2D

1.Create

1.1 Arc

- Basic input data

Center point X: 0

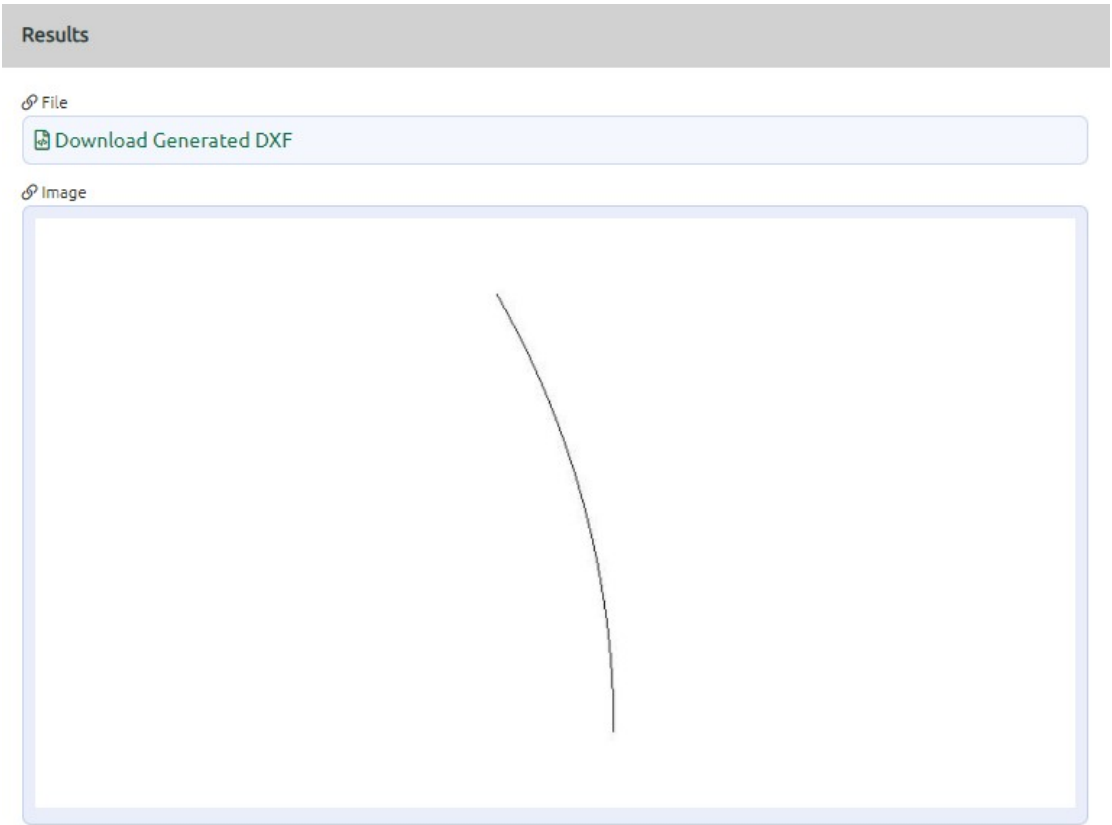
Center point Y: 0

Center point Z: 0

Radius: 10

Start angle: 0

End angle: 30



1.2 Circle

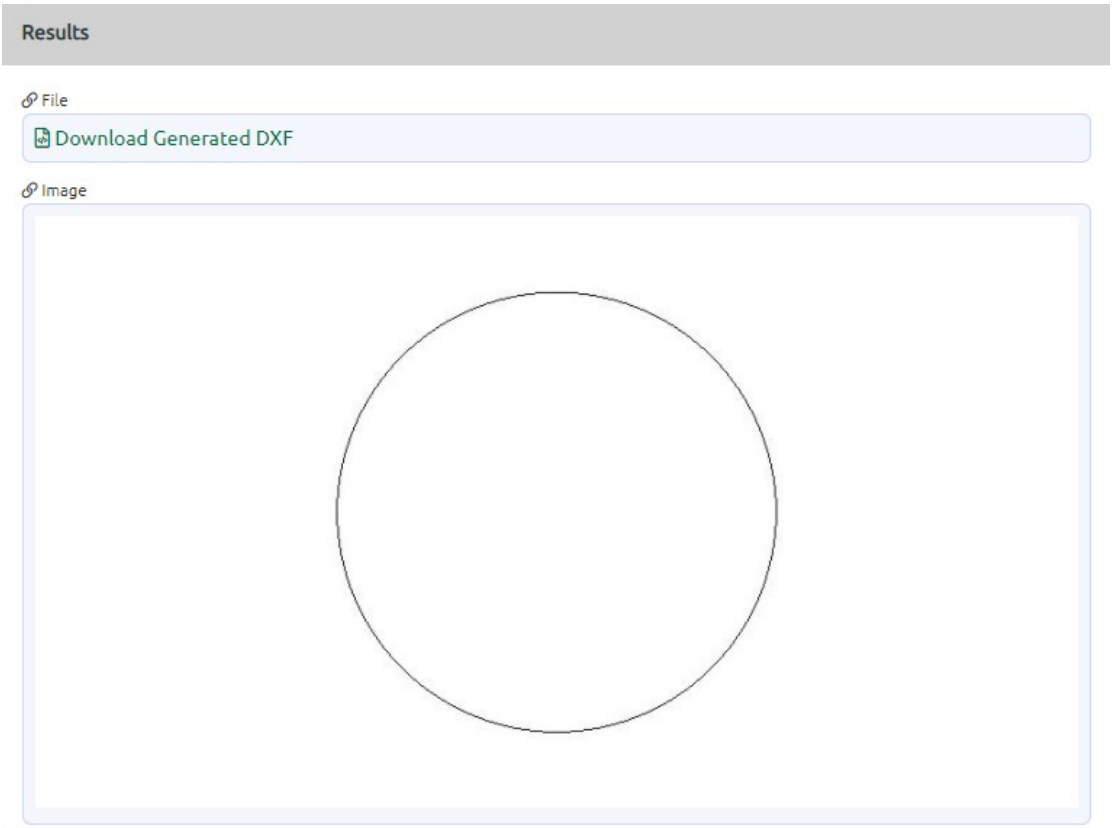
- Basic input data

Center point X: 0

Center point Y: 0

Center point Z: 0

Radius: 15



1.3 Ellipse

- Basic input data

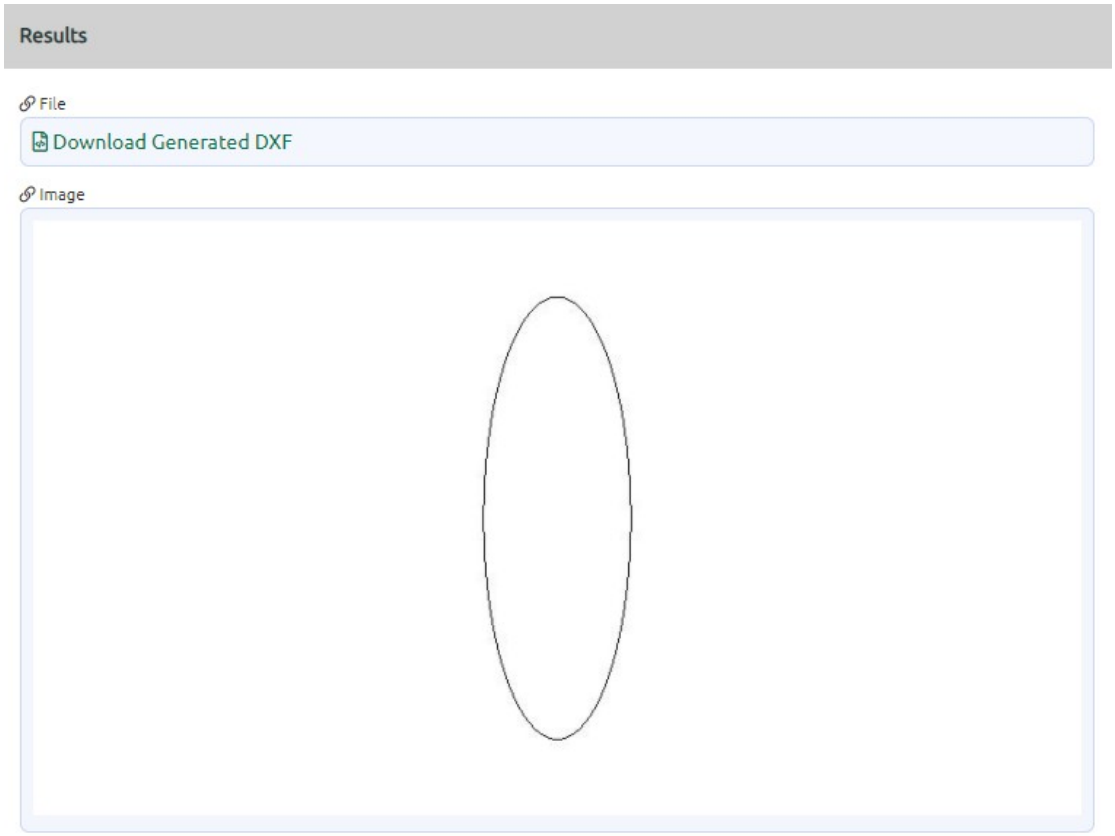
Center point X: 0

Center point Y: 0

Center point Z: 0

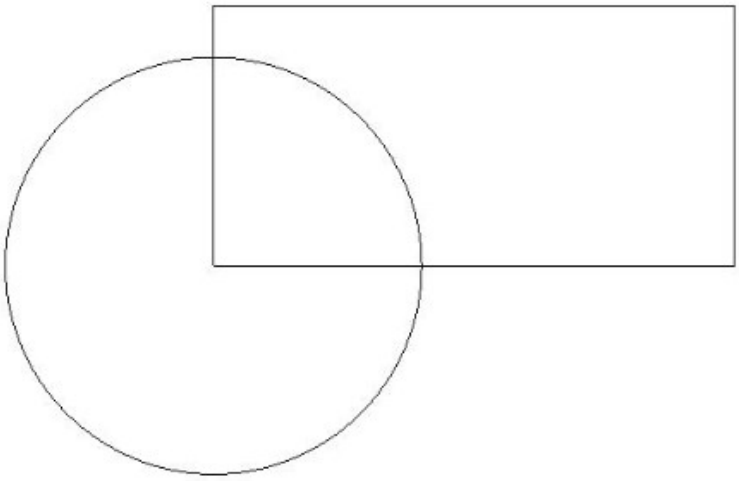
Radius A: 5

Radius B: 15

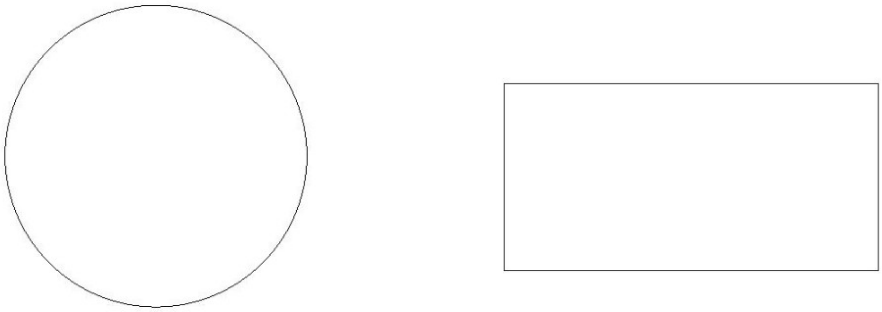


1.4 Explode to files

Original file



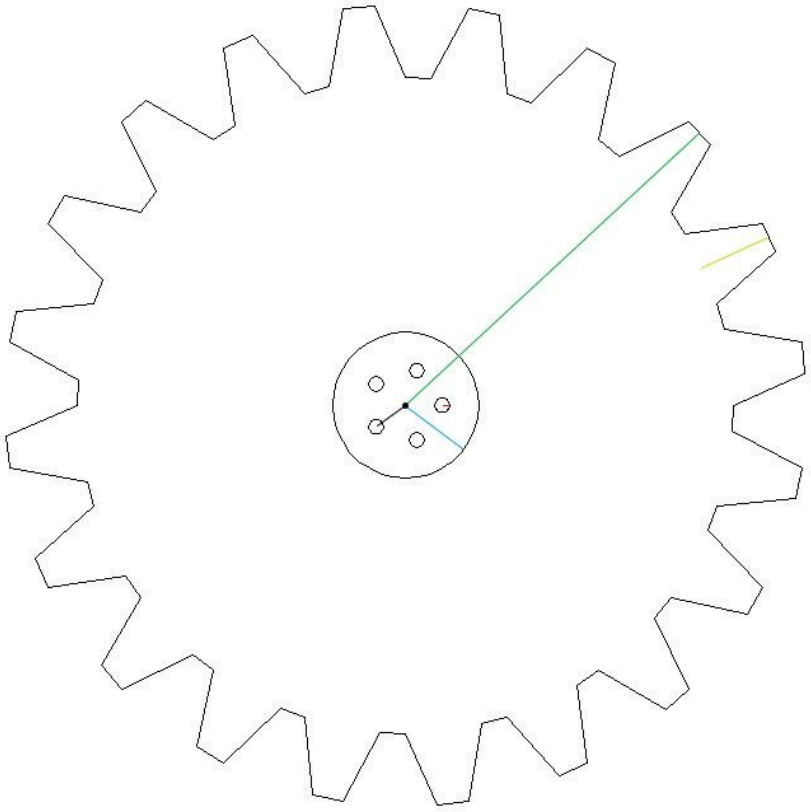
After Explode



1.5 Gear

The Gear to G-Code app help us to make a gear.

