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TRADEMARKS

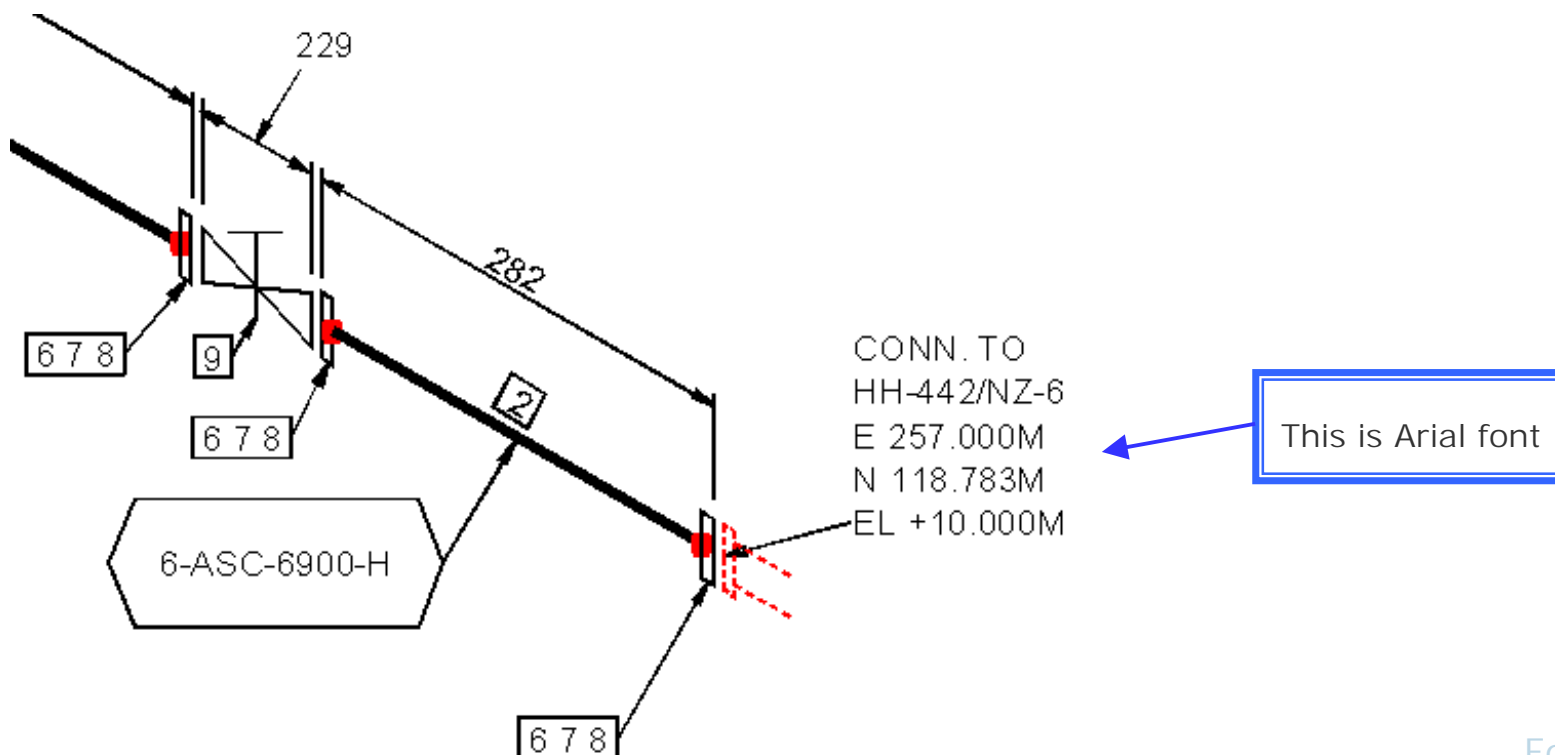
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Fonts

Isogen isometrics may now use Fonts other than the fixed pitch Monotxt font which previously was the only one used

