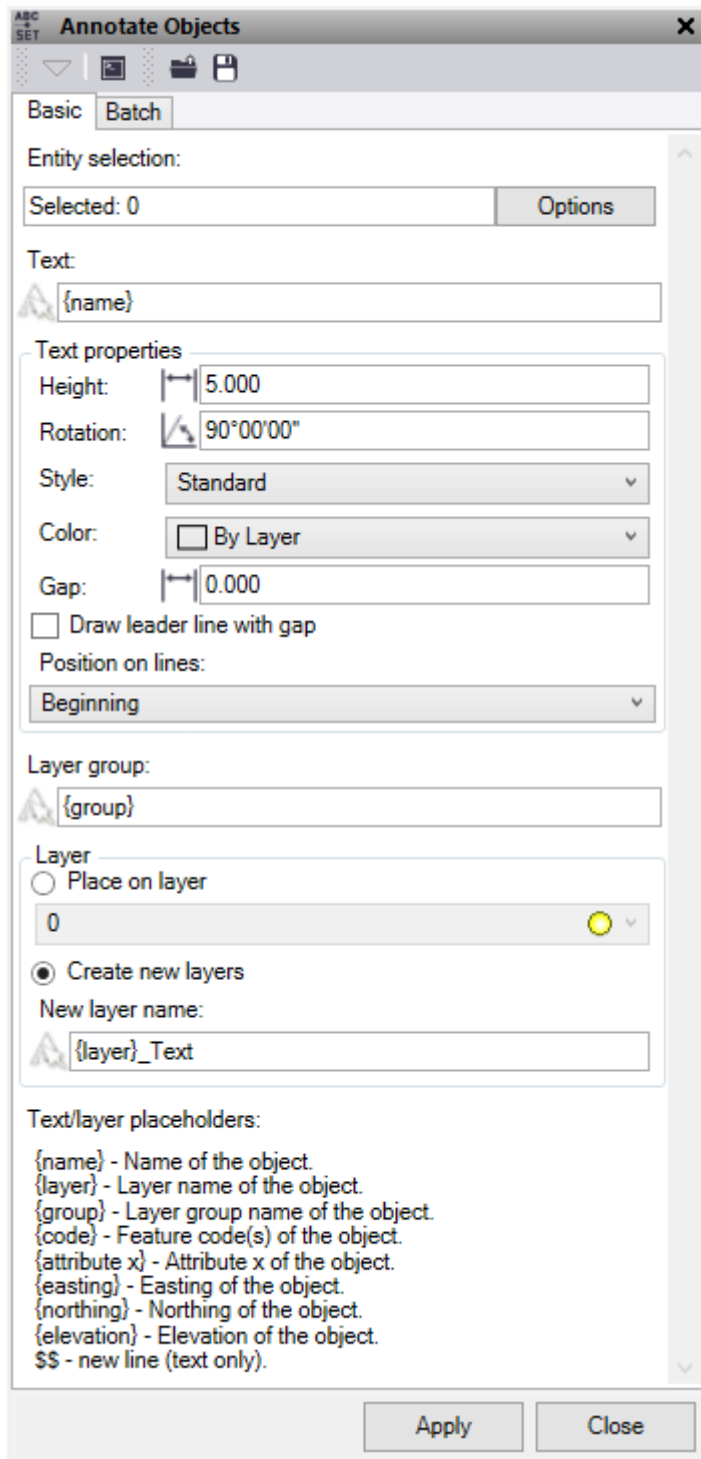


Command Description

The Annotate Objects command allows the user to write text to screen for selected objects using multiple options to extract information. There is a *Basic* option for one off work and a *Batch* option that uses rule sets for repeatable work on large data sets.



The screenshot shows the 'Annotate Objects' dialog box with the 'Basic' tab selected. The dialog is titled 'Annotate Objects' and has a close button (X) in the top right corner. It features a toolbar with icons for selection, text, and saving. The 'Entity selection' section shows 'Selected: 0' and an 'Options' button. The 'Text' section has a text input field containing '{name}'. The 'Text properties' section includes fields for 'Height' (5.000), 'Rotation' (90°00'00"), 'Style' (Standard), 'Color' (By Layer), and 'Gap' (0.000). There is a checkbox for 'Draw leader line with gap' and a 'Position on lines' dropdown set to 'Beginning'. The 'Layer group' section has a text input field containing '{group}'. The 'Layer' section has two radio buttons: 'Place on layer' (selected) and 'Create new layers'. Below 'Place on layer' is a dropdown menu showing '0'. Below 'Create new layers' is a 'New layer name' text input field containing '{layer}_Text'. The 'Text/layer placeholders' section lists various placeholders: {name} - Name of the object, {layer} - Layer name of the object, {group} - Layer group name of the object, {code} - Feature code(s) of the object, {attribute x} - Attribute x of the object, {easting} - Easting of the object, {northing} - Northing of the object, {elevation} - Elevation of the object, and \$\$ - new line (text only). At the bottom are 'Apply' and 'Close' buttons.