Example:



Inner circle radius: **20**

Outer circle radius: **100**

Number of teeth: **20**

Tooth depth: **20**

Number of radial holes: **5**

Radial holes radius: **2**

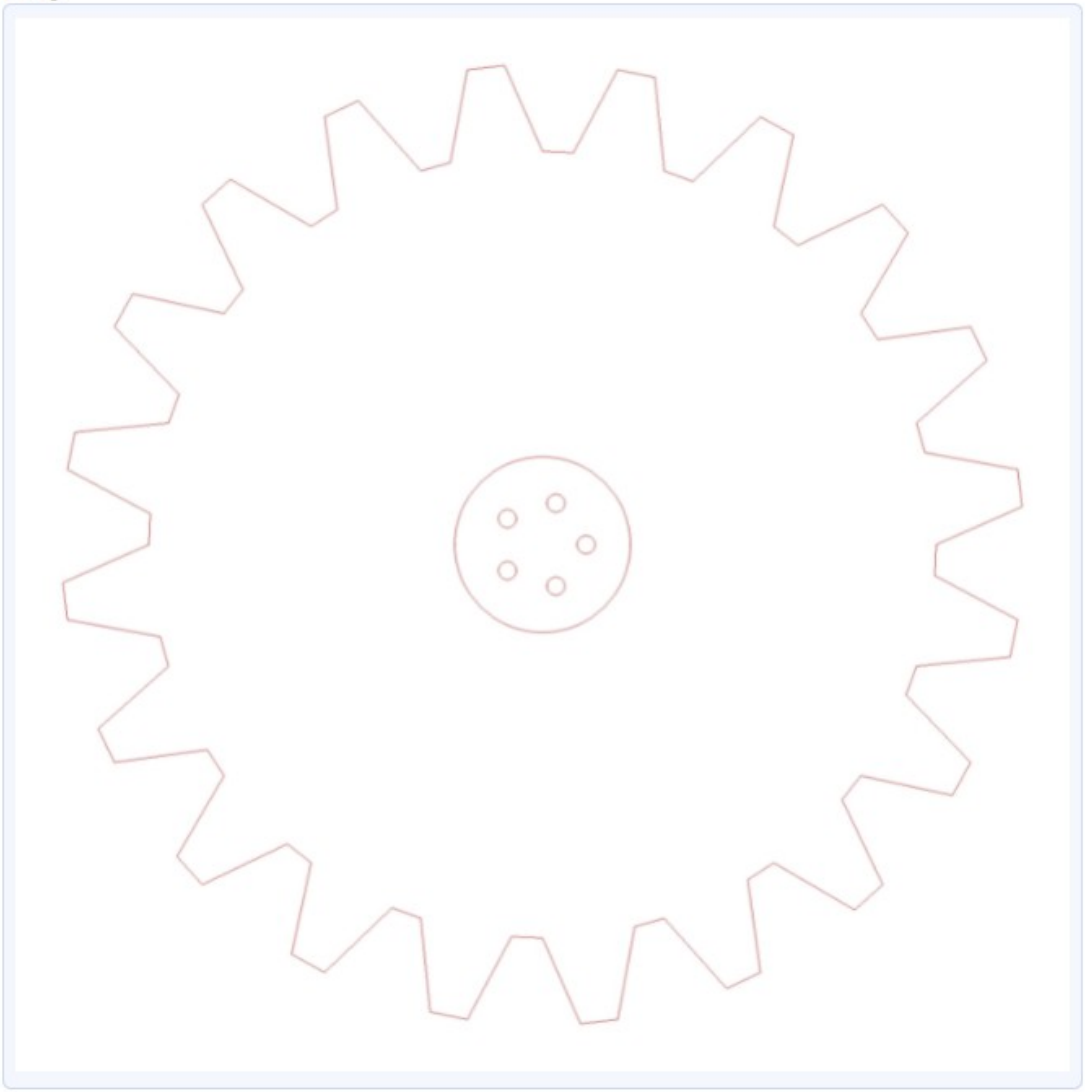
Radial holes distance: **10**

Result:

File

Download Generated DXF

Image



1.6 Hatch

Example 1

- Basic input data

Distance: 0.5

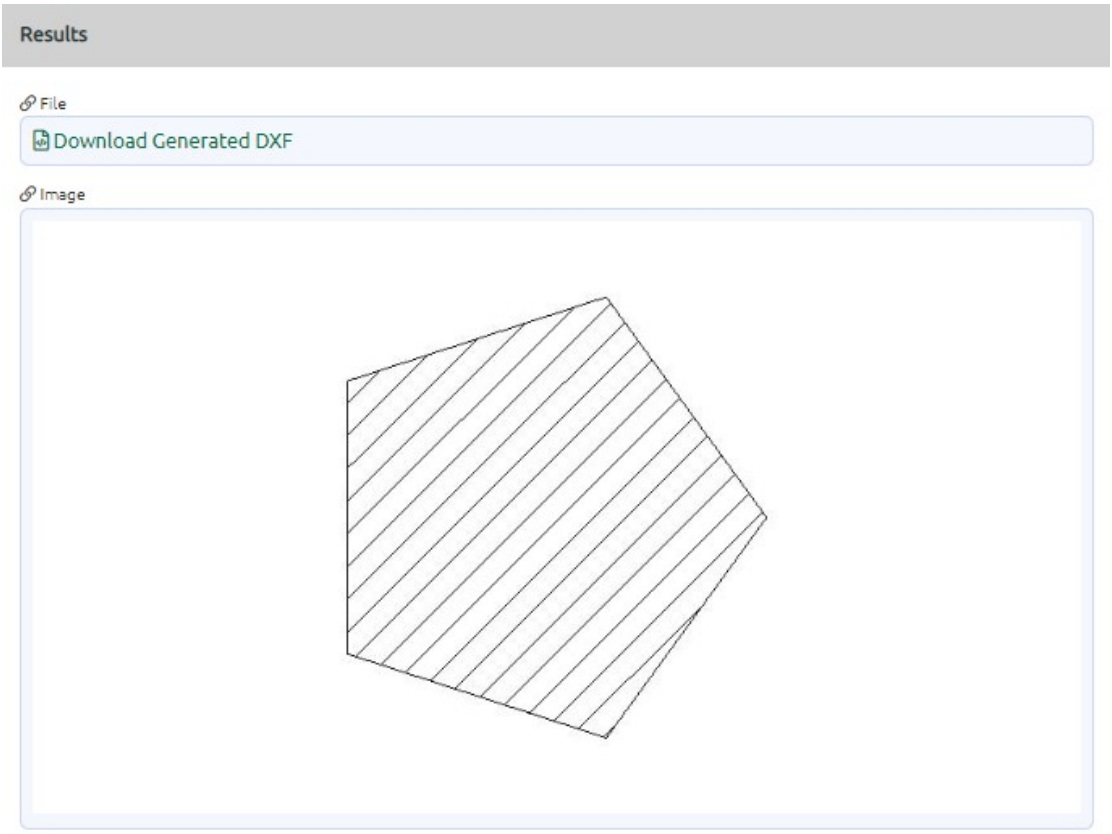
Angle: 45

Outline: Yes

Inside: Yes

Border: No

Mask: -



Example 2 (outside delineation)

- Basic input data

Distance: 0.5

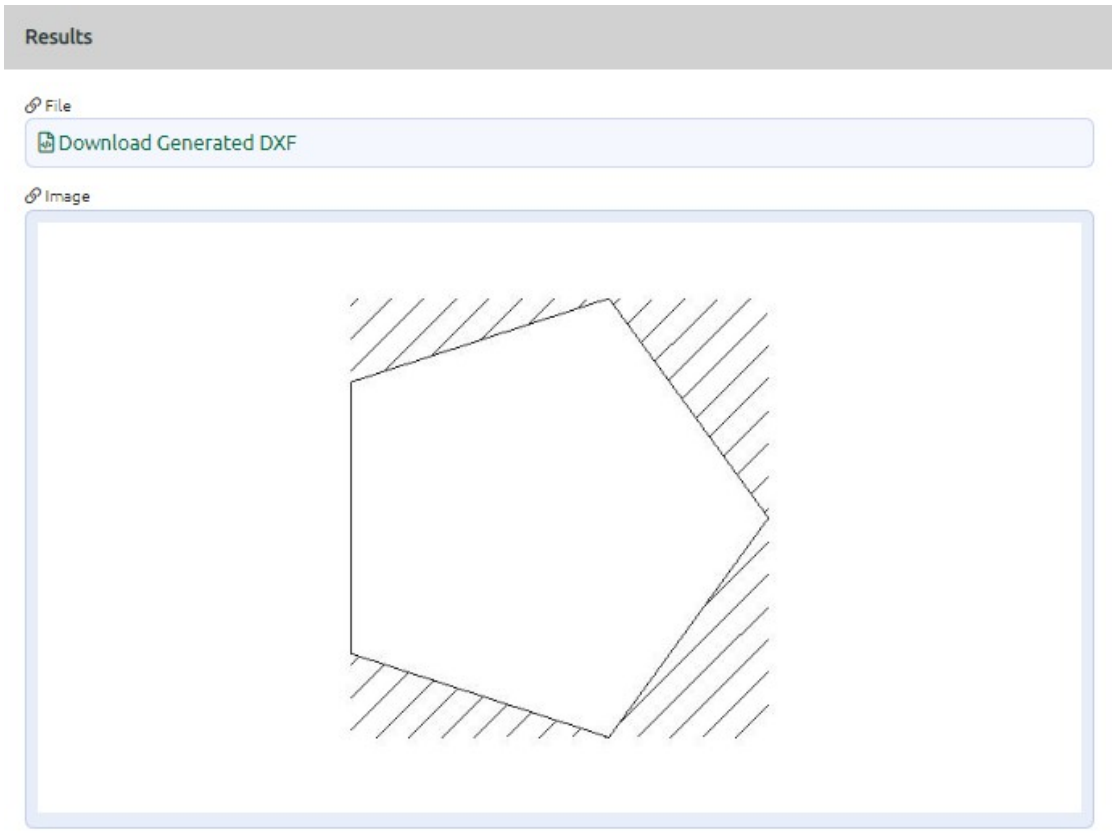
Angle: 45

Outline: Yes

Inside: No

Border: No

Mask: -



Example 3 (No Outline no Border)

- Basic input data

Distance: 0.5

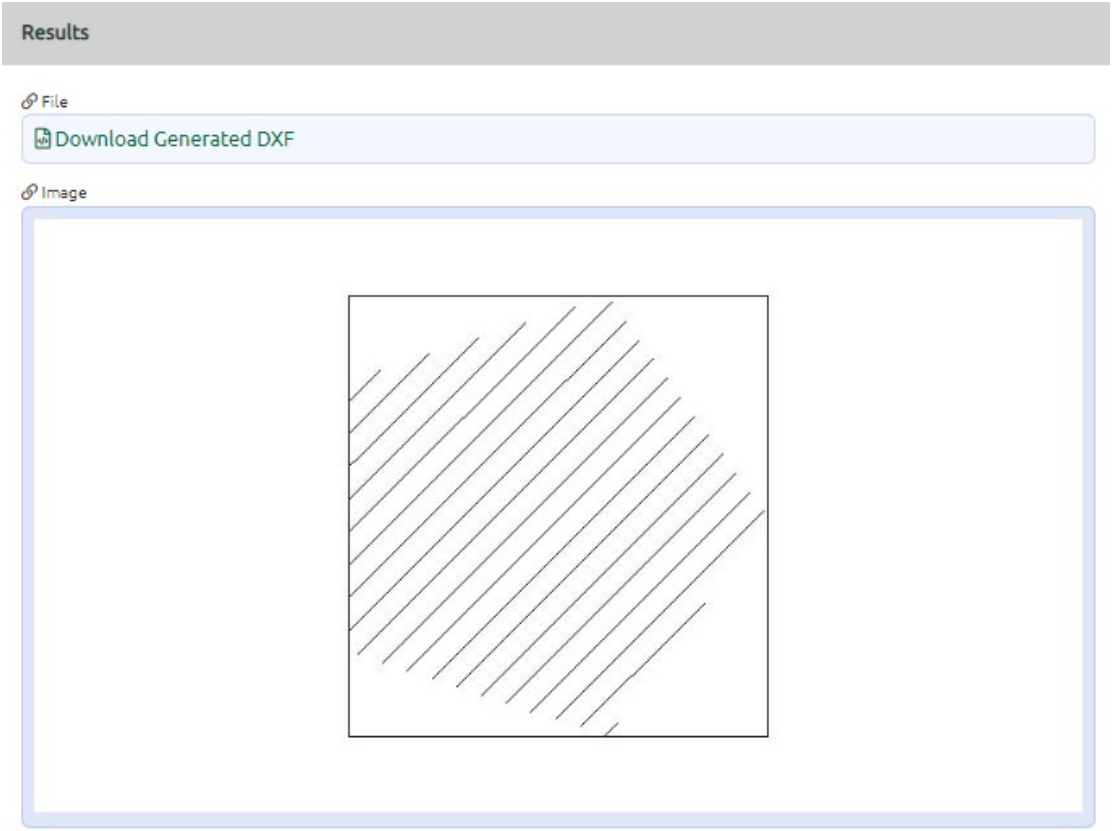
Angle: 45

Outline: No

Inside: Yes

Border: Yes

Mask: -



Example 4

- Basic input data

Distance: 0.5

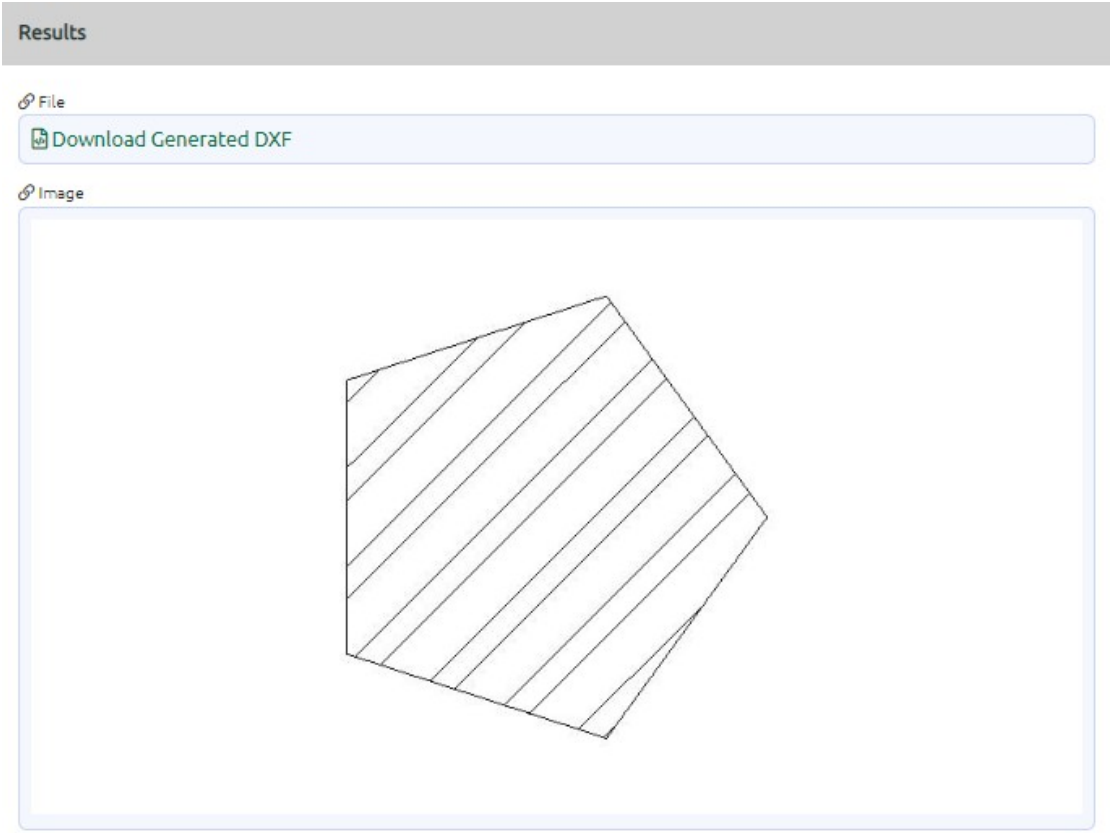
Angle: 45

Outline: Yes

Inside: Yes

Border: No

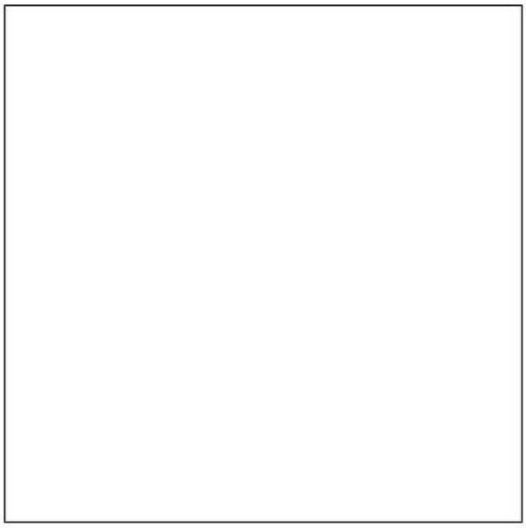
Mask: 101



1.7 Copy in/out

Generates an internal or external copy of all polylines and circles on a drawing.