Now, a variety of other fonts may be used, including proportionally spaced

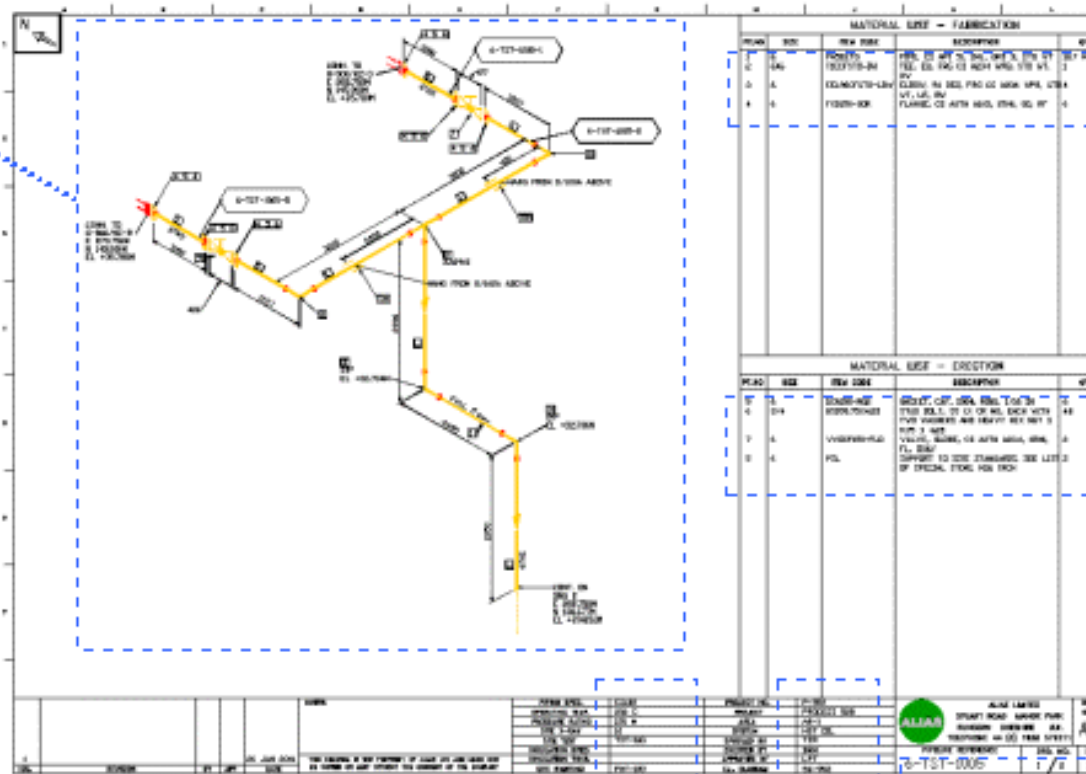


The Font Information File

1

Picture region

The use of a Font file is optional
If one is not used then all text on the isometric will be in Monotxt font - This applies to the Picture region 1, the Material List 2 (also Welding and Cutting lists if generated), the Attributes area 3 and Title block area 4 as indicated here



2

Material List areas

4

Title block area

3

Attributes area

Using a Font Information file - enables you to choose from a wide variety of fonts approved by Alias for use with ISOGEN. The following conditions apply -

1. Only the fonts named in the file supplied with ISOGEN may be used – you can't use any others
2. If required, the four areas of the isometric indicated in the sample isometric previously can all be set to use a different font
3. Font details are supplied in a single file - **Fontstd.fif** which contains a mixture of different font types for use with the following graphics systems –

- AutoCAD DXF
- MicroStation DGN
- Intergraph SmartSketch

Also include is a wide range of Microsoft True Type fonts (TTF)