Annotate Objects

Basic Batch

Entity selection:

Selected: 0 Options

Text:

{name}

Text properties

Height: 5.000

Rotation: 90°00'00"

Style: Standard

Color: By Layer

Gap: 0.000

☐ Draw leader line with gap

Position on lines:

Beginning

Layer group:

{group}

Layer

☐ Place on layer

0

☒ Create new layers

New layer name:

{layer}_Text

Text/layer placeholders:

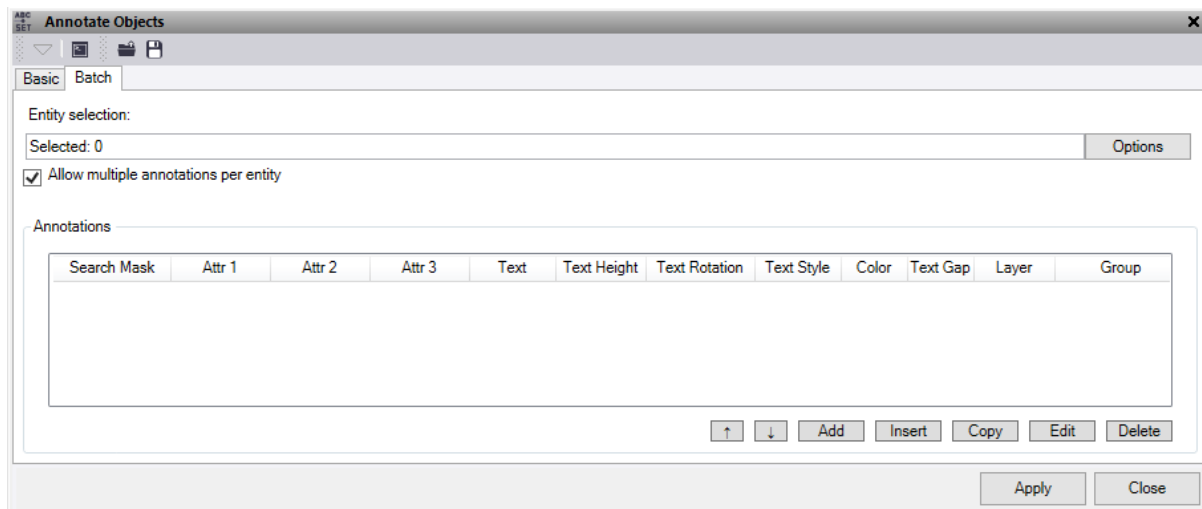
{name} - Name of the object.
 {layer} - Layer name of the object.
 {group} - Layer group name of the object.
 {code} - Feature code(s) of the object.
 {attribute x} - Attribute x of the object.
 {easting} - Easting of the object.
 {northing} - Northing of the object.
 {elevation} - Elevation of the object.
 \$\$ - new line (text only).


Apply Close

Basic Tab

1. Click in the **Entity selection** field and then in a graphic view select the objects which you want to annotate with text. Click **Options** for additional selection options.
2. In **Text**, input the text to display on screen for the object and/or use the place holders to add text based on the object's properties. *Note: for the attribute place holder {attribute x} input the attribute name in place of the x e.g. {attribute Diameter}. To place text on a new line use \$\$ before the text to be placed.*
3. Enter a **Text height** value.
4. Enter a **Text Rotation** value.
5. Select a **Text style** from the list or create a new one.
6. Select a **Text color**
7. Set the **Text Gap** to be used. This is the distance in metres that the insertion point of the text will be in the direction of rotation from the node it is created from. If you are using this to create 12d Vertex text, we recommend "0" offset.
8. Check the **Draw leader line with gap** box to add a leader line when a gap has been used.
9. **Position on lines**, sets the location for any text associated to lines being annotated. Note, that if you use the middle setting the text will be orientated to the line.
10. Input a new **Layer group** name where you can use the place holders to populate the name based on the object's properties.
11. Check the **Place on layer** option to place all the text created on an existing layer.
12. Or check **Create new layers** and input a new layer name where you can use the place holders to populate the name based on the object's properties.
13. Click **Apply** to annotate the objects.

Batch Tab



1. Click in the **Entity selection** field and then in a graphic view select all the points and CAD objects you want to map. Click **Options** for additional selection options.
2. Tick the **Allow multiple annotations per entity** if you need the same object to be read multiple times within the rule set. If this is not selected, then once an object has been selected in the rule set it will not be selected again even if the mask matches. Therefore, the order of the rule set is important.
3. To import previous rule sets into your project from a .annotationrules file and populate the **Annotations** table, click the  button at the top of the command pane and select the file you want to import.
4. To add Annotations to the bottom of the table, click the **Add** button to display the **Edit Mapping** dialog and do the following:

Edit mapping

Filter

Search by:

☒ Name/Id
☐ Feature code

Name mask:

Use * as a wildcard.

