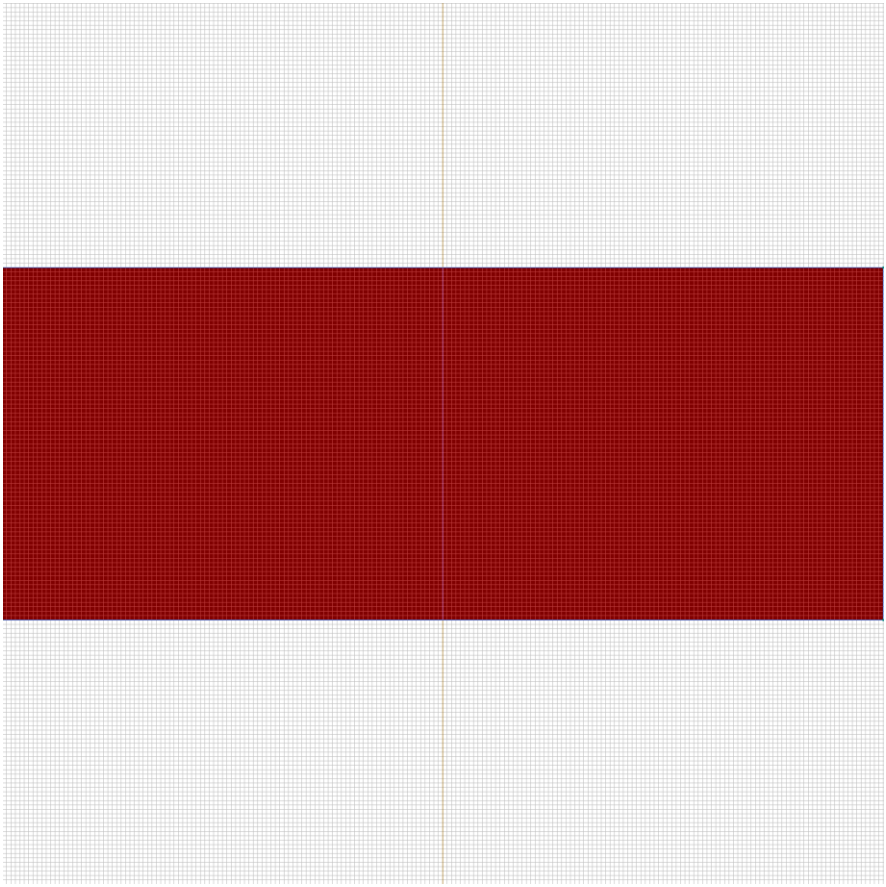
Blocks:	Edges:	Vertices:
• vacuum •	• axis • coil •	

Detailed information about each label is listed below.

Labelled objects: block "vacuum"

There are (1) objects with this label

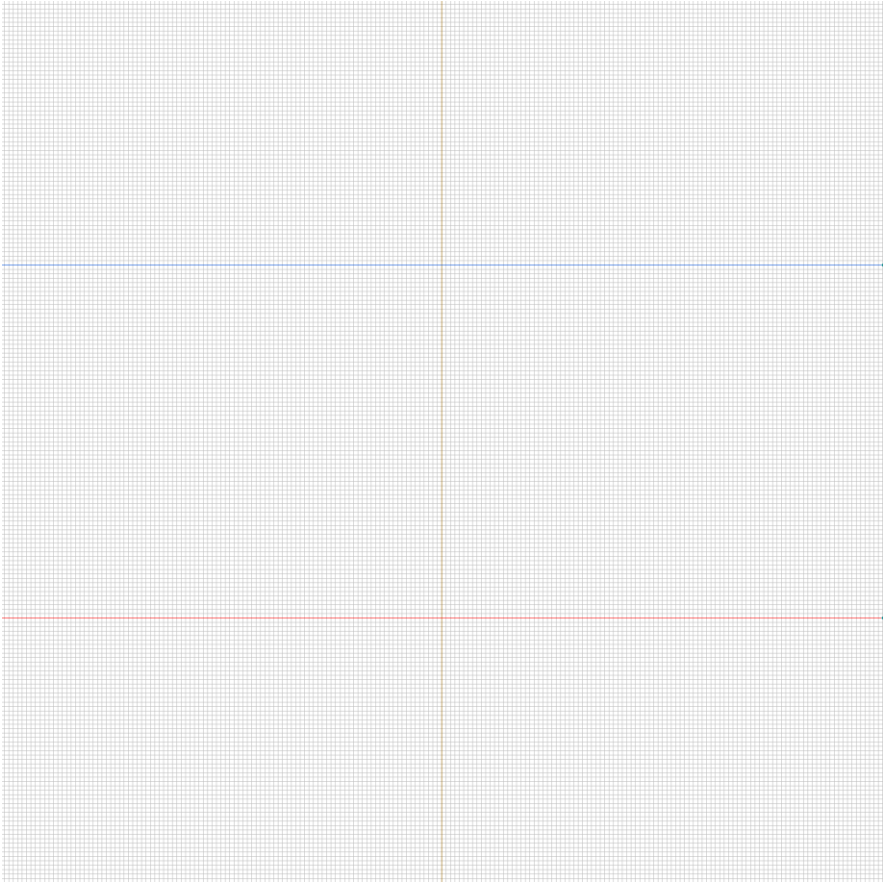
Relative magnetic permeability: mu_x=1, mu_y=1
Current density: j=0 [A/m2]
Conductor's connection: in parallel