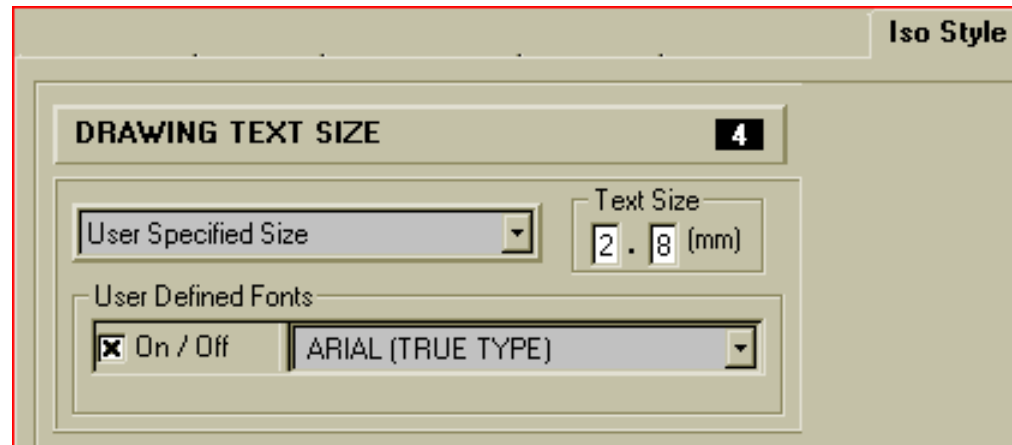
4. No actual font files are supplied with ISOGEN. The Alias Font File **Fontstd.fif** contains only pointers and coded text character information for the standard fonts supplied with the AutoCAD, MicroStation, and SmartSketch systems, and Microsoft Windows, as indicated on the following slides -

Setting Fonts using the Options Editor

1 The Picture region

Select the **Iso Style** tab
followed by -

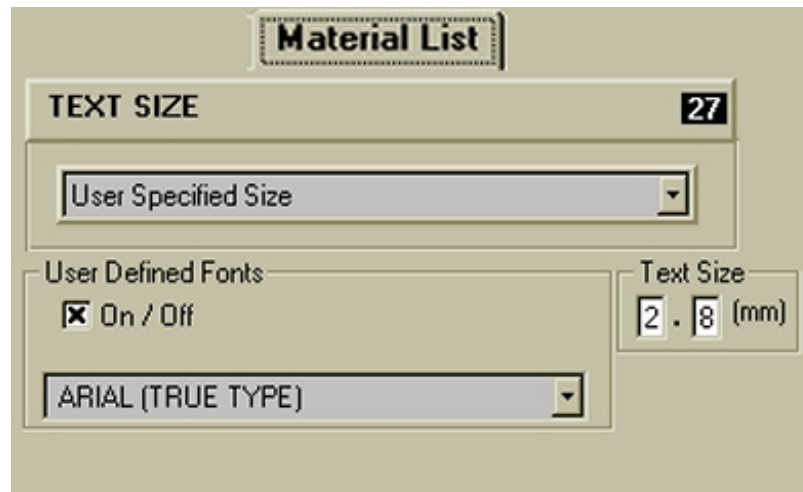
- User Defined Size
- User Defined Fonts **On**
- and the actual required Font



2 The Material List

Select the **Material List** tab
followed by -

- User Defined Size
- User Defined Fonts **On**
- and the actual required Font



3 The Attributes Area

Text output in this area is controlled by the TextPos feature

**For details of how to make TextPos settings for
Fonts - see the slide set for TextPos**



Font Information file details - these are all the fonts supplied in the file **Fontstd.fif**

1. AutoCAD Fonts

ISOGEN-FONT 1
FAMILY A
FILENAME complex.shx
DESCRIPTION AutoDesk COMPLEX
TYPEFACE Complex
FONTNUMBER 171

ISOGEN-FONT 2
FAMILY A
FILENAME isocp2.shx
DESCRIPTION AutoDesk ISOCP2
TYPEFACE ISOCP2

ISOGEN-FONT 3
FAMILY A
FILENAME isocp3.shx
DESCRIPTION AutoDesk ISOCP3
TYPEFACE ISOCP3