Original image:



- Basic input data

Distance: 0.5

Direction: Outside

Join type: Round

Keep original: Yes

Result:

1.8 Line

- Basic input data

Start point X: 0

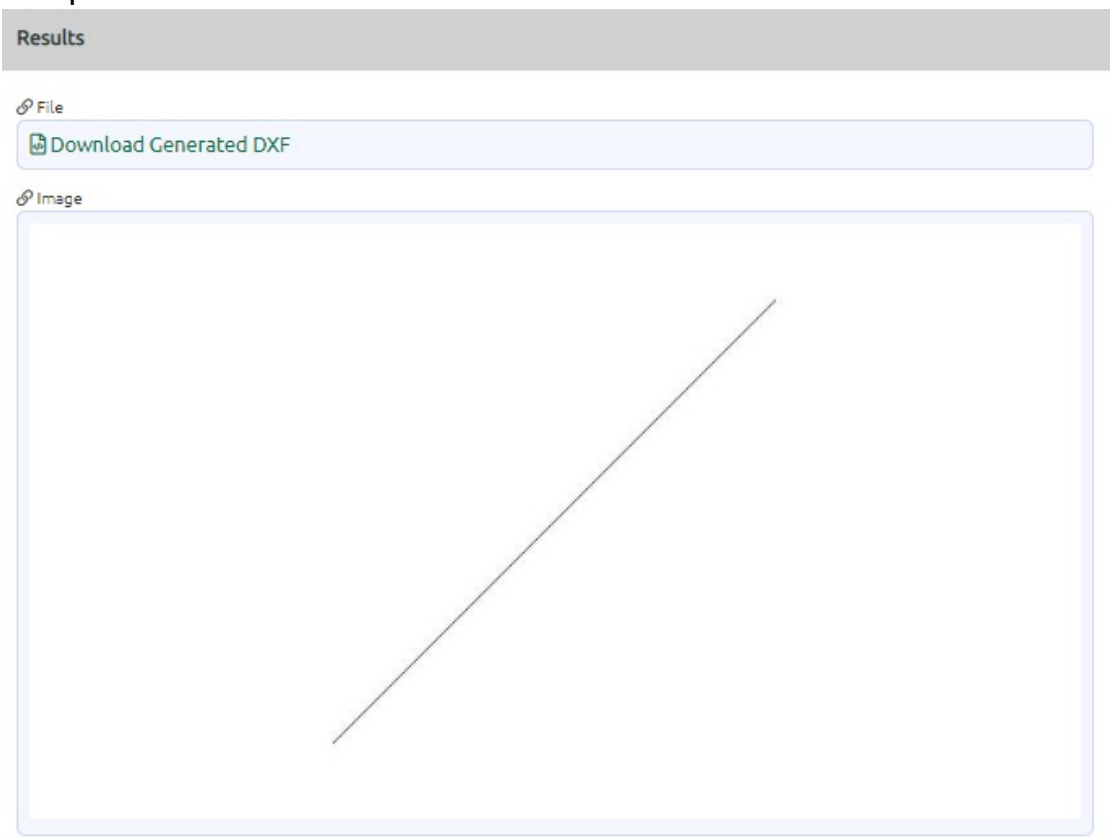
Start point Y: 0

Start point Z: 0

End point X: 10

End point Y: 10

End point Z: 0



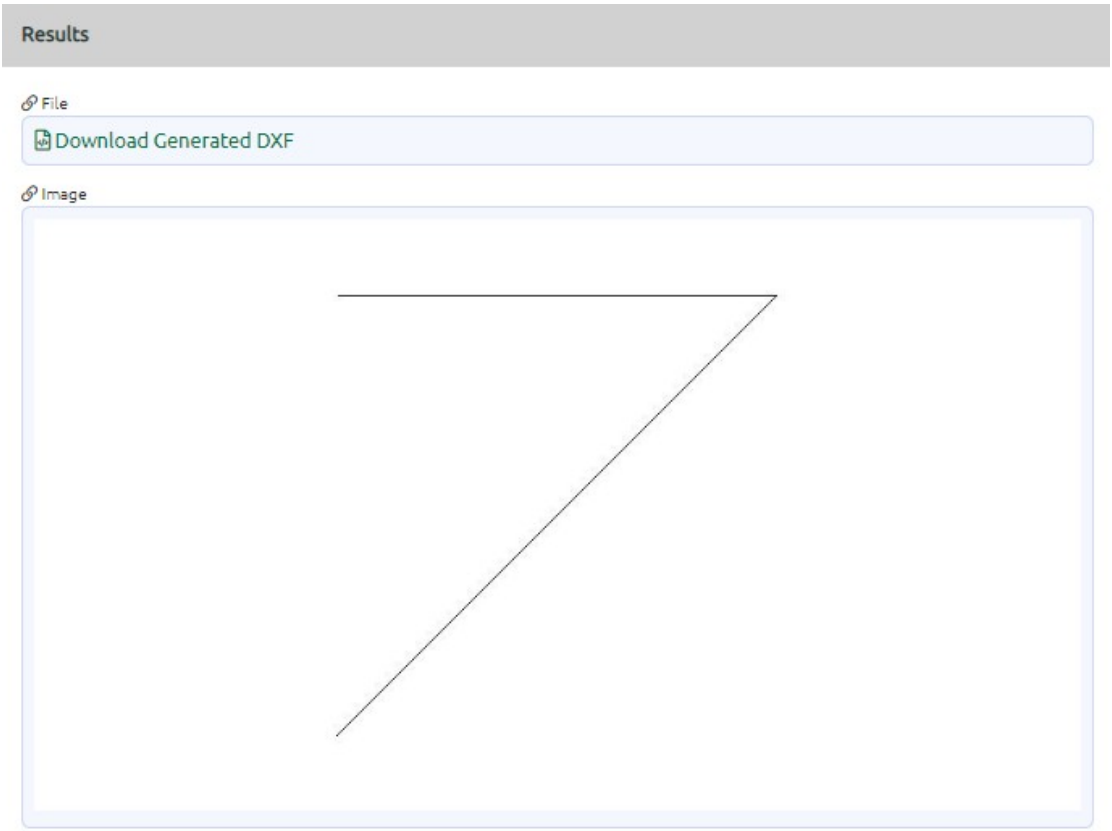
1.9 Lines from file

Create line from a file

txt file:

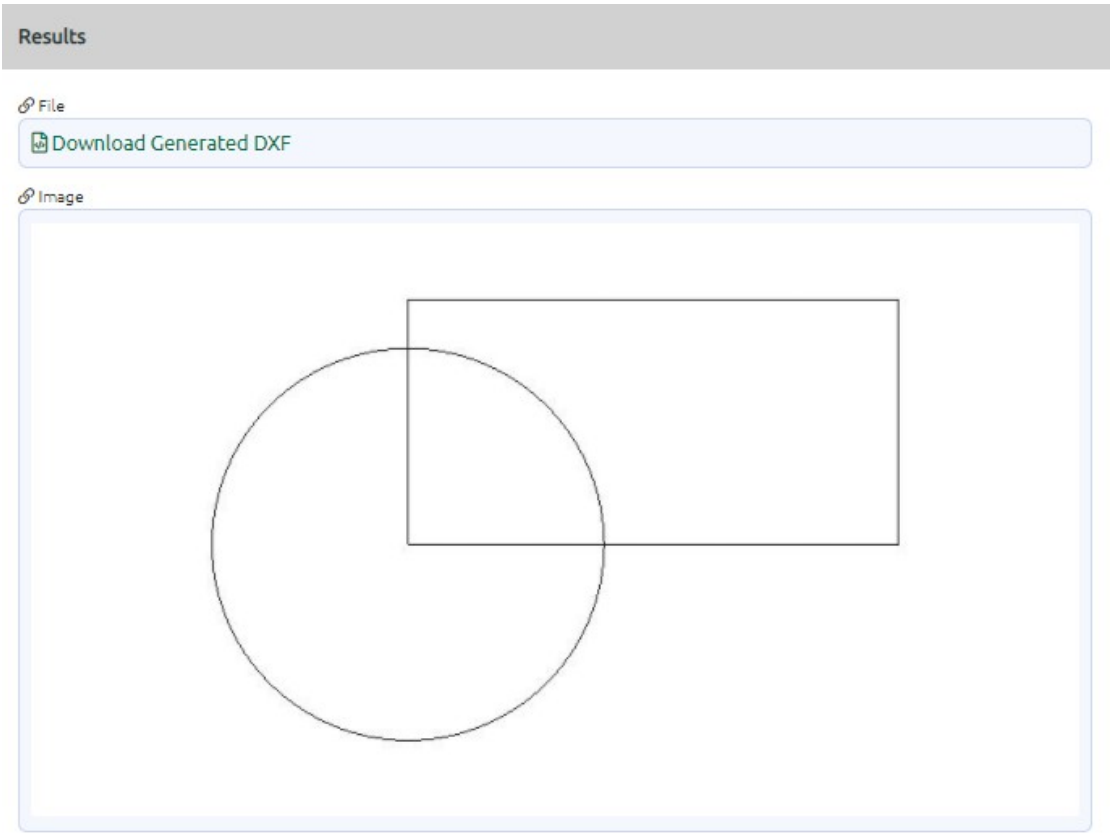
0,0,0,10,10,0

10,10,0,0,10,0



1.10 Merge DXF files

Merge DXF files tool allows you to combine two or more drawing files (dxf, dwg). For example, if we upload a circle and rectangle dxf file this is the result.



1.11 Point

Point tool allows you to create a point in a xyz axis by inputting the respectively data.

1.12 Points from file

Create points from a file

txt file:

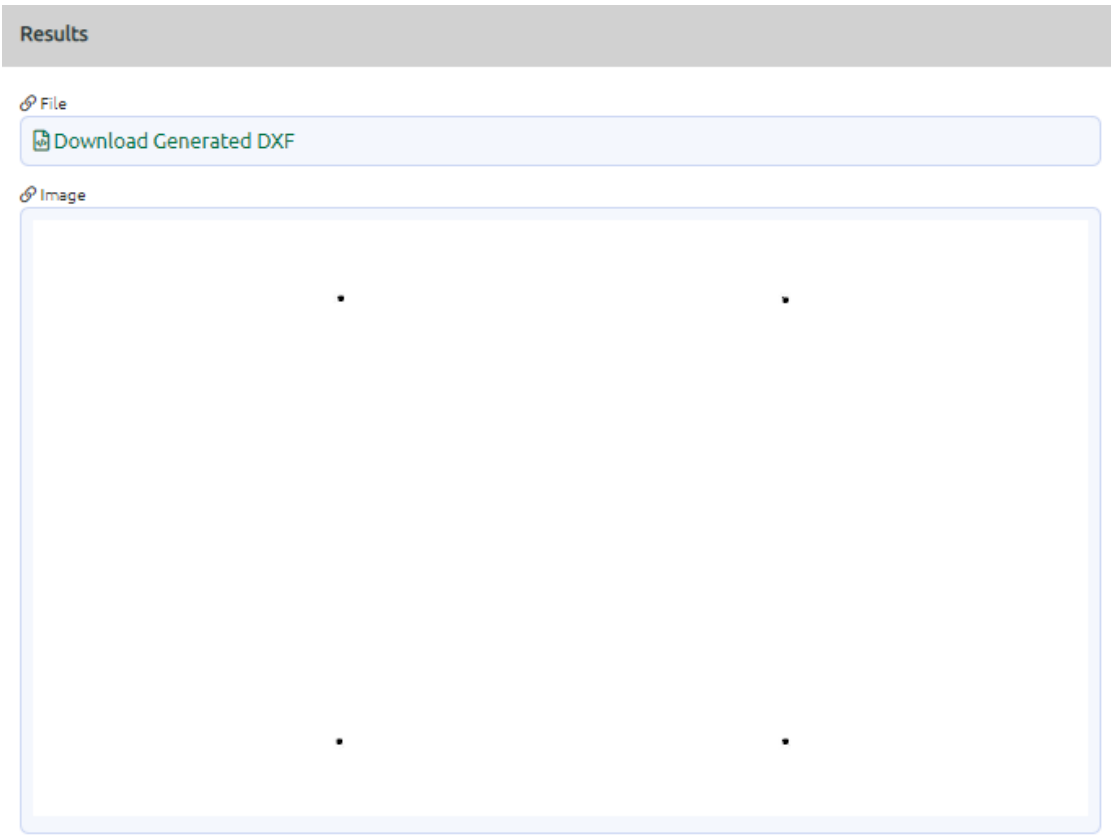
0,0,0

0,10,0

10,10,0

10,0,0

0,0,0



1.13 Polyline

- Basic input data

Vertex 1

X: 0

Y: 0

Z: 0

Vertex 2

X: 10

Y: 0

Z: 0

Vertex 3

X: 8

Y: 5

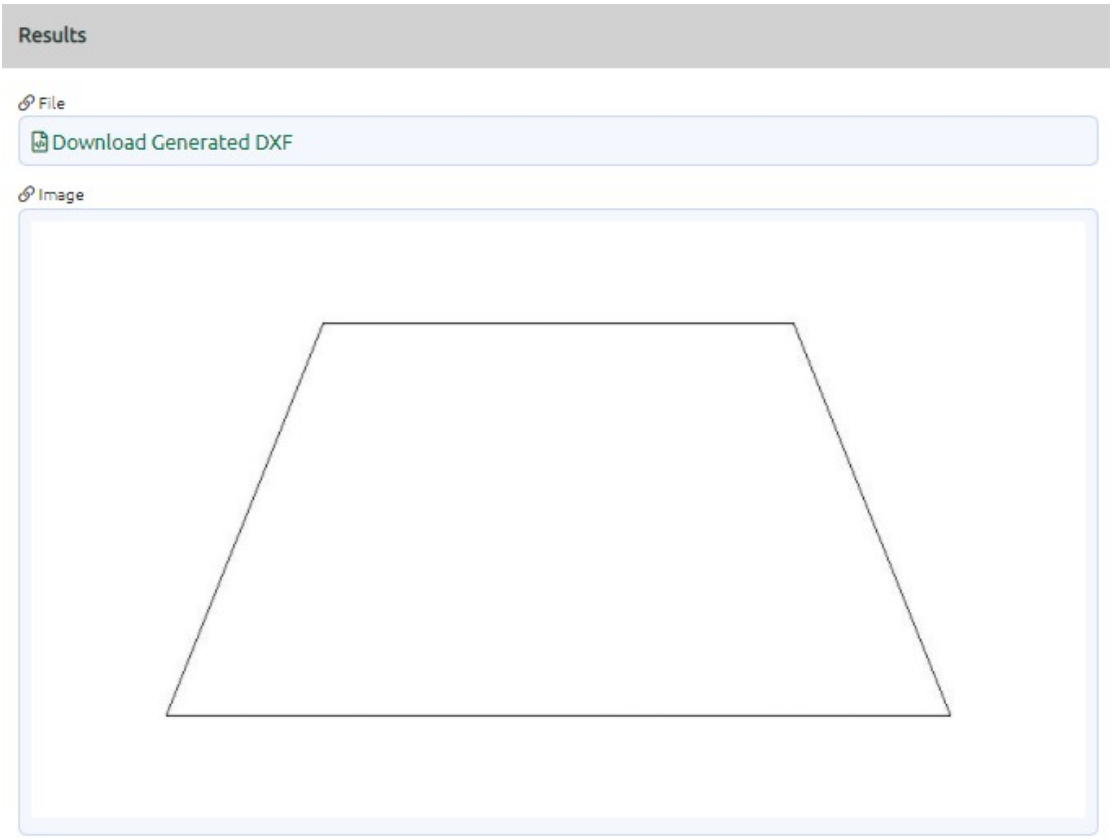
Z: 0

Vertex 4

X: 2

Y: 5

Z: 0



1.14 Polyline from file

Create polyline with vertices from a file

txt file:

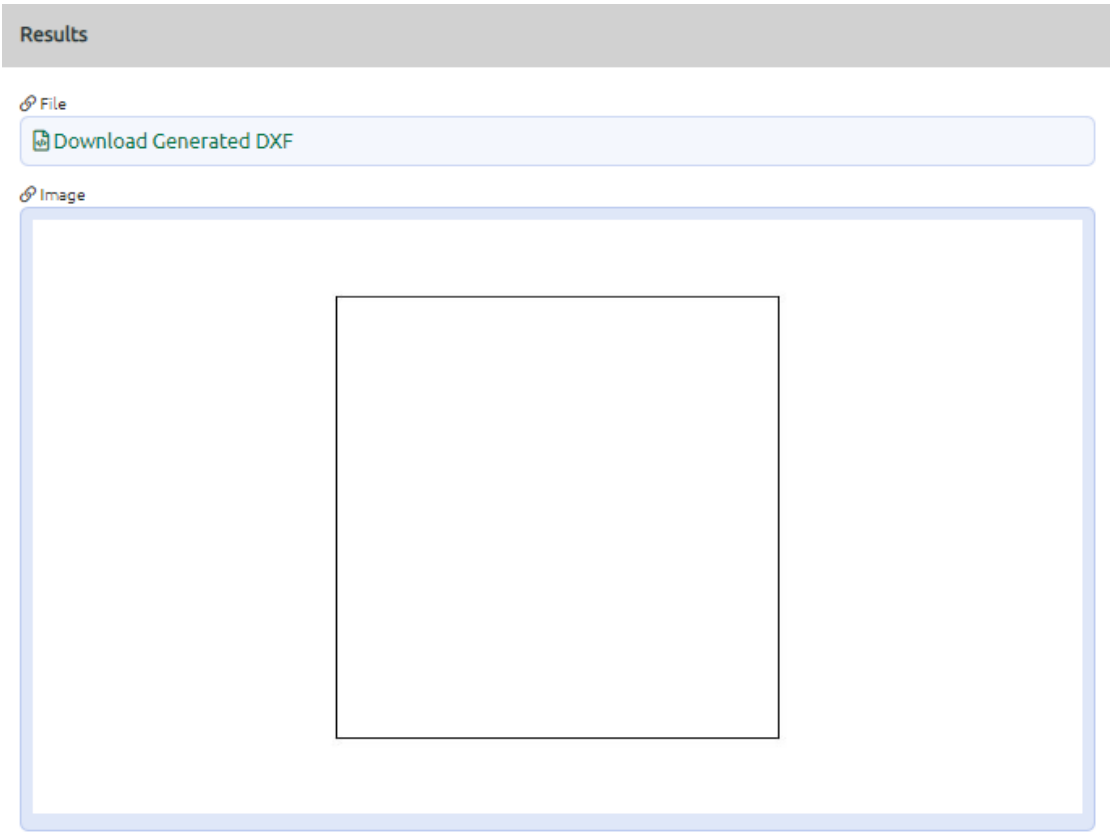
0,0,0

0,10,0

10,10,0

10,0,0

0,0,0



1.15 Polyline from polar points

- Basic input data

Start point X: 0

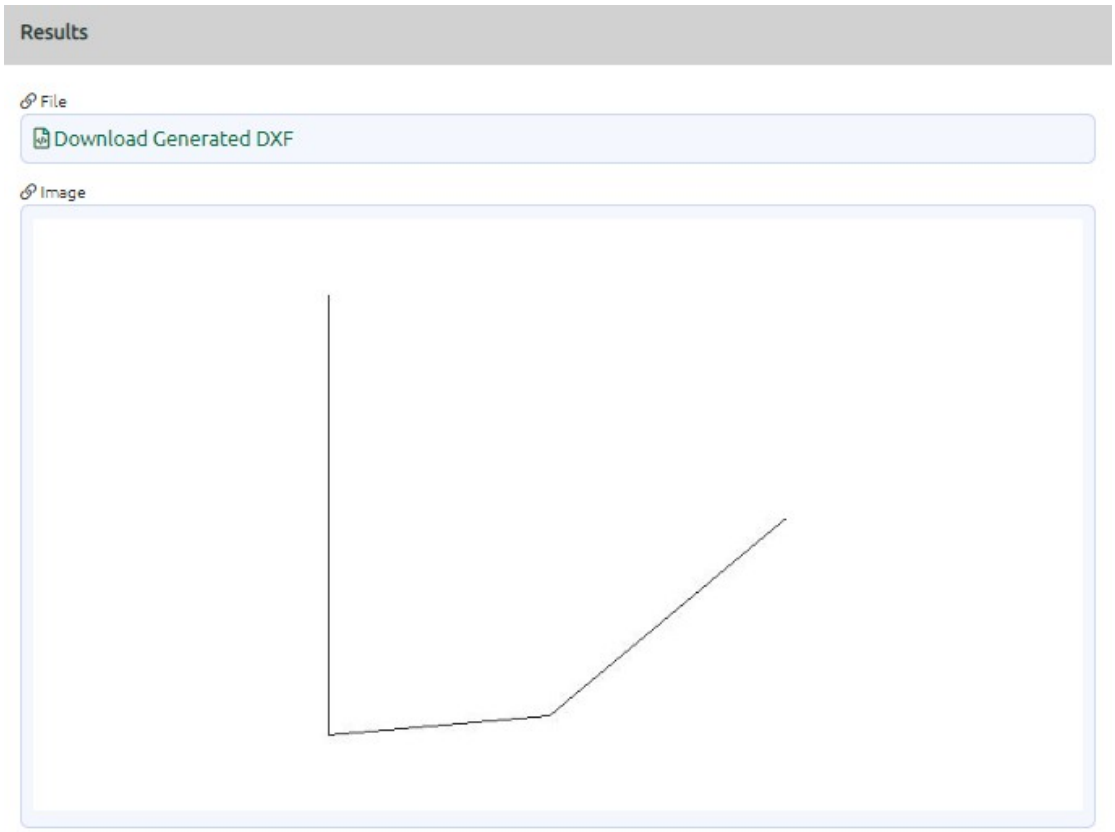
Start point Y: 0

Start point Z: 0

Polar points table

Distance	Angle
10	270
5	5

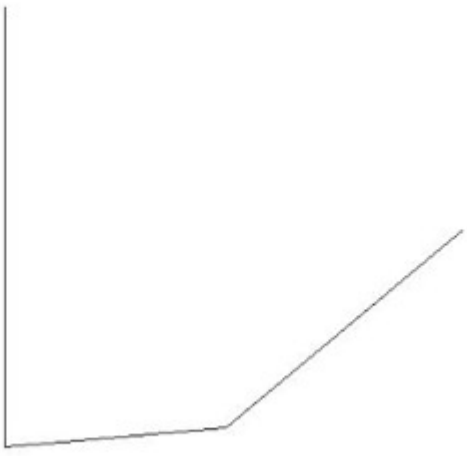
7 40



1.16 Polyline to curve

Create a curve from a polyline

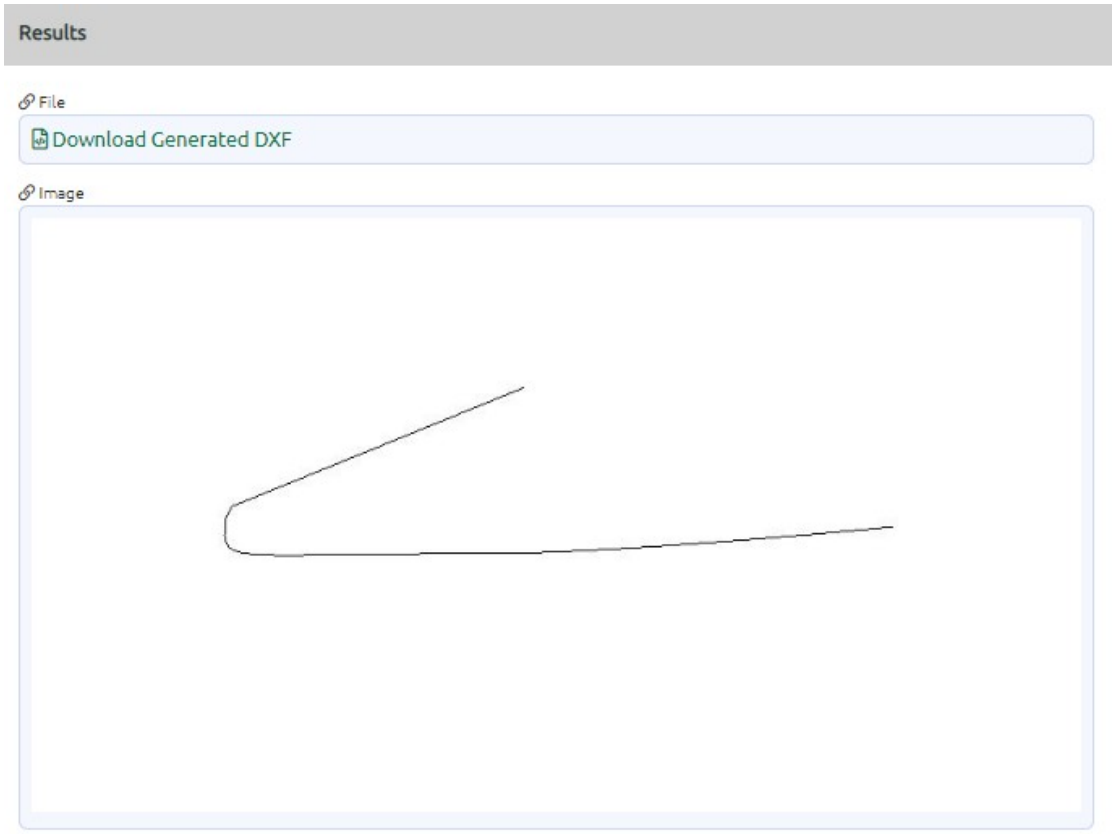
Original file:



Example 1

- Basic input data

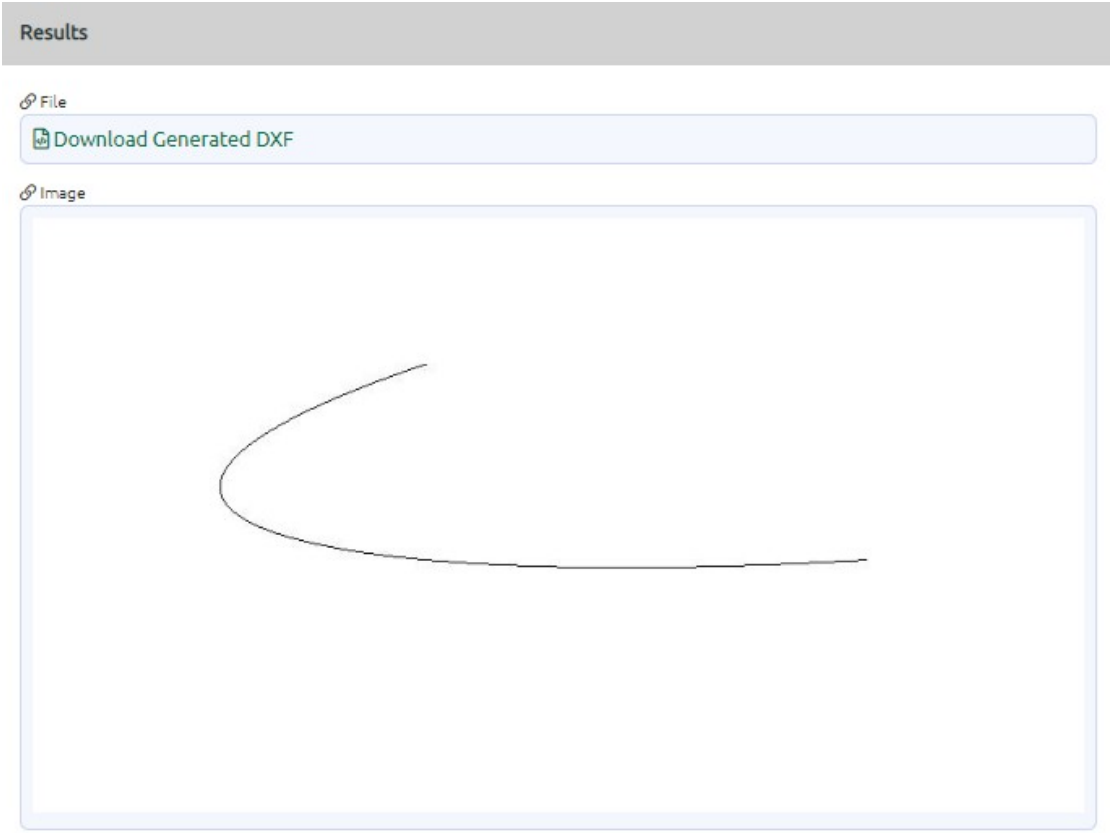
Curve type: Cubic Spline (fixed endpoint)



Example 2

- Basic input data

Curve type: Bezier



1.17 Rectangle

- Basic input data

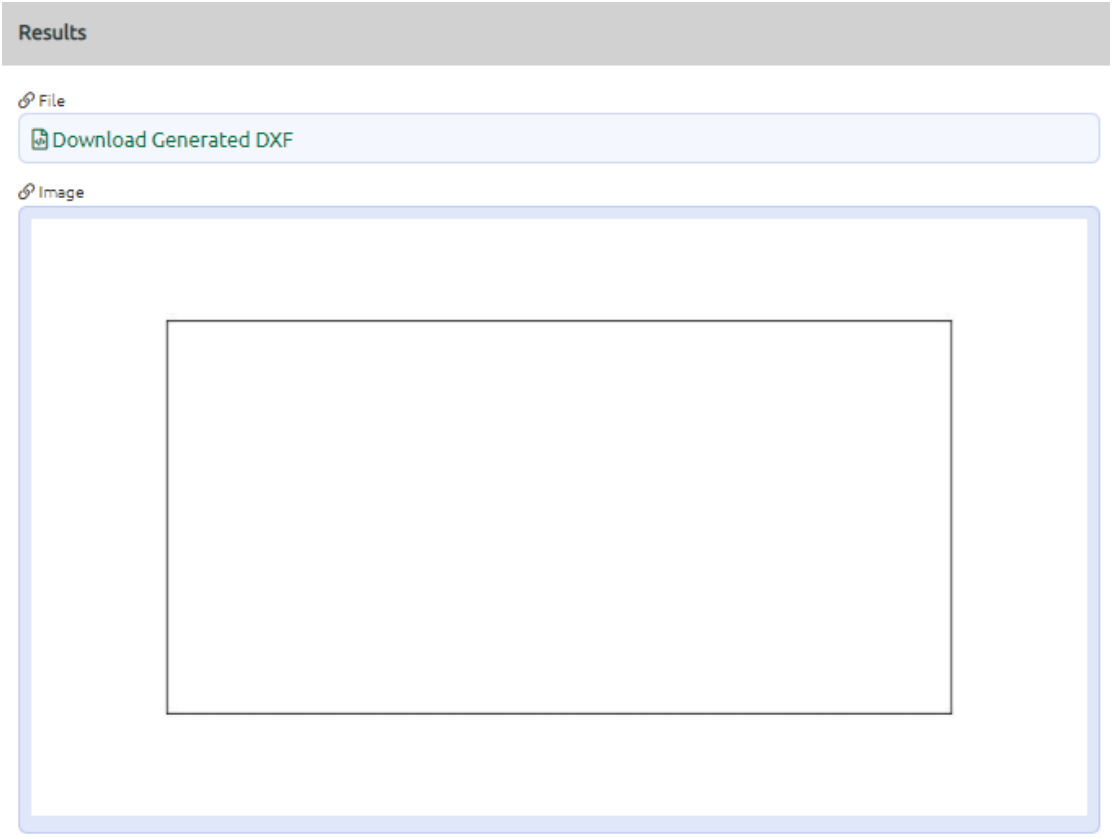
Start point X: 0

Start point Y: 0

Start point Z: 0

Width: 10

Height: 5



1.18 Regular polygon

- Basic input data

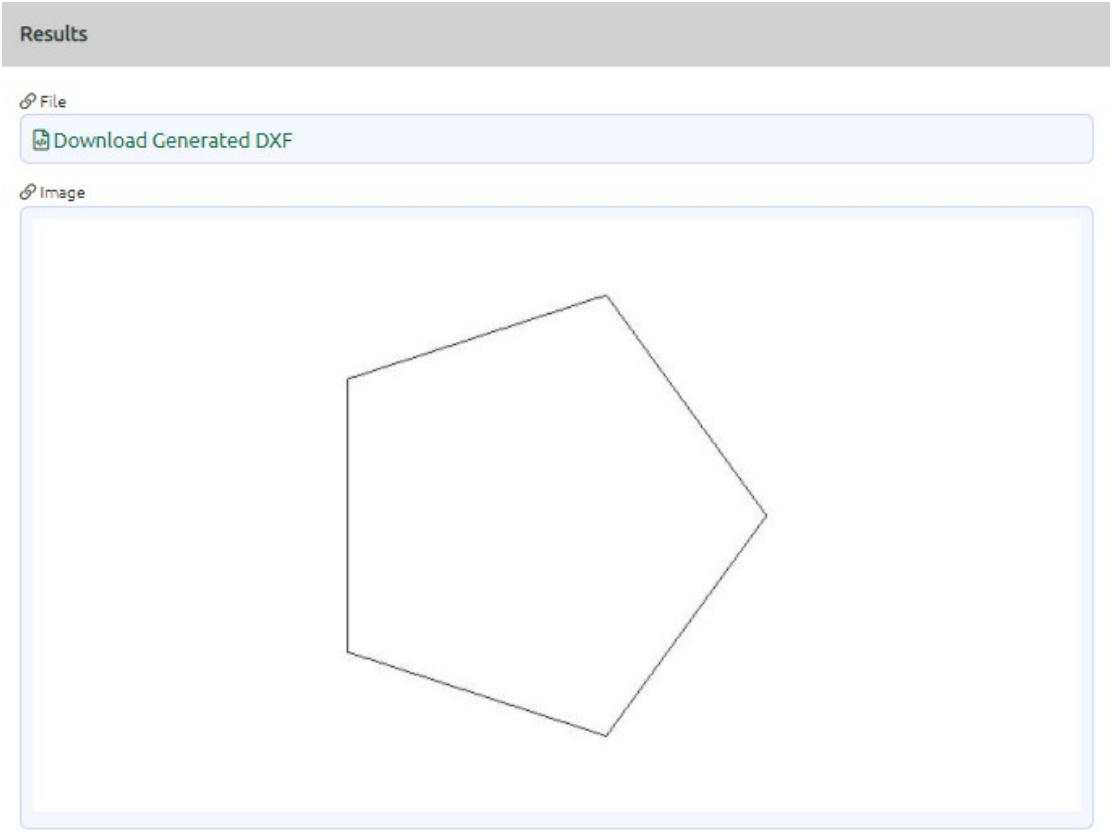
Vertices number: 5

Center point X: 0

Center point Y: 0

Center point Z:

Radius: 5



1.19 Repeat

With this app you can repeat a drawing on X and Y axis.

Upload a dxf or dwg file.

Example 1

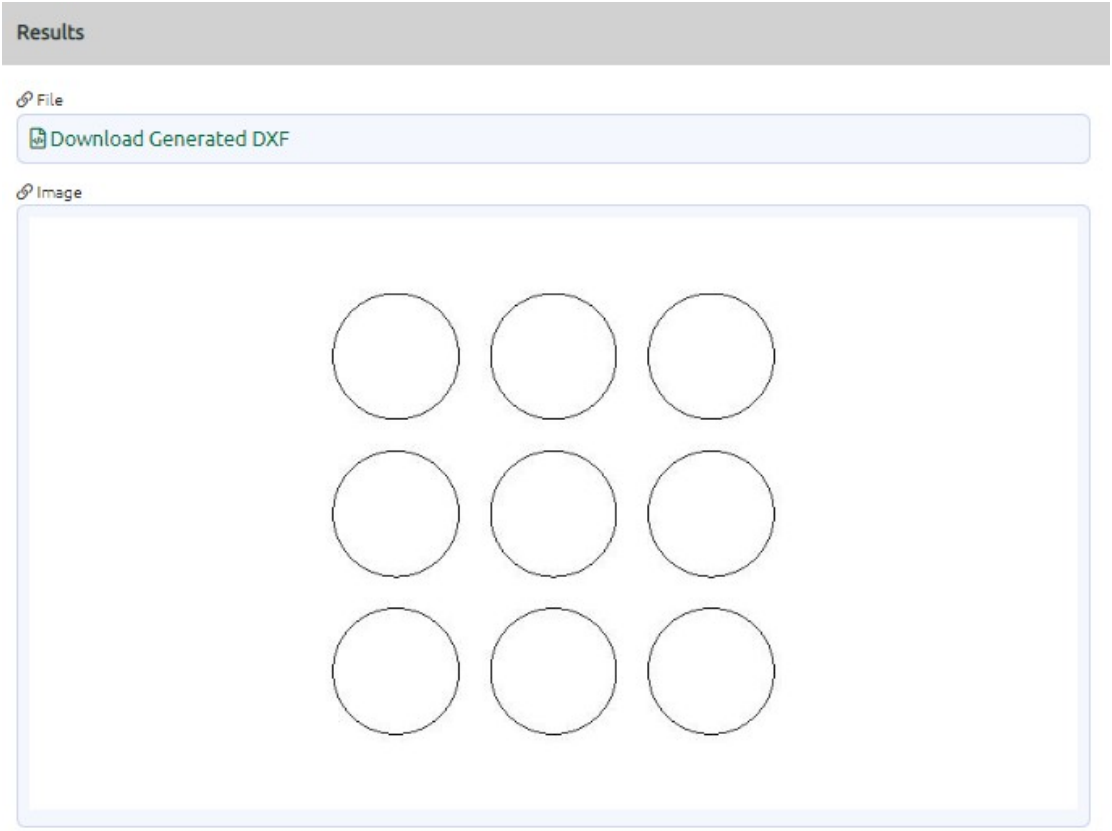
- Basic input data

X offset: 10

Y offset: 10

Pattern rows: 3

Pattern columns: 3



Example 2

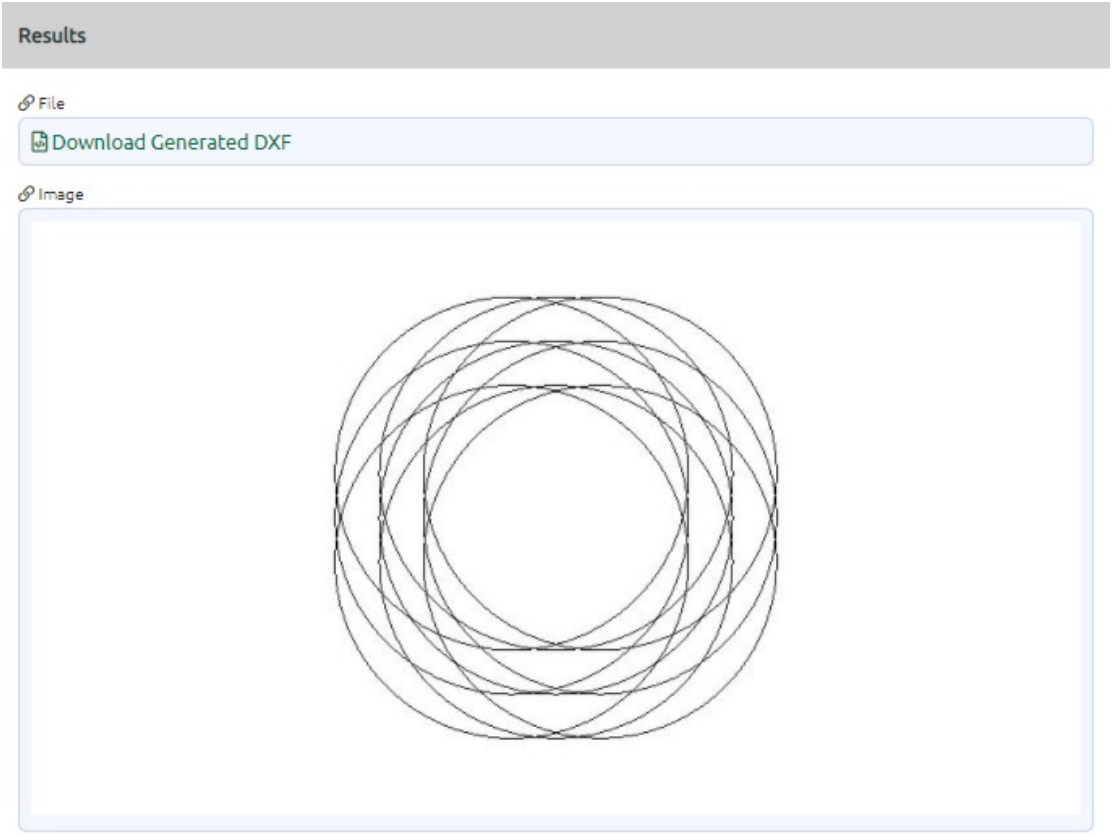
- Basic input data

X offset: 1

Y offset: 1

Pattern rows: 3

Pattern columns: 3



1.20 Text

Create a text

- Basic input data

Text: text for test

Font name: Times New Roman

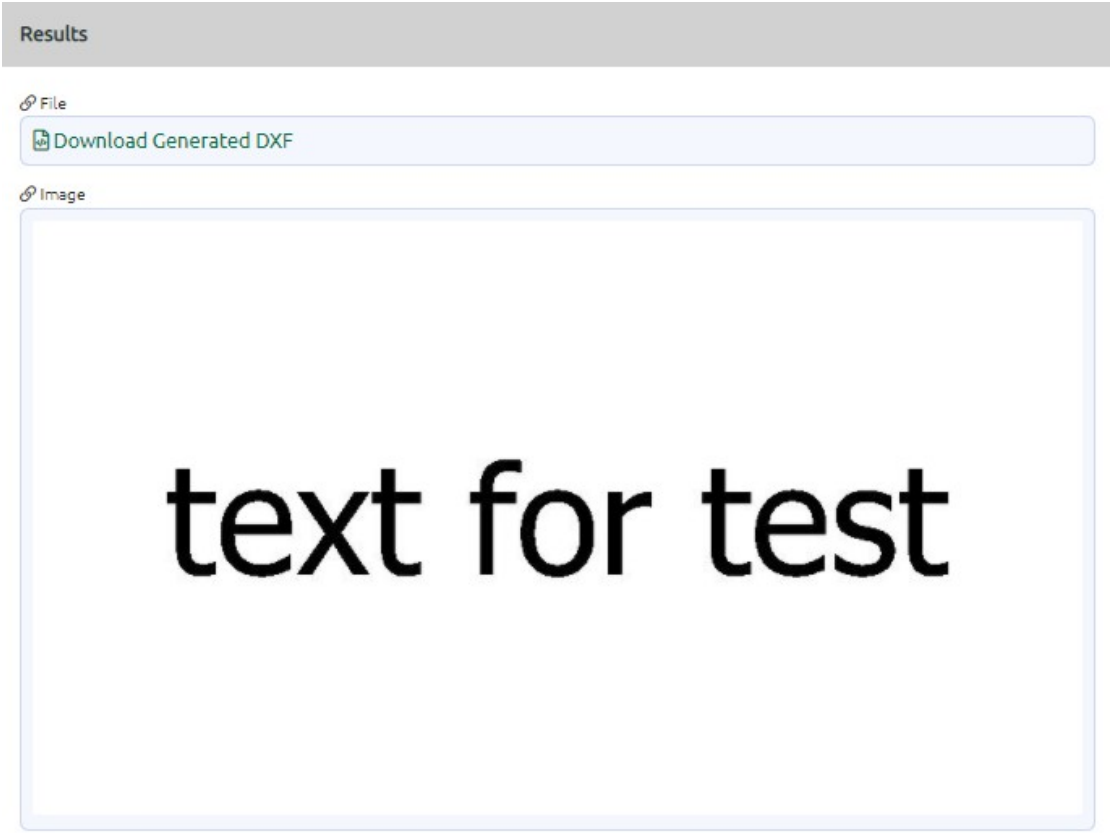
Start point X: 0

Start point Y: 0

Start point Z: 0

Text height: 3

Convert to lines: No



1.21 Text to curve

Create a text on curve by writing the text and uploading a circle or an arc dxf/dwg file.

- Basic input data

Text: text for test

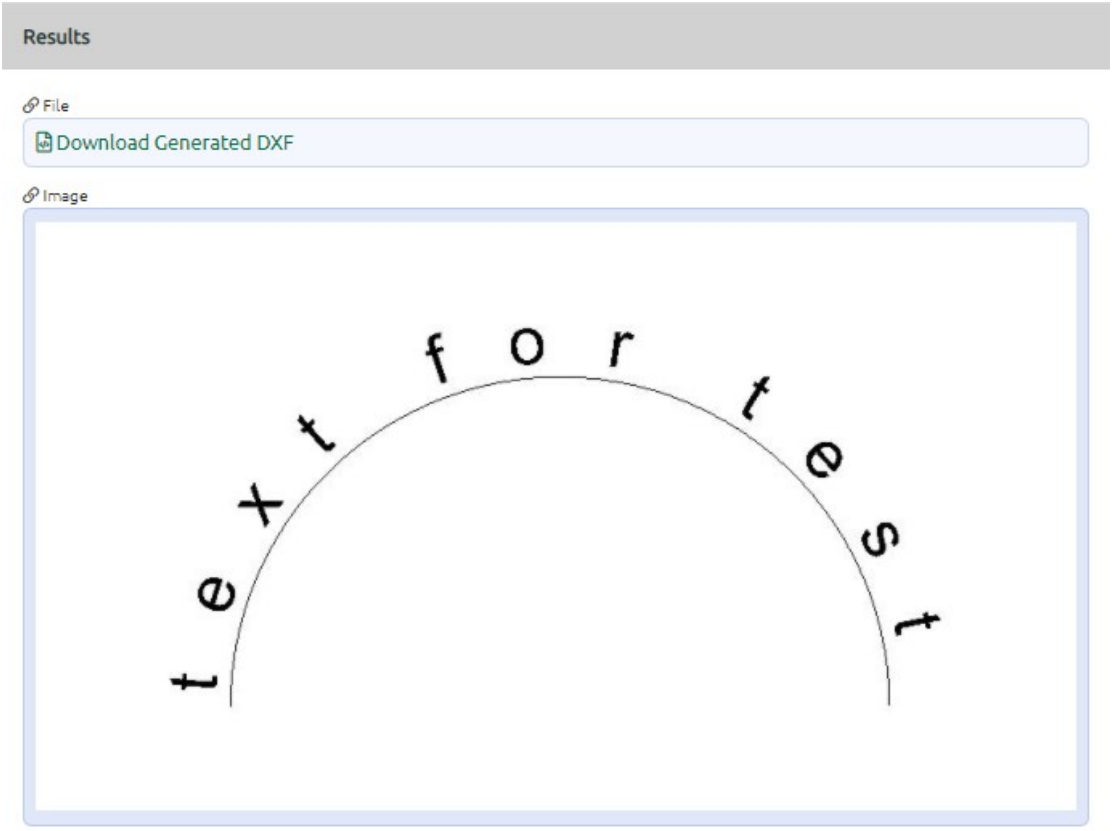
Font name: Arial

Text height: 1.5

Characters distance: 1

Alignment: Bottom

Convert to lines: No



1.22 Triangle

The Triangle app allows you to create a triangle with 3 different ways.

1 ABC (side, side, side): By inserting numbers for all three sides.

2 AcB (side, angle, side): By inserting numbers for two of the sides and one angle.

3 bAc (angle, side, angle): By inserting numbers for one of the sides and two angles.

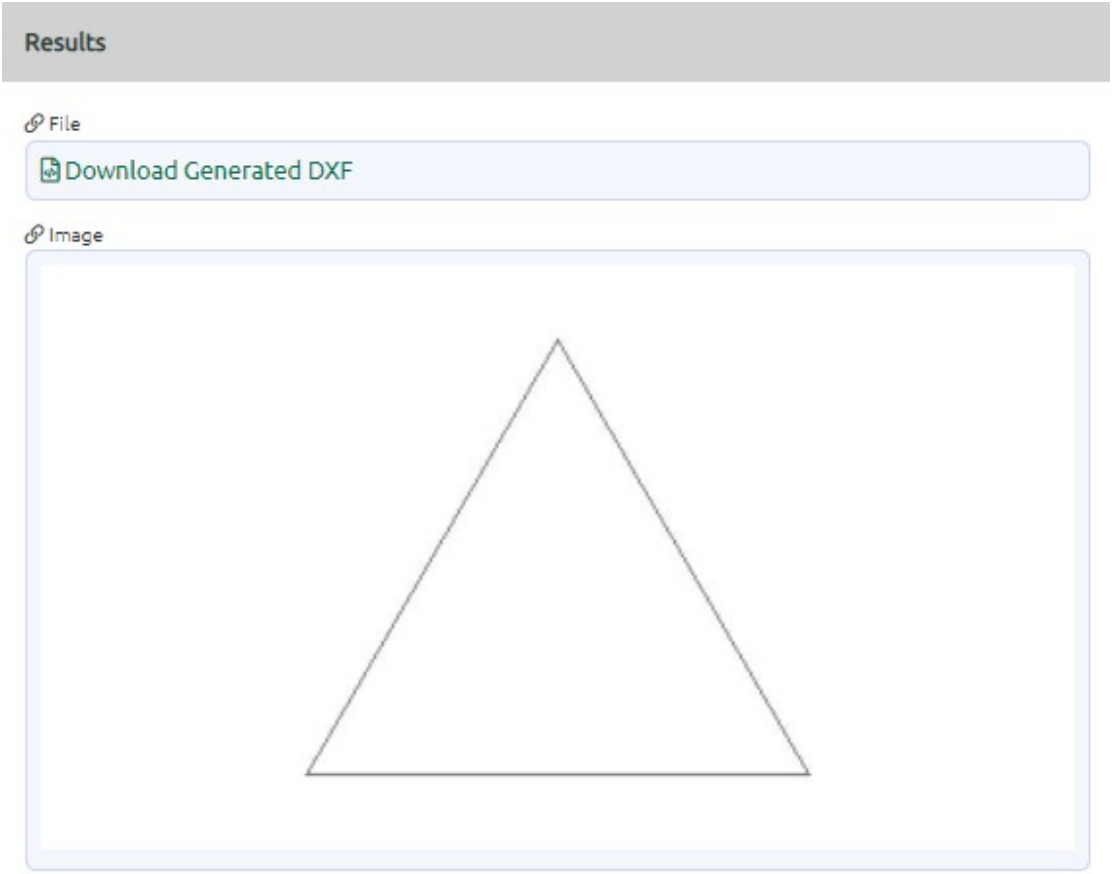
- Basic input data

Triangle type: ABC (side, side, side)

1st parameter: 5

2nd parameter: 5

3rd parameter: 5

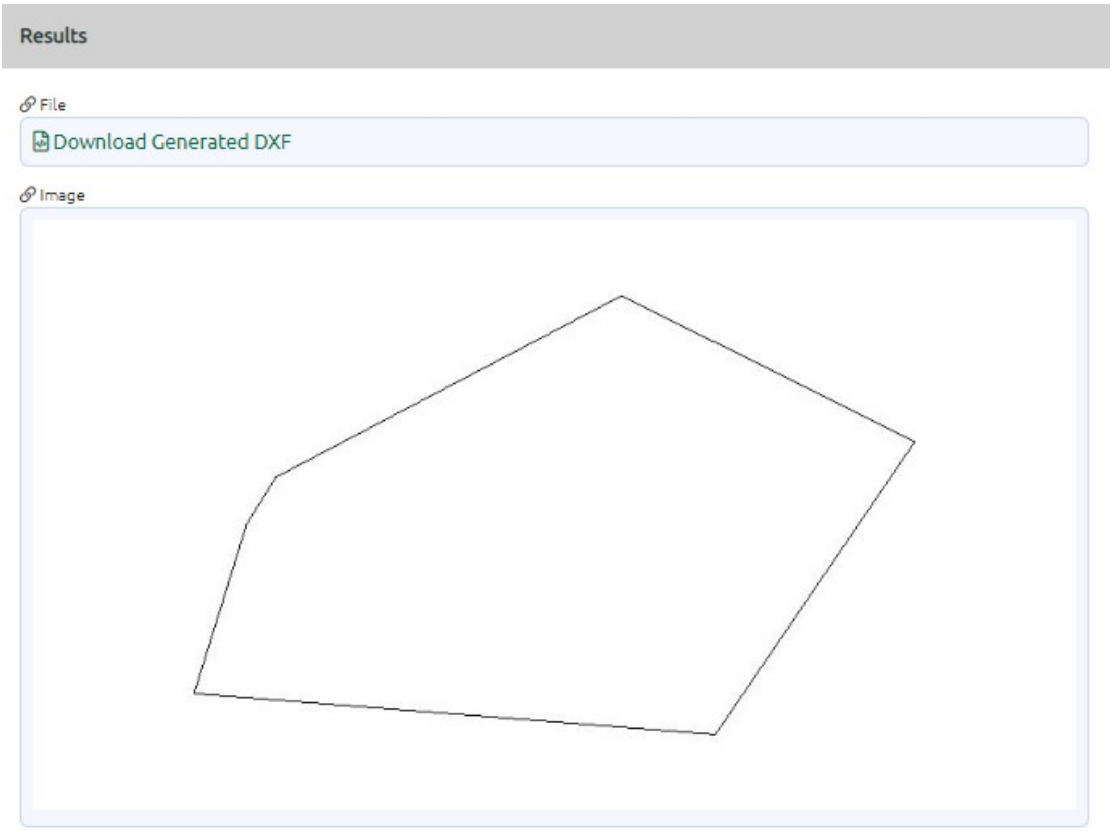


2. Algorithms

2.1 Points convex envelope

The smallest convex polygon (hull) that contains the points of a file.

Original file:



2.2 Points shortest possible route (TSP)

Find the shortest possible route of the points from a file (Travelling salesman problem).

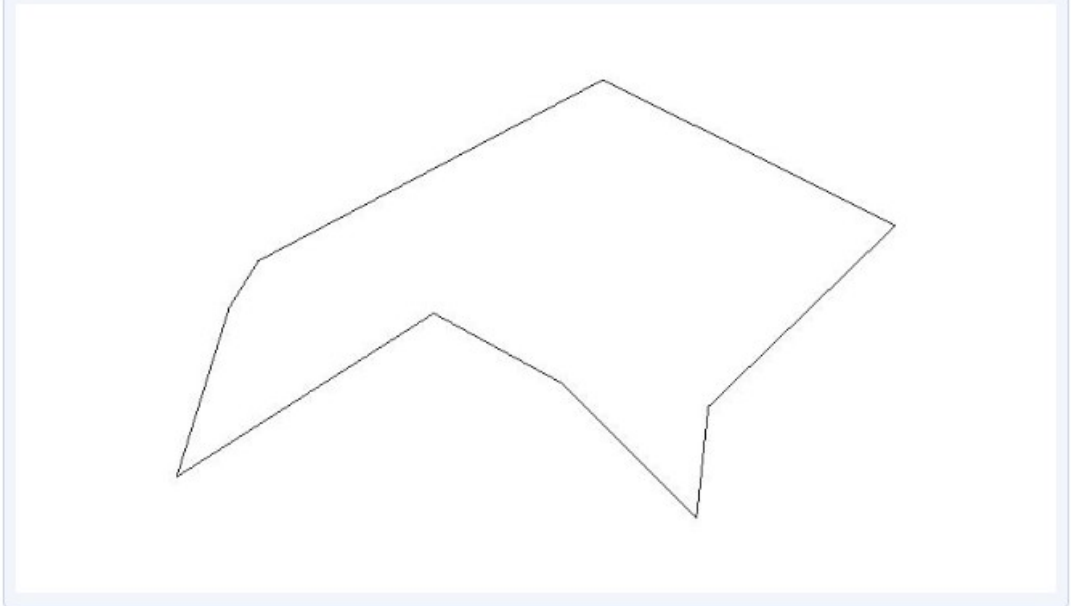
Original file:

Results

File

Download Generated DXF

Image



3. Print

3.1 Print to PDF

With this app you can export a drawing print in a PDF file.

Example 1

- Basic input data

Paper size type: A4, 210 x 297 mm

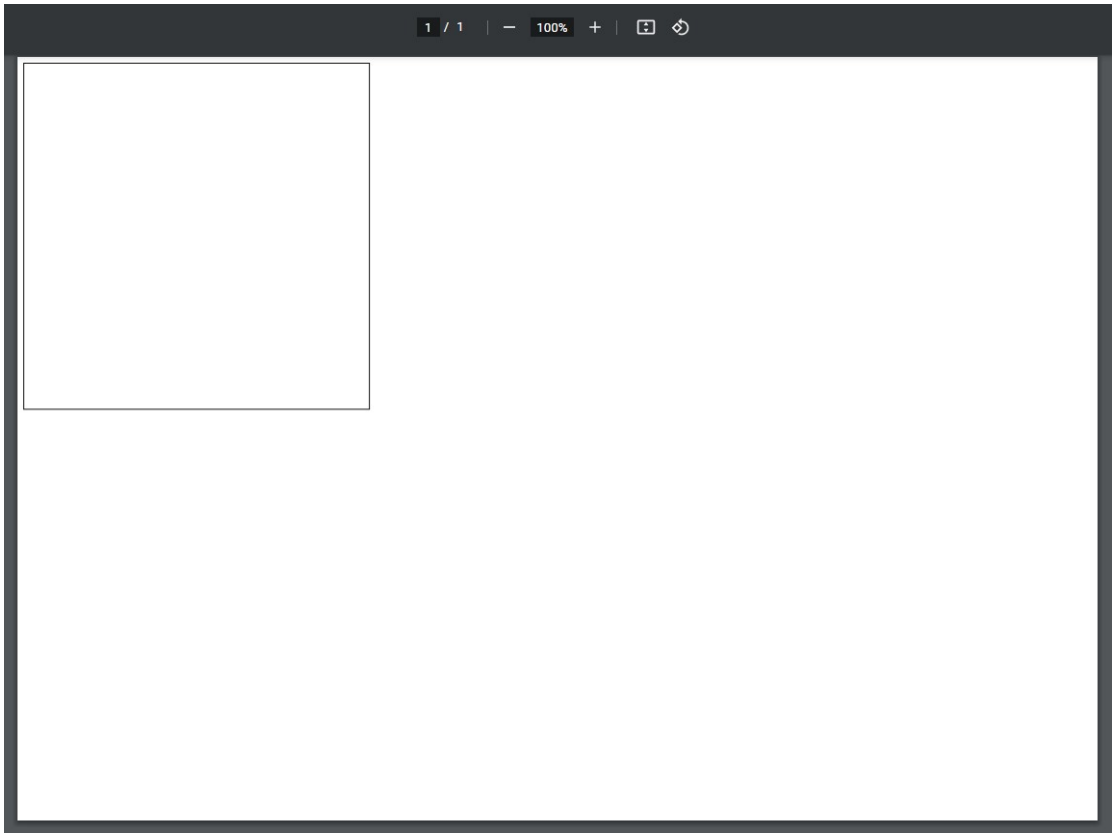
User defined width: 0

User defined height: 0

Scale: 1:100

Fit to page: No

Landscape: Yes



Example 2

- Basic input data

Paper size type: A4, 210 x 297 mm

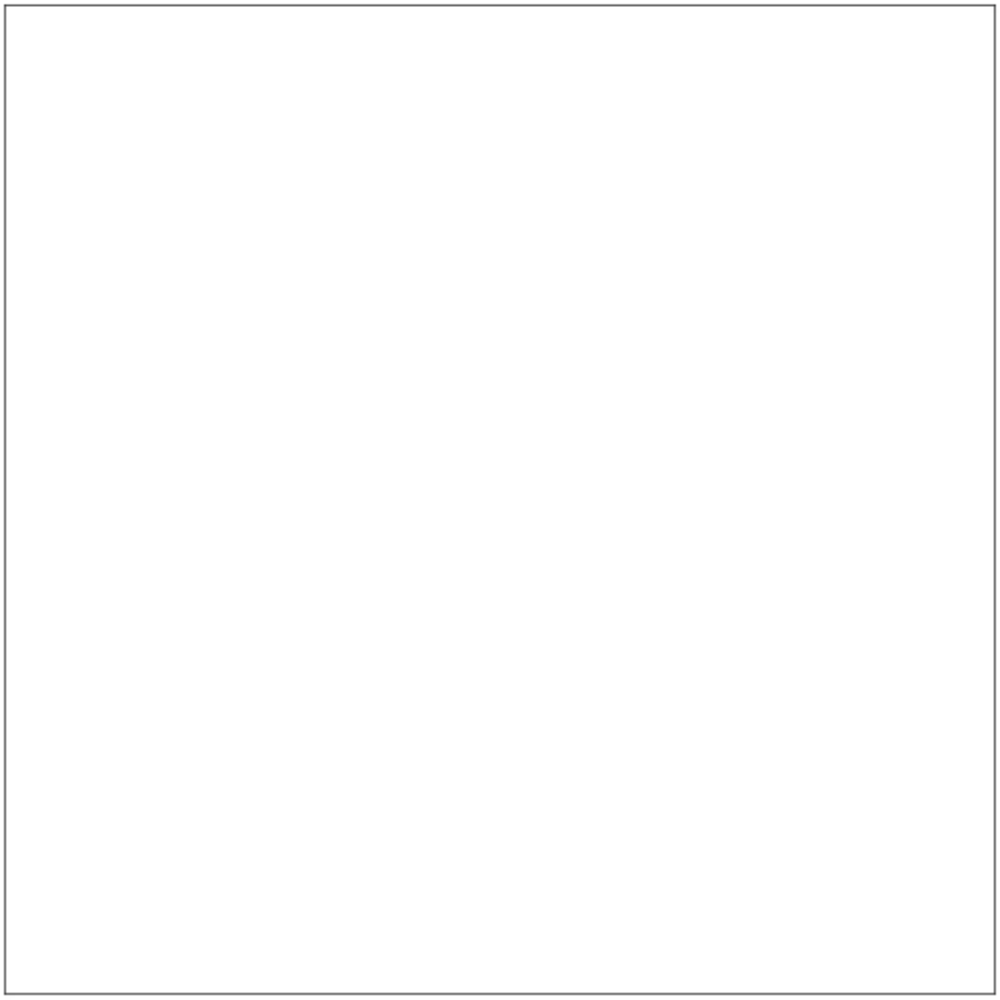
User defined width: 0

User defined height: 0

Scale: 1:100

Fit to page: Yes

Landscape: No



4. Calculations

4.1 Text calculator

This application calculates the arithmetic expressions of each line of one

text separately and at the end brings out the sum of them. Operators which are allowed: +, -, *, /, ^ and parentheses (,).

- Basic input data

100*0.5+87.931*0.14+34.825*0.07+100*0.05

5+5

Results

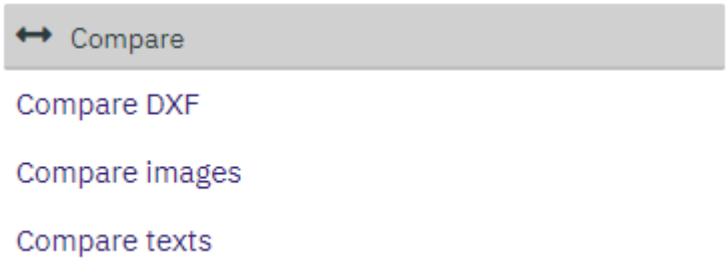
100*0.5+87.931*0.14+34.825*0.07+100*0.05 = 69.74809
5+5 = 10
69.74809+10 = 79.74809

5. AI Tools

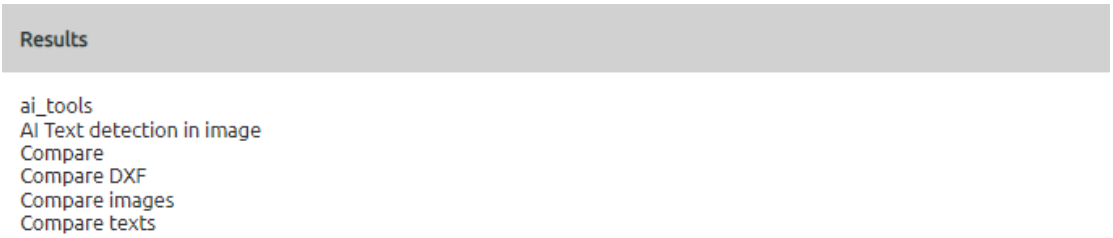
5.1 AI Text detection in image

This app detects automatically text in image using artificial intelligence (AI) technology.

Original file:



Results:

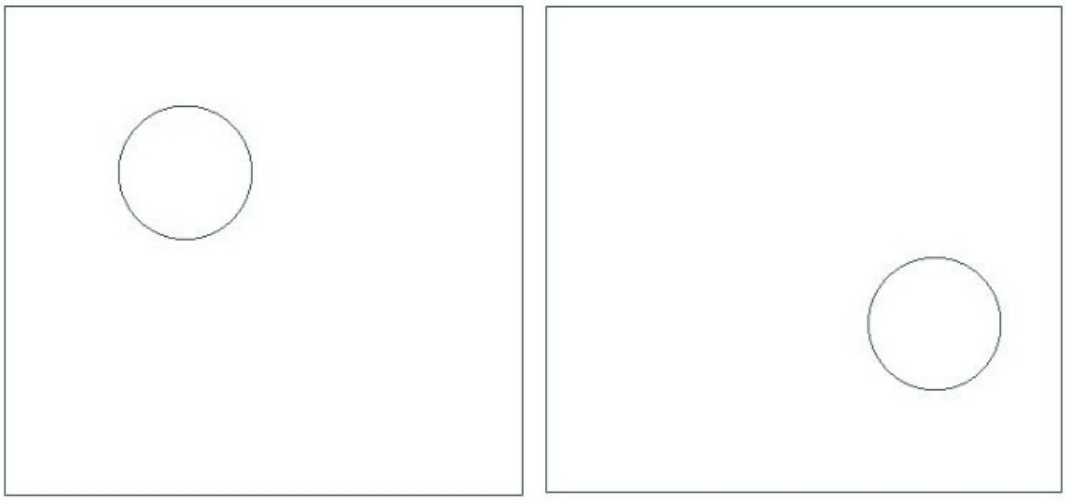


6. Compare

6.1 Compare DXF

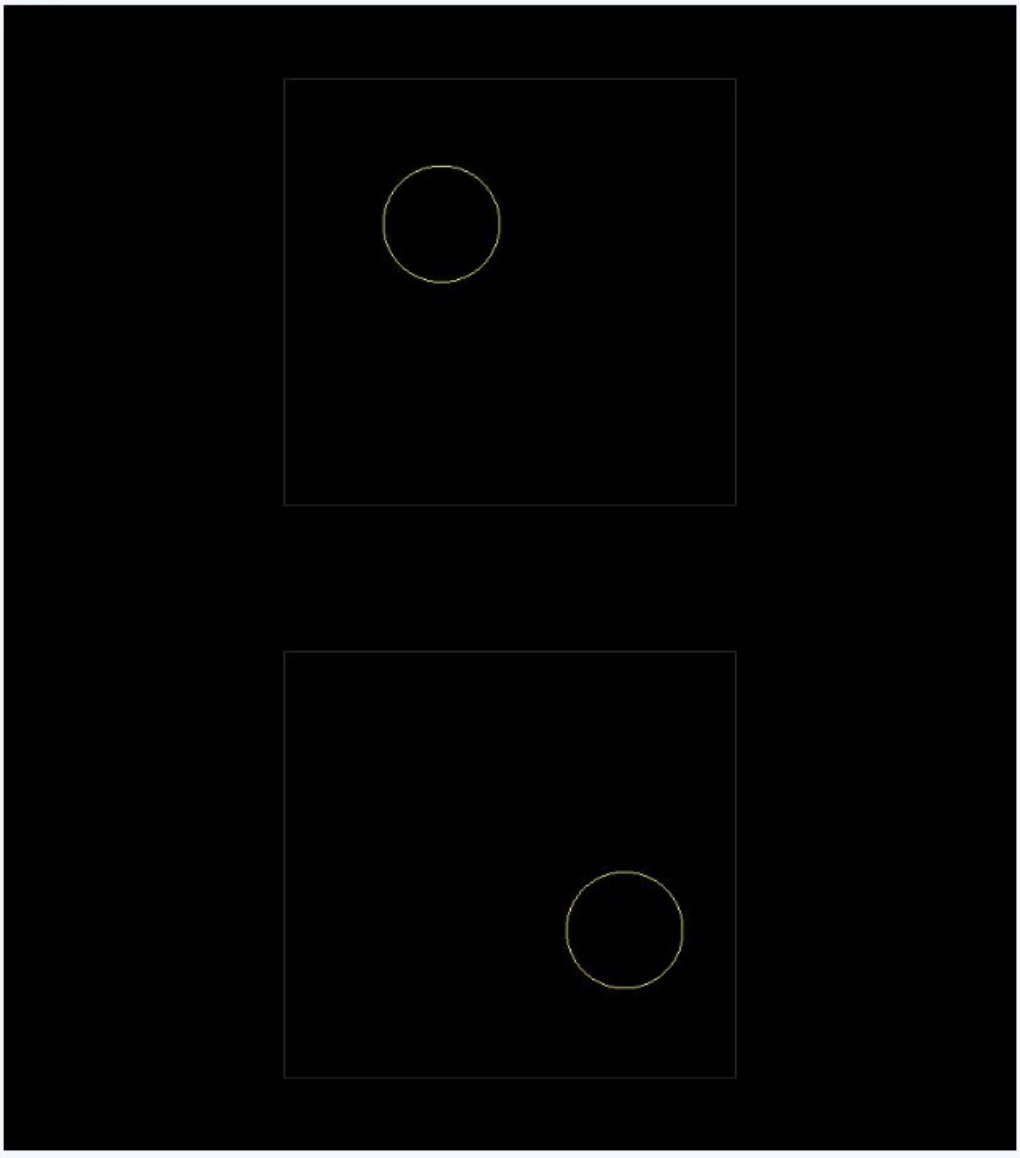
Compare DXF files.

Original file:



Results

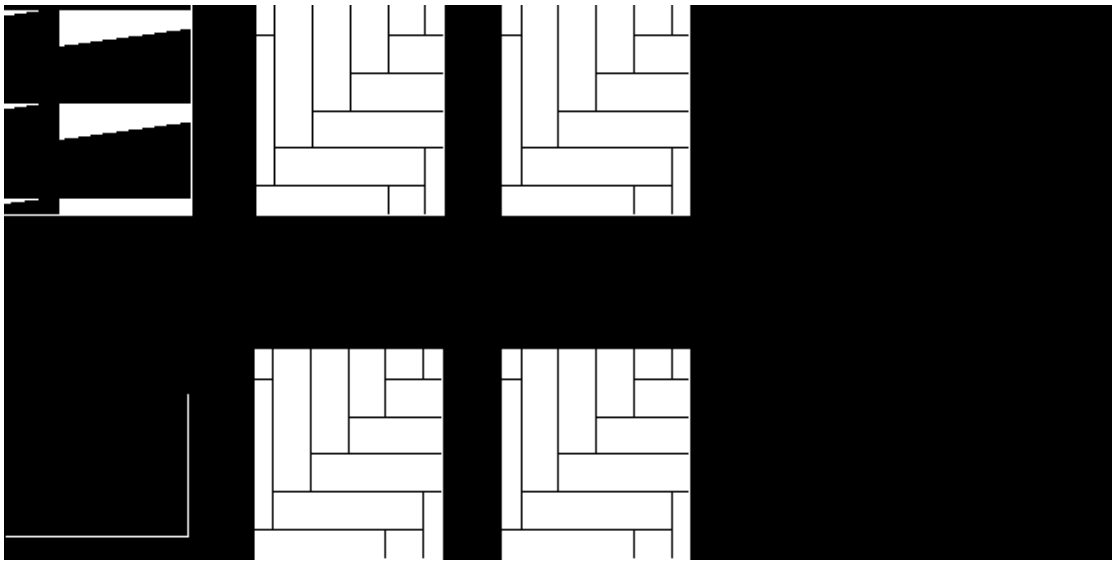
Image



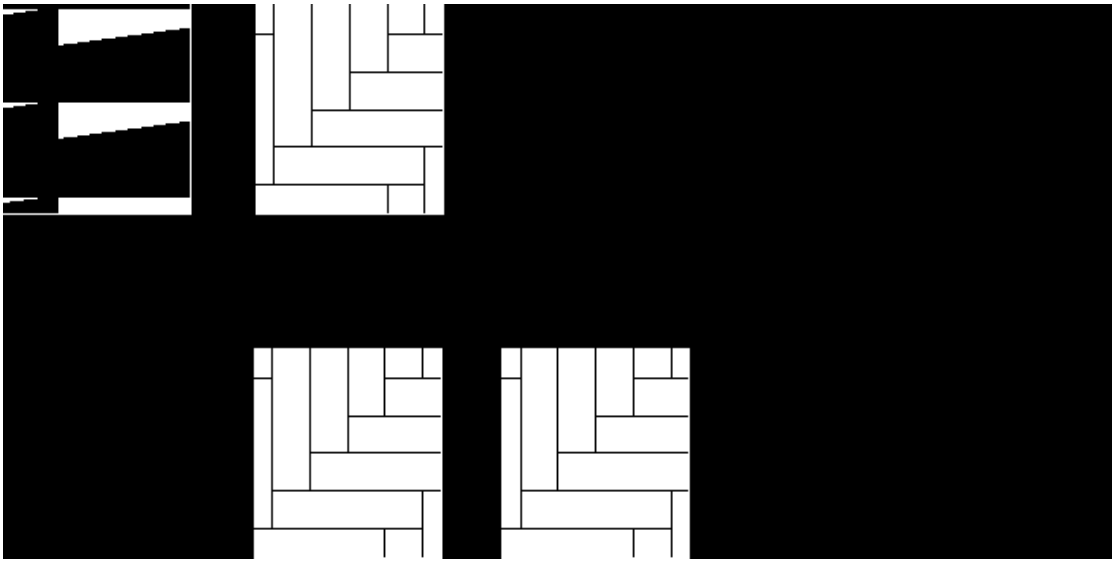
6.2 Compare images

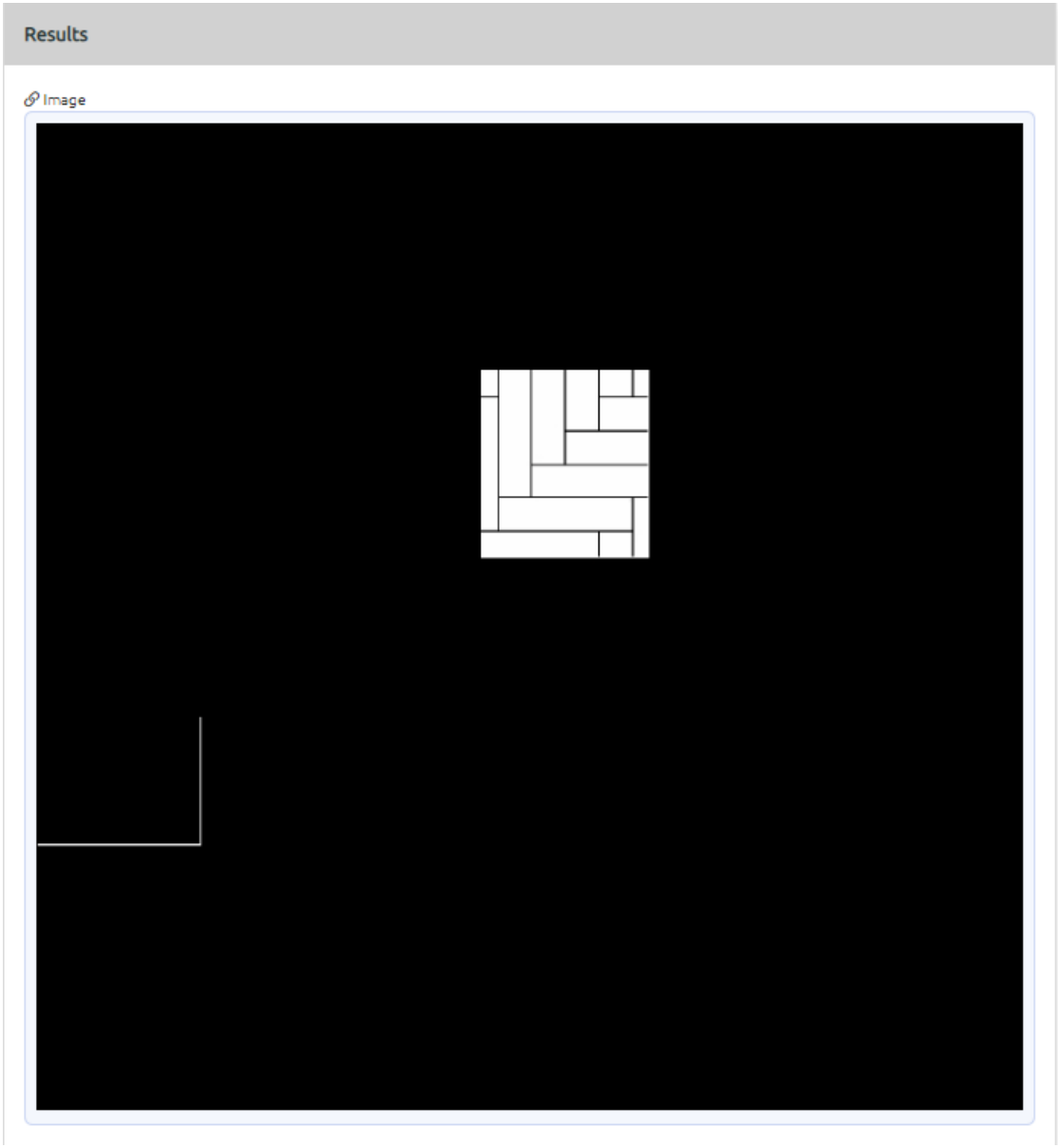
Compare image and drawing files.

First image:



Second image:





6.3 Compare texts

With this app you can compare two texts.