Labelled objects: edge "axis"

There are (1) objects with this label

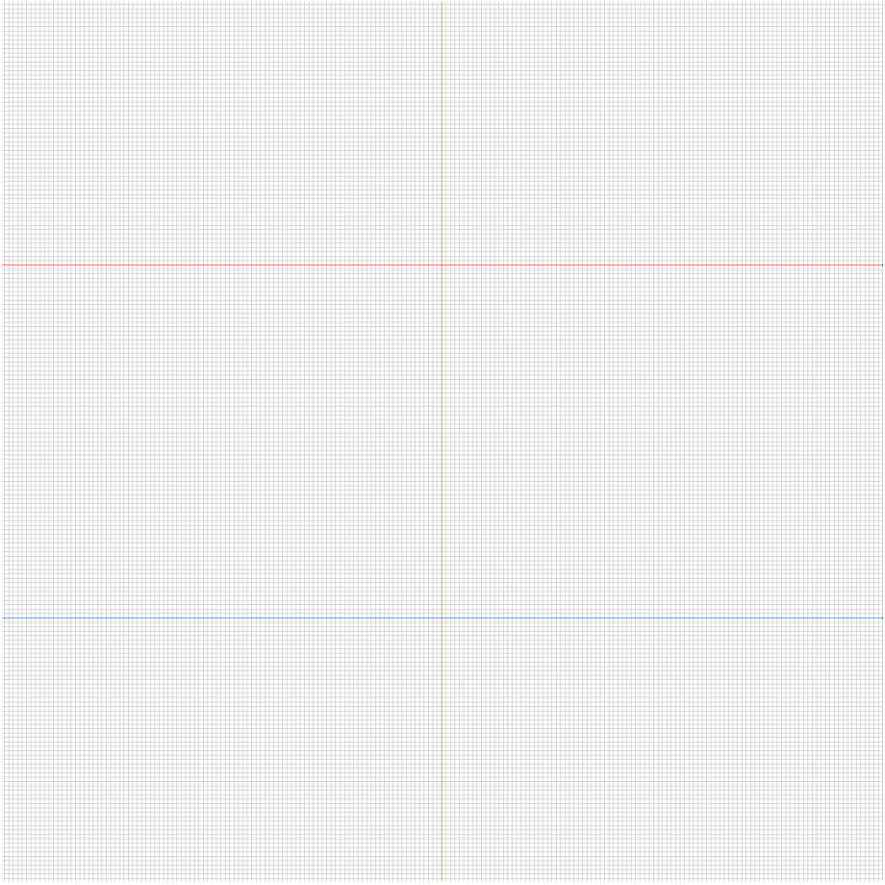
No material data (boundary conditions) are specified



Labelled objects: edge "coil"

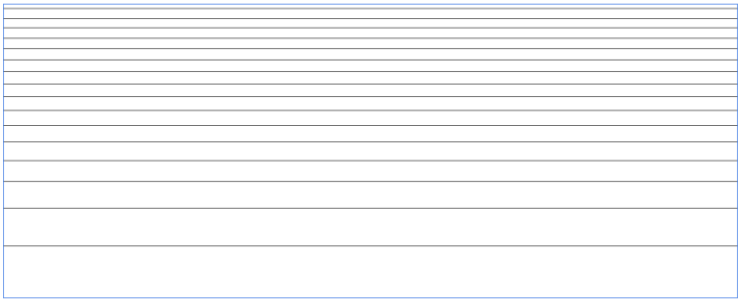
There are (1) objects with this label

Tangential field: H_t=-3183 [A/m]



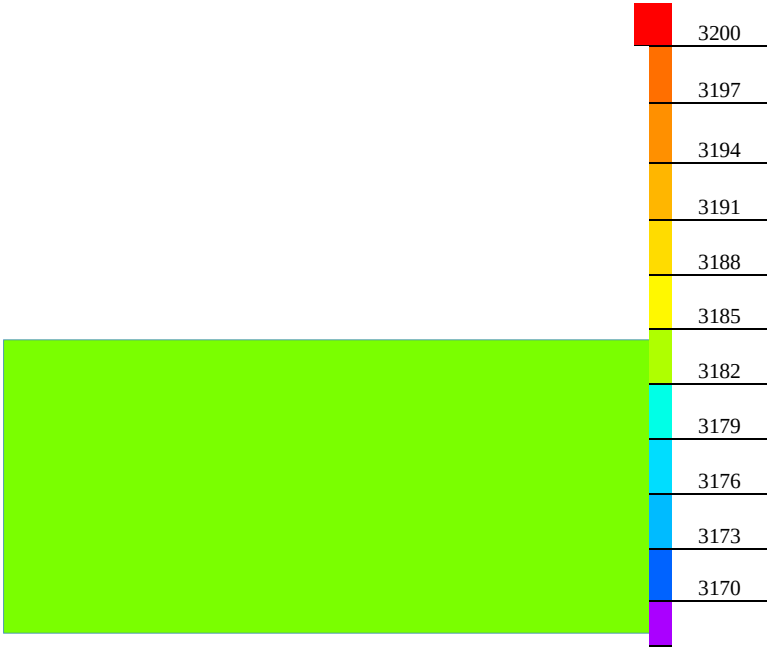
Results

Field lines



Results

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



Nonlinear dependencies

No non-linear dependencies are used in this problem data