ISOGEN-FONT 4
FAMILY A
FILENAME isoct.shx
DESCRIPTION AutoDesk ISOCT
TYPEFACE ISOCT

ISOGEN-FONT 5
FAMILY A
FILENAME isoct2.shx
DESCRIPTION AutoDek ISOCT2
TYPEFACE ISOCT2

ISOGEN-FONT 6
FAMILY A
FILENAME isoct3.shx
DESCRIPTION AutoDesk ISOCT3
TYPEFACE ISOCT3

ISOGEN-FONT 7
FAMILY A
FILENAME italic.shx
DESCRIPTION AutoDesk ITALIC
TYPEFACE Italic
FONTNUMBER 224

ISOGEN-FONT 8
FAMILY A
FILENAME italicc.shx
DESCRIPTION AutoDesk ITALIC-COND
TYPEFACE Italicc
FONTNUMBER 248

ISOGEN-FONT 9
FAMILY A
FILENAME italicct.shx
DESCRIPTION AutoDesk ITALIC THICK
TYPEFACE ItalicT
FONTNUMBER 222

ISOGEN-FONT 10
FAMILY A
FILENAME monotxt.shx
DESCRIPTION AutoDesk MONOTXT
TYPEFACE Monotxt

ISOGEN-FONT 11
FAMILY A
FILENAME romanc.shx
DESCRIPTION AutoDesk ROMANC
TYPEFACE RomanC
FONTNUMBER 230

ISOGEN-FONT 12
FAMILY A
FILENAME romand.shx
DESCRIPTION AutoDesk ROMAND
TYPEFACE Romand
FONTNUMBER 152

ISOGEN-FONT 13
FAMILY A
FILENAME romans.shx
DESCRIPTION AutoDesk ROMANS
TYPEFACE RomanS
FONTNUMBER 182



AutoCAD fonts - Contd.

ISOGEN-FONT 14
FAMILY A
FILENAME romant.shx
DESCRIPTION AutoDesk ROMANT
TYPEFACE RomanT
FONTNUMBER 187

ISOGEN-FONT 15
FAMILY A
FILENAME txt.shx
DESCRIPTION AutoDesk TEXT
TYPEFACE Txt



2. MicroStation Fonts

ISOGEN-FONT 51
FAMILY M
DESCRIPTION MicroStation ENGINEERING
FONTNUMBER 3

ISOGEN-FONT 52
FAMILY M
DESCRIPTION MicroStation INTL_ENGINEERING
FONTNUMBER 32

ISOGEN-FONT 53
FAMILY M
DESCRIPTION MicroStation INTL_ISO
FONTNUMBER 105

ISOGEN-FONT 54
FAMILY M
DESCRIPTION MicroStation INTL_ISO_ITALIC
FONTNUMBER 107

ISOGEN-FONT 55
FAMILY M
DESCRIPTION MicroStation INTL_WORKING
FONTNUMBER 33

ISOGEN-FONT 56
FAMILY M
DESCRIPTION MicroStation ITALICS
FONTNUMBER 23

ISOGEN-FONT 57
FAMILY M
DESCRIPTION MicroStation LOW_RES_FILLED
FONTNUMBER 43

ISOGEN-FONT 58
FAMILY M
DESCRIPTION MicroStation STANDARD
FONTNUMBER 4

ISOGEN-FONT 59
FAMILY M
DESCRIPTION MicroStation UPPERCASE
FONTNUMBER 50

ISOGEN-FONT 60
FAMILY M
DESCRIPTION MicroStation WORKING
FONTNUMBER 1

3. Microsoft True Type fonts

ISOGEN-FONT 101
FAMILY T
FILENAME arial.ttf
DESCRIPTION Arial (TTF)
TYPEFACE ARIAL
FONTNUMBER 151

ISOGEN-FONT 102
FAMILY T
FILENAME ariali.ttf
DESCRIPTION Arial Italic (TTF)
TYPEFACE Arial
STYLE Italic
FONTNUMBER 164

ISOGEN-FONT 103
FAMILY T
FILENAME arialbd.ttf
DESCRIPTION Arial Bold (TTF)
TYPEFACE Arial
STYLE Bold
FONTNUMBER 217

ISOGEN-FONT 104
FAMILY T
FILENAME arialbi.ttf
DESCRIPTION Arial Bold Italic (TTF)
TYPEFACE Arial
STYLE Bold Italic
FONTNUMBER 247

ISOGEN-FONT 105
FAMILY T
FILENAME bookos.ttf
DESCRIPTION Bookman Old Style (TTF)
TYPEFACE Bookman Old Style
FONTNUMBER 9

ISOGEN-FONT 106
FAMILY T
FILENAME bookosi.ttf
DESCRIPTION Bookman Old Style Italic
TYPEFACE Bookman Old Style
STYLE Italic
FONTNUMBER 254

ISOGEN-FONT 107
FAMILY T
FILENAME cour.ttf
DESCRIPTION Courier New (TTF)
TYPEFACE Courier New
FONTNUMBER 175

ISOGEN-FONT 108
FAMILY T
FILENAME couri.ttf
DESCRIPTION Courier New Italic (TTF)
TYPEFACE Courier New
STYLE Italic
FONTNUMBER 211

ISOGEN-FONT 110
FAMILY T
FILENAME courbi.ttf
DESCRIPTION Courier New Bold Italic (TTF)
TYPEFACE Courier New
STYLE Bold Italic
FONTNUMBER 196

ISOGEN-FONT 111
FAMILY T
FILENAME dutch.ttf
DESCRIPTION Dutch 801 Roman BT (TTF)
TYPEFACE Dutch801 Rm BT
FONTNUMBER 166

ISOGEN-FONT 112
FAMILY T
FILENAME dutchi.ttf
DESCRIPTION Dutch 801 Italic BT (TTF)
TYPEFACE Dutch801 Rm BT
STYLE Italic
FONTNUMBER 51

ISOGEN-FONT 113
FAMILY T
FILENAME eurr____.ttf
DESCRIPTION EuroRoman (TTF)
TYPEFACE EuroRoman
FONTNUMBER 89

Microsoft True Type fonts - Contd.

ISOGEN-FONT 114
FAMILY T
FILENAME euro____.ttf
DESCRIPTION EuroRoman Oblique (TTF)
TYPEFACE EuroRoman
STYLE Italic
FONTNUMBER 153

ISOGEN-FONT 115
FAMILY T
FILENAME gara.ttf
DESCRIPTION Garamond (TTF)
TYPEFACE Garamond
FONTNUMBER 104
OFFSETS

ISOGEN-FONT 116
FAMILY T
FILENAME garabd.ttf
DESCRIPTION Garamond Bold (TTF)
TYPEFACE Garamond
STYLE Bold
FONTNUMBER 228

ISOGEN-FONT 117
FAMILY T
FILENAME garait.ttf
DESCRIPTION Garamond Italic (TTF)
TYPEFACE Garamond
STYLE Italic
FONTNUMBER 208

ISOGEN-FONT 118
FAMILY T
FILENAME lucon.ttf
DESCRIPTION Lucida Console (TTF)
TYPEFACE Lucida Console
FONTNUMBER 192

ISOGEN-FONT 119
FAMILY T
FILENAME L_10646.TTF
DESCRIPTION Lucida Sans Unicode (TTF)
TYPEFACE Lucida Sans Unicode
FONTNUMBER 241

ISOGEN-FONT 120
FAMILY T
FILENAME monos.ttf
DESCRIPTION Monospace 821 BT (TTF)
TYPEFACE Monospac821 BT
FONTNUMBER 129

ISOGEN-FONT 121
FAMILY T
FILENAME monosb.ttf
DESCRIPTION Monospace 821 Bold BT
TYPEFACE Monospac821 BT
STYLE Bold
FONTNUMBER 206

ISOGEN-FONT 122
FAMILY T
FILENAME monosi.ttf
DESCRIPTION Monospace 821 Italic BT (TTF)
TYPEFACE Monospac821 BT
STYLE Italic
FONTNUMBER 113

ISOGEN-FONT 123
FAMILY T
FILENAME monosbi.ttf
DESCRIPTION Monospace 821 Bold Italic BT (TTF)
TYPEFACE Monospac821 BT
STYLE Bold Italic
FONTNUMBER 68

ISOGEN-FONT 124
FAMILY T
FILENAME romantic.ttf
DESCRIPTION Romantic (TTF)
TYPEFACE Romantic
FONTNUMBER 147

ISOGEN-FONT 125
FAMILY T
FILENAME romanti.ttf
DESCRIPTION Romantic Italic (TTF)
TYPEFACE Romantic
STYLE Italic
FONTNUMBER 190

Microsoft True Type fonts - Contd.

ISOGEN-FONT 126
FAMILY T
FILENAME sanss____.ttf
DESCRIPTION SansSerif (TTF)
TYPEFACE SansSerif
FONTNUMBER 131

ISOGEN-FONT 127
FAMILY T
FILENAME sansso____.ttf
DESCRIPTION SansSerif Oblique (TTF)
TYPEFACE SansSerif
STYLE Italic
FONTNUMBER 96

ISOGEN-FONT 128
FAMILY T
FILENAME simplex_.ttf
DESCRIPTION Simplex (TTF)
TYPEFACE Simplex
FONTNUMBER 165

ISOGEN-FONT 129
FAMILY T
FILENAME swiss.ttf
DESCRIPTION Swiss 721 BT (TTF)
TYPEFACE Swis721 BT
FONTNUMBER 238

ISOGEN-FONT 130
FAMILY T
FILENAME swissb.ttf
DESCRIPTION Swiss 721 Bold BT (TTF)
TYPEFACE Swis721 BT
STYLE Bold
FONTNUMBER 216

ISOGEN-FONT 131
FAMILY T
FILENAME swissi.ttf
DESCRIPTION Swiss 721 Italic BT (TTF)
TYPEFACE Swis721 BT
STYLE Italic
FONTNUMBER 252

ISOGEN-FONT 132
FAMILY T
FILENAME swissbi.ttf
DESCRIPTION Swiss 721 Bold Italic BT (TTF)
TYPEFACE Swis721 BT
STYLE Bold Italic
FONTNUMBER 136

ISOGEN-FONT 133
FAMILY T
FILENAME tahoma.ttf
DESCRIPTION Tahoma (TTF)
TYPEFACE Tahoma
FONTNUMBER 141

ISOGEN-FONT 134
FAMILY T
FILENAME technic.ttf
DESCRIPTION Technic (TTF)
TYPEFACE Technic
FONTNUMBER 19

ISOGEN-FONT 135
FAMILY T
FILENAME techb____.ttf
DESCRIPTION TechnicBold (TTF)
TYPEFACE TechnicBold
FONTNUMBER 25

ISOGEN-FONT 136
FAMILY T
FILENAME times.ttf
DESCRIPTION Times New Roman (TTF)
TYPEFACE Times New Roman
FONTNUMBER 143

ISOGEN-FONT 137
FAMILY T
FILENAME timesi.ttf
DESCRIPTION Times New Roman Italic (TTF)
TYPEFACE Times New Roman
STYLE Italic
FONTNUMBER 203

Microsoft True Type fonts - Contd.

ISOGEN-FONT 138
FAMILY T
FILENAME verdana.ttf
DESCRIPTION Verdana (TTF)
TYPEFACE Verdana
FONTNUMBER 132

ISOGEN-FONT 139
FAMILY T
FILENAME verdanai.ttf
DESCRIPTION Verdana Italic (TTF)
TYPEFACE Verdana
STYLE Italic
FONTNUMBER 150

ISOGEN-FONT 140
FAMILY T
FILENAME din.ttf
DESCRIPTION Din (TTF)
TYPEFACE Din
FONTNUMBER 50

ISOGEN-FONT 151
FAMILY T
FILENAME BARCODE39.ttf
DESCRIPTION Bar Code 39
FONTNUMBER 256

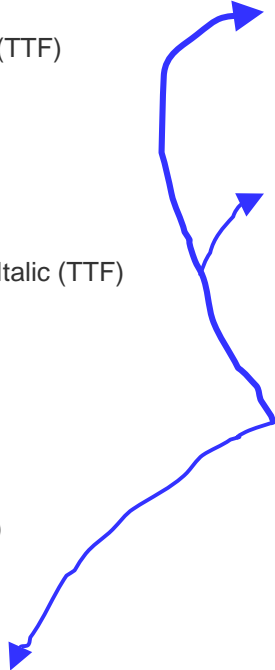
ISOGEN-FONT 152
FAMILY T
FILENAME BARCODE25.ttf
DESCRIPTION Bar Code 25
FONTNUMBER 257

ISOGEN-FONT 153
FAMILY T
FILENAME BARCODE25I.ttf
DESCRIPTION Bar Code 25 Interleaved
FONTNUMBER 258

Note. ISOGEN-FONT numbers 151, 152 and 153 are records for Bar Code Fonts

Unlike all the other listed fonts which are supplied with AutoCAD, MicroStation or MS Windows, these fonts are not supplied at all and have to be obtained separately.

For further details of how Barcode fonts operate in **Spoolgen** - see the specific Barcoding documentation slides



File Structure for records in the Font Information file -

Each file record has up to seven fields – as follows –

1. **ISOGEN-FONT n** - where n is the font number in Spoolgen - this number is entered in the Fulliso and Spooliso OPT files by using these function in the Options Editor (See page 13)
2. **FAMILY f** Where the letters A, M or T are used at the f position to denote AutoCAD, MicroStation or True Type family
3. **FILENAME y** where y is the font file name
4. **DESCRIPTION d** font description which is displayed in the Option Editor font selection panel
5. **TYPEFACE t** Typeface name
6. **STYLE s** Only listed if the font is *Italic* or **Bold**
7. **FONTNUMBER f** Used only in MicroStation where f is the font number in the font.rsc file

Fields 6 and 7 may not be listed as they are only used when applicable

Summary of the steps needed to make a User selected Font operational - for both AutoCAD and Microstation Users -

1. The Font Information File - Depending upon where the Font File is stored - set a -152 Font Information File record like this in the Fulliso and Spooliso OPT files -

-152 /C:\P-900\FONTSTD.FIF ! Font Information File

In the example given here the Font Information File is held at the P-900 project level. Alternatively, it could be stored at a central location - e.g. on a server on the network

2. Choose which Font you want to use - e.g. AutoCAD ROMAND (ISOGEN-FONT 12)
3. Use the Options Editor as shown here to set this font and the text size in the Fulliso and Spooliso OPT files



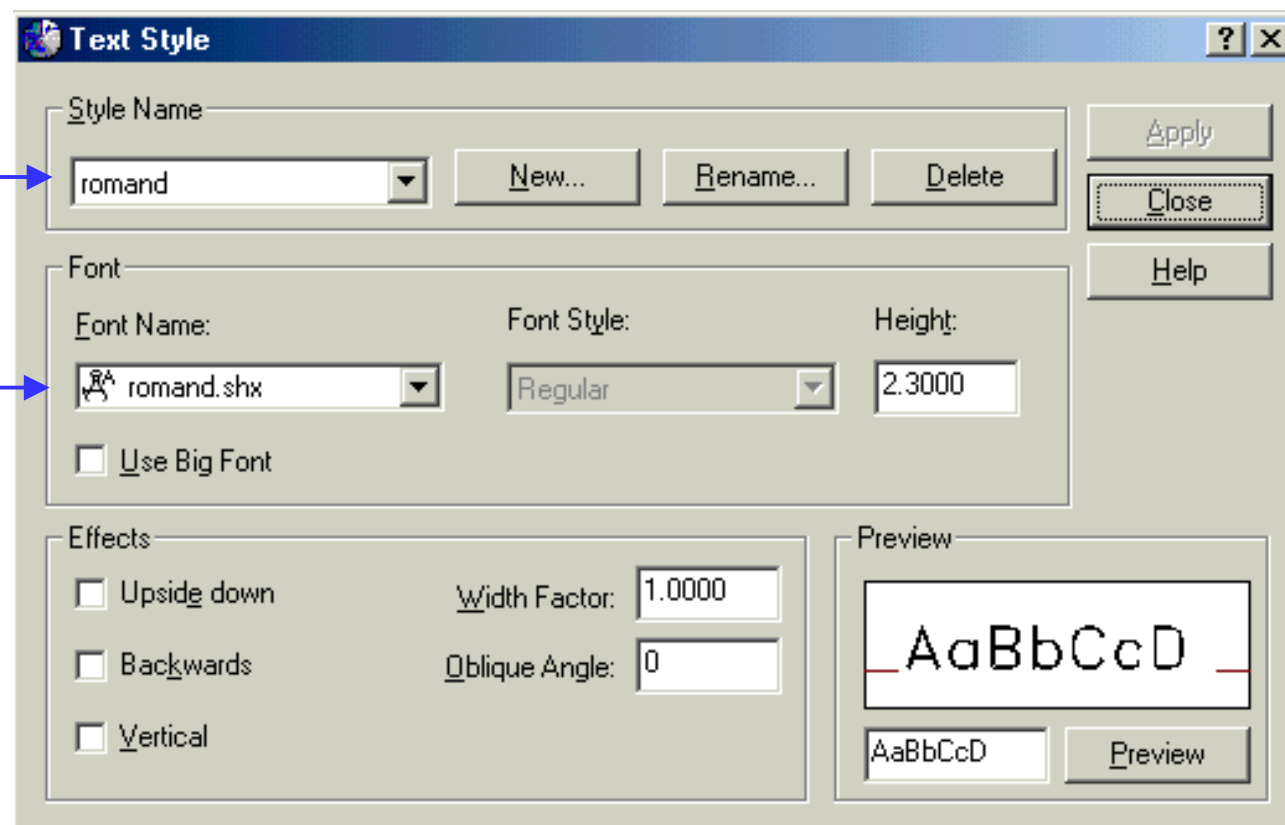
Specifically for AutoCAD Users -

In your backing sheet drawing - create and set a Text Style for the chosen Font - like this -

Set the **Style Name**
to the TYPEFACE name
in the Font information file

Set the **Font Name**
to the font FILENAME

This example here is for
an AutoCAD SHX font
which is directly
compatible with saving
a DXF in Release 12
format which Spoolgen
needs




Special Note for AutoCAD Users -

If you want to use a True Type font (e.g. ARIAL) instead of a standard AutoCAD shx font - then the font file name (e.g. arial.ttf) will not be written into the DXF backing sheet file correctly - there, it's changed to font 'txt' during the Save operation

This is because currently, Spoolgen is still confined to still using AutoCAD Release 12 DXF format and that format cannot handle True Type Fonts. It's the Save feature for Release 12 DXF format that automatically changes arial.ttf to txt

The work around action to remedy this occurrence and allow the arial true type font to be used is as follows -


1. Load the backing sheet DXF file into a text editor
2. Use the **find** feature to locate the second occurrence of the text string 'arial'



STYLE
2
ARIAL
70
0
40
2.3
41
0.86
50
0.0
71
0
42
0.2
3
txt
4

3. Change the entry **txt** following this to arial.ttf