- Basic input data

1st text: With this app you can compare two texts

2nd text: With this app you can compare five texts

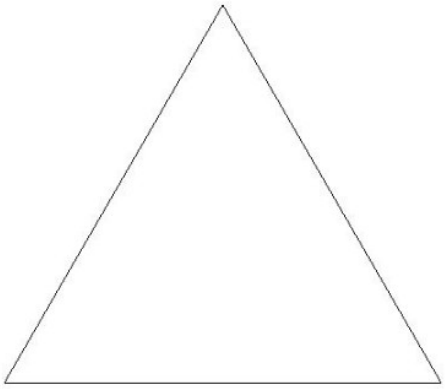
Results:

7. Manipulate

7.1 Mirror

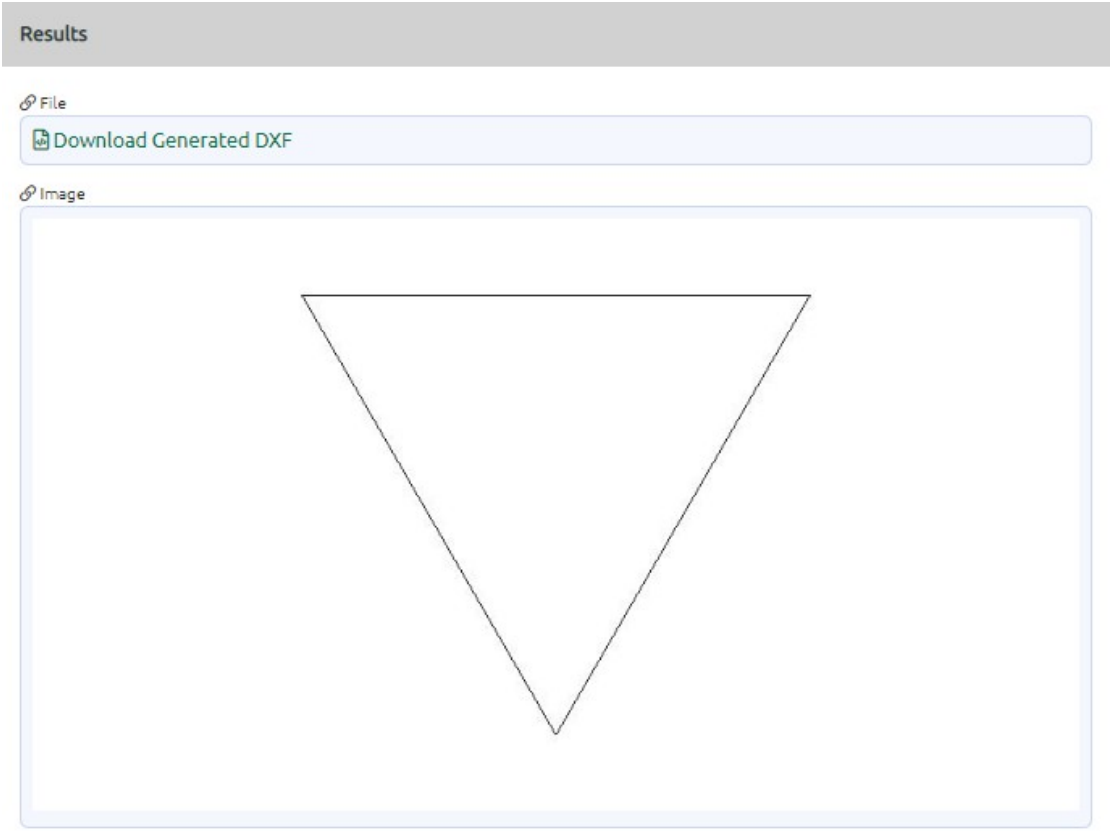
With this app you can mirror a part.

Original file:



- Basic input data

Mirror axis: X axis



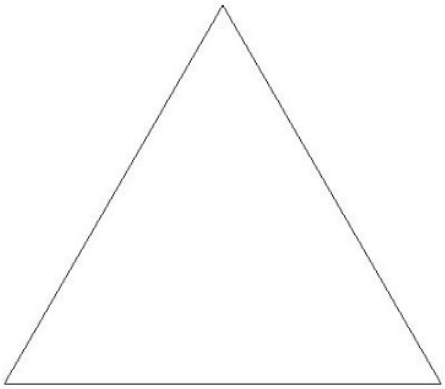
7.2 Move

With this app you can move a drawing by inserting x,y and z distances.

7.3 Rotate

With this app you can rotate a drawing.

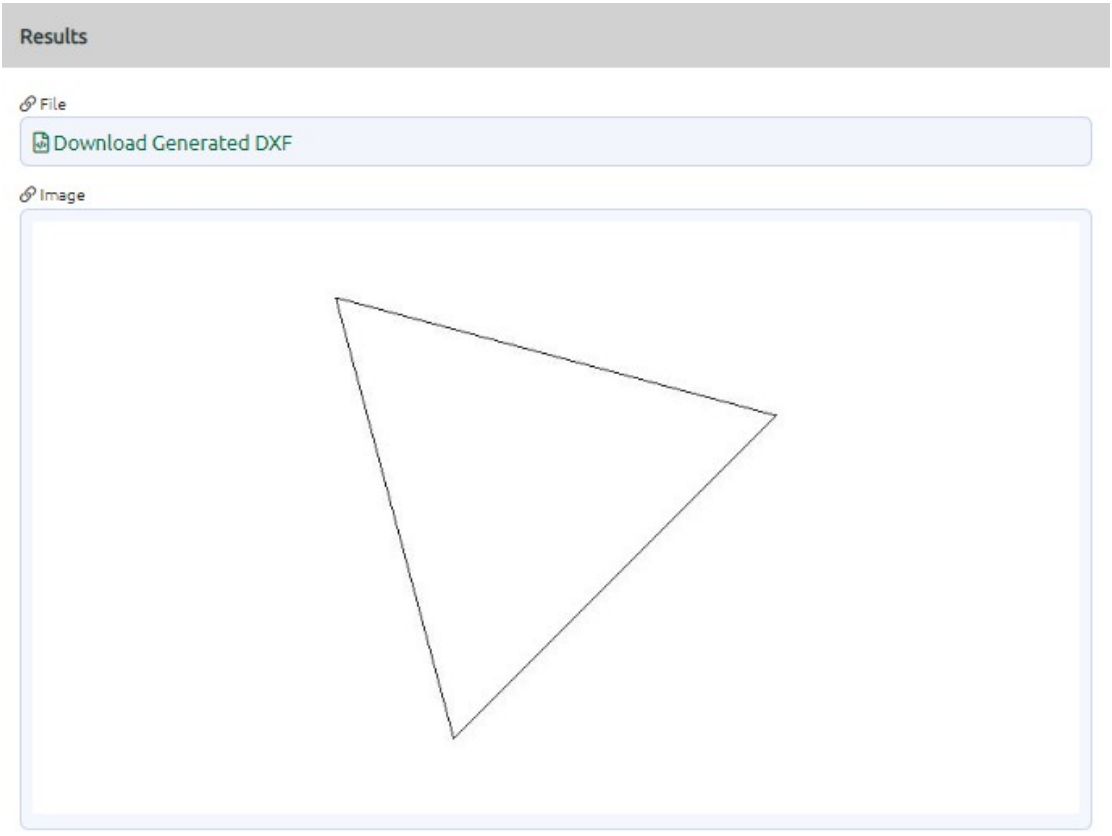
Original file:



- Basic input data

Angle: 45

Rotate axis: Z axis



7.4 Scale

With this app you can scale a drawing by a scale factor.

8. Convert

8.1 Convert SPLINE to POLYLINE

With this app you can convert the SPLINEs of a drawing file to POLYLINEs.

8.2 Convert to DXF

With this app you can convert EPS, AI, SVG, AVX and PLT files to DXF files.

8.3 Convert to SVG

With this app you can convert EPS, AI, DXF, AVX and PLT files to SVG files.

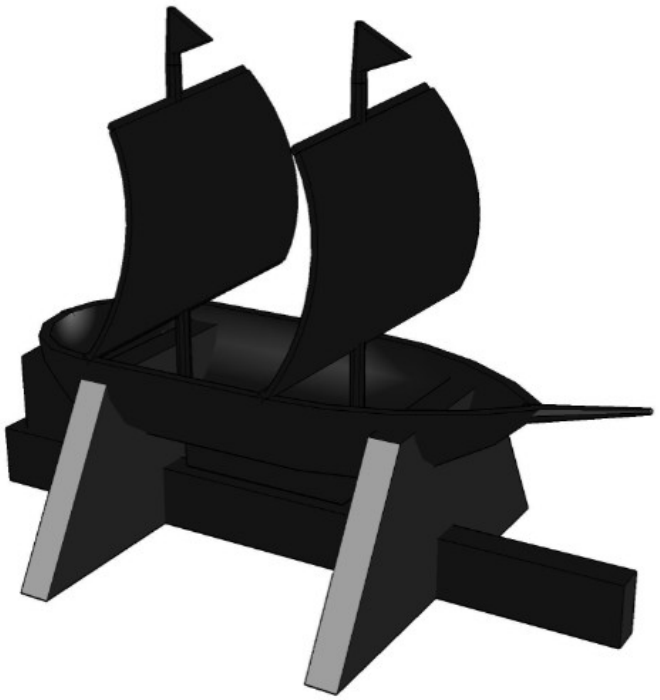
8.4 Drawing files converter

With this app you can convert DXF, DWG, STL, IGES, IGS, STEP, STP, IFC, IFCZIP, ASC, OBJ, LAS, 3DS files to DXF, DWG, STL, IGES, IGS, STEP, STP, PDF files.

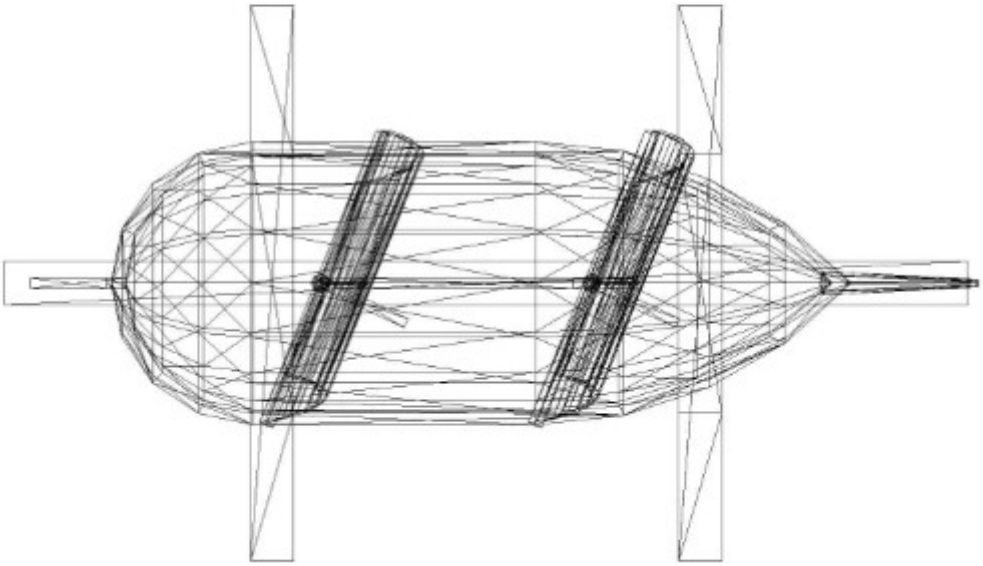
8.5 Flatten

Flatten 3D file.

Original file:



Result:



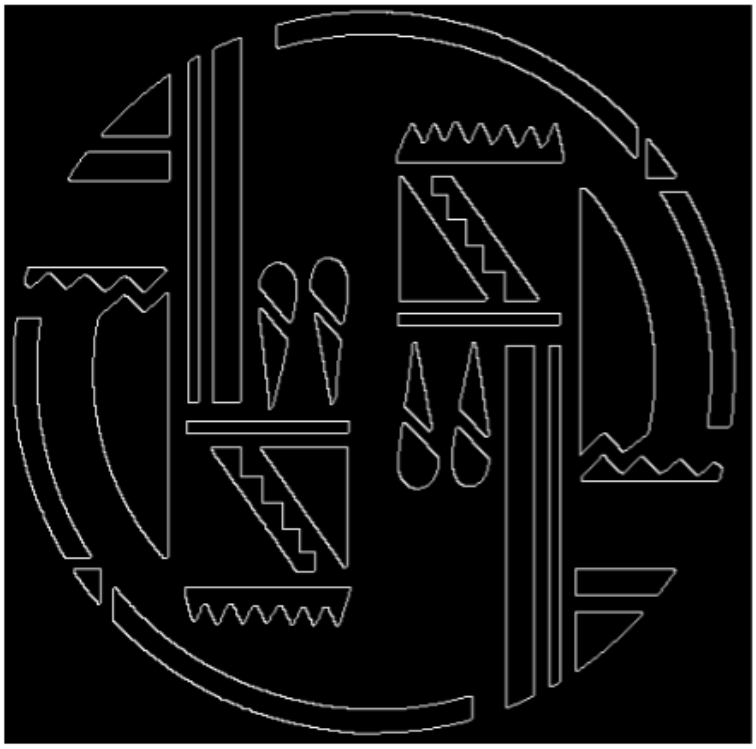
8.6 Image files converter

With this app you can convert JPEG, JPG, BMP, WMF, GIF, PNG, ICO, TIFF, EMF, RLE files to same, JPEG, JPG, BMP, GIF, PNG, TIFF, RLE files.

8.7 Raster to vector

The Raster to vector app takes digital picture and makes into a shape.

Original file:



- Basic input data

Outline = No

Smooth = Yes

Smooth factor = 0

Connect = Yes

Connect factor = 0

Clean = Yes

Clean factor = 0

Result:

8.8 Zip files

With this app you can zip files.

9. View

9.1 View DXF

Upload and view a DXF or DWG file.

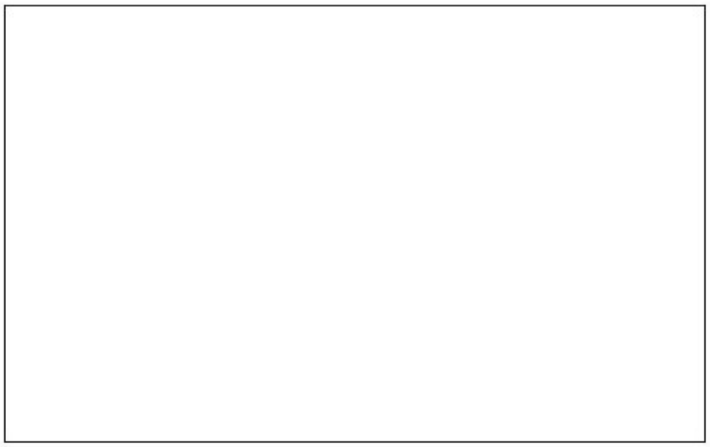
10. Info

10.1 Area

This app can calculate the area of a 2D shape.

Original file:

Width 8, Height 5



Results

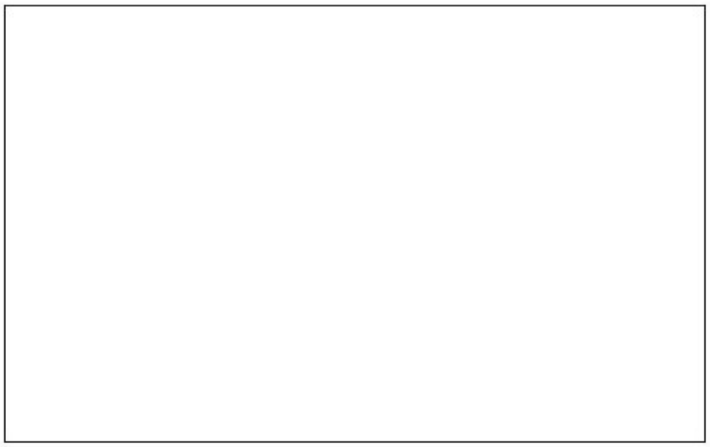
Area = 40

10.2 Length

This app can calculate the length of a 2D shape.

Original file:

width 8, height 5



Results

Length = 26