☐ Filter attributes

Attribute 1:

Value 1:

Attribute 2:

Value 2:

Attribute 3:

Value 3:

Annotation

Text:

Text properties

Height:

Rotation:

Style:

Color:

Gap:

☐ Draw leader line with gap

Position on lines:

Layer group:

Layer

☐ Place on layer

☒ Create new layers

New layer name:

Text/layer placeholders:

{name} - Name of the object.

{layer} - Layer name of the object.

{group} - Layer group name of the object.

{code} - Feature code(s) of the object.

{attribute x} - Attribute x of the object.

{easting} - Easting of the object.

{northing} - Northing of the object.

{elevation} - Elevation of the object.

\$\$ - new line (text only).

OK

Cancel

Filter:

- In the **Code/Name mask** field, enter all or part (using the wildcard asterisk **"***") of the name/ID or feature code of the mask object you want to select.
 - Name/Id – works on the name of a line or ID of a point.
 - Feature code – works on the feature code of a point.


For example, if you enter **Fence** (preceded and followed by an asterisk), all objects with *Fence* in their name will be selected. This would include, for example, *FrontFence1*, *FrontFence2*, and *RearFence1*.

- **Filter attributes** can be applied to the above mask as a secondary filter option.
 - Enter the attribute name and value you wish to search, then leave the second and third attribute options empty or add another to refine further. Once the mask is found true it then checks the attributes and if they are found true will apply the annotations. *Note these are decimal point sensitive.*

Annotation:

- In **Text**, input the text to display on screen for the object and/or use the place holders to add text based on the object's properties. Note: for the attribute place holder {attribute x} input the attribute name in place of the x e.g. {attribute Diameter}. To place text on a new line use \$\$ before the text to be placed.
- Enter a **Text height**.
- Enter a **Text rotation**.
- Select a **Text style** from the list or create a new one.
- Select a **Text color**.
- Set the **Text Gap** to be used. This is the distance in metres that the insertion point of the text will be in the direction of rotation from the node it is created from. If you are using this to create 12d Vertex text, we recommend "0" offset.
- Check the **Draw leader line with gap** box to add a leader line when a gap has been used.
- **Position on lines**, sets the location for any text associated to lines being annotated. Note, that if you use the middle setting the text will be orientated to the line.
- Input a new **Layer group** name where you can use the place holders to populate the name based on the object's properties.
- Check the **Place on layer** option to place all the text created on an existing layer.
- Or check **Create new layers** and input a new layer name where you can use the place holders to populate the name based on the object's properties.
- Click **OK** to save the rule.

Your selections are displayed in a new row in the **Annotations** table in the **Annotate Objects** command pane.

5. To delete a row from the **Annotations** table, select the row and click **Delete**. To delete multiple rows, select the top row and hold shift and select the bottom row, then delete.
6. To move the row order, use the **Up** and **Down** arrows and to edit a previously entered row use the **Edit** button or double click on the row in the table. Note that the order of the mapping file matters as the command looks at the Name Mask from top to bottom. To reorder the file to alphabetical click on the "**Search Mask**" header.
7. To insert a row above an existing one click on the row location and press the **Insert** button. To copy an existing row, highlight the row and press the **Copy** button and this will be added directly below.
8. To export the contents of the **Annotations** table as rule sets into a ".*annotationrules*" file that can be shared with others, click the  button at the top of the command pane and select a location for the new file.
9. Click **Apply** to apply the changes and keep the **Annotate Objects** command pane open.

The text annotations are applied to the selected objects and the number that were annotated is displayed.

Note: If the same object mask is selected in more than one row in the **Annotate** table, the mapping rules specified first will apply.

Place holders:

To add a place holder in the text you must use one of the 4 as shown below and they need to be contained within {}. You can use as many of these as you like. **Note:** these are all lower case.

{name} – This will use the name of the line selected or the point ID of a point.

{layer} – This will use the layer name of the object selected.

{group} – Layer group name of the object.

{code} – This will use the feature code of the point selected.

{attribute x} – This will use the value from the attribute of the object selected when you type it after the word “attribute” where the letter “x” is.

{easting} – This will use the easting of a point and the first node of a line.

{northing} – This will use the northing of a point and the first node of a line.

{elevation} – This will use the elevation of a point and the first node of a line.

\$\$ - This will place any text written after it on a new line.

Example: Text for the object could be:

Current selected object:

- Name - “ITS Cable”, Layer - “E COMM”, Attribute - “Diameter = 100”

Annotate object:

- Text “{name}\$\$Pipe Size {attribute Diameter}\$\$Unused”
- Results
 ITS Cable
 Pipe Size 100
 Unused

Note: Does not work on CAD points, blocks or 3d objects.

Example:

