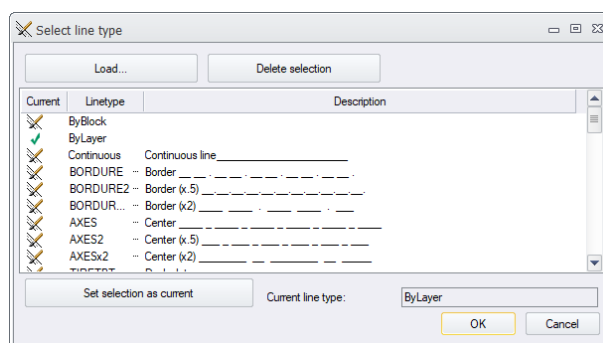


elecworks™ Tips & Tricks

Line Types

elecworks™ has several pre-defined line types built in similar to AutoCAD's line types.

To browse the current selection, select the *Tools* ribbon tab >



Line type information is stored in the following file:

C:\Program Files\elecworks\support\linestyle.xlin

This file can be opened using Notepad. **BEFORE** making any changes, make a copy of the file so that you can revert back to if necessary.

Let's take a look at one of the existing definitions to see how they work.

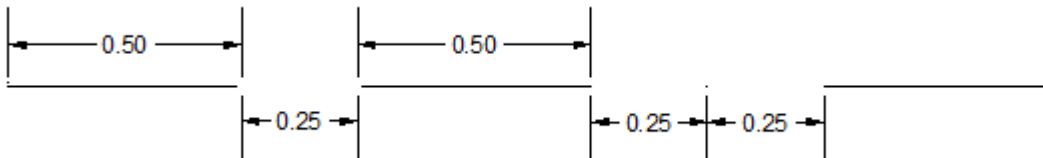
```
<lineStyle>
  <pattern>.5,-.25,.5,-.25,0,-.25</pattern>
  <name>BORDURE</name>
  <ascii>___ . ___ . ___ . ___ . ___ .</ascii>
  <description>
    <LANGUAGE xml:lang="en">Border</LANGUAGE>
    <LANGUAGE xml:lang="fr">Bordure</LANGUAGE>
    <LANGUAGE xml:lang="es">Borde</LANGUAGE>
    <LANGUAGE xml:lang="it">Bordo</LANGUAGE>
    <LANGUAGE xml:lang="de">Rand</LANGUAGE>
    <LANGUAGE xml:lang="ko">경계</LANGUAGE>
    <LANGUAGE xml:lang="ja">枠線</LANGUAGE>
    <LANGUAGE xml:lang="ru">Граница</LANGUAGE>
    <LANGUAGE xml:lang="pt">Borda</LANGUAGE>
  </description>
</lineStyle>
```

```

<LANGUAGE xml:lang="cs">Ohraničení</LANGUAGE>
<LANGUAGE xml:lang="zh">边框</LANGUAGE>
<LANGUAGE xml:lang="pl">Obramowanie</LANGUAGE>
<LANGUAGE xml:lang="tr">Border</LANGUAGE>
<LANGUAGE xml:lang="zh-tw">框線</LANGUAGE>
</description>
</lineStyles>

```

Every linetype definition consists of multiple lines of text but the third and fourth lines are the key information. In the third line we have a standard text of “<pattern>” and then a series of values to define the actual pattern. Positive values represent a line of that length, negative values represent a space of that length, and zero’s represent periods. Below you can see how these values relate to the actual linetype. The text “</pattern>” closes off the values.



Linetypes with text become a bit more complicated by including a portion specific to the text in brackets. This bracket portion defines the linetype text, text style, text size, rotation angle, horizontal offset, and vertical offset.

```

<pattern>.5,-.2,["GAS",STANDARD,S=.1,R=0.0,X=-0.1,Y=-.05],-.25</pattern>
<name>GAZ</name>

```

Determining the horizontal and vertical offsets can be tricky but experimentation should resolve. In this instance a text style that exists in all drawings is used (standard) and this text style should have a text height of 0 defined in STYLE. This will mean that the text height is controlled by the height setting in the linetype (s=.1) rather than a fixed value in your title block drawing.

The easiest way to create a new linestyle is to copy an existing. I copied the GAS line and changed the copy to a “3~” wire type for use within single line diagrams.

```

<linestyle>
<pattern>.5,-.2,["3~",STANDARD,S=.1,R=0.0,X=-0.1,Y=-.05],-.25</pattern>
<name>3~</name>
<ascii>----3~----3~----3~----3~----3~----3~----3~--</ascii>
<description>
<LANGUAGE xml:lang="en">3~</LANGUAGE>
<LANGUAGE xml:lang="fr">3~</LANGUAGE>
<LANGUAGE xml:lang="es">3~</LANGUAGE>
<LANGUAGE xml:lang="it">3~</LANGUAGE>
<LANGUAGE xml:lang="de">3~</LANGUAGE>

```

```
<LANGUAGE xml:lang="ko">3~</LANGUAGE>
<LANGUAGE xml:lang="ja">3~</LANGUAGE>
<LANGUAGE xml:lang="ru">3~</LANGUAGE>
<LANGUAGE xml:lang="pt">3~</LANGUAGE>
<LANGUAGE xml:lang="cs">3~</LANGUAGE>
<LANGUAGE xml:lang="zh">3~</LANGUAGE>
<LANGUAGE xml:lang="pl">3~</LANGUAGE>
<LANGUAGE xml:lang="tr">3~</LANGUAGE>
<LANGUAGE xml:lang="zh-tw">3~</LANGUAGE>
</description>
</lineStyle>
</lineStyles>
</SECTIONS>
```

N.B. The last two lines of the xlin file close off the linestyle & the section so when adding linestyles, make sure these lines still exist at the bottom of the file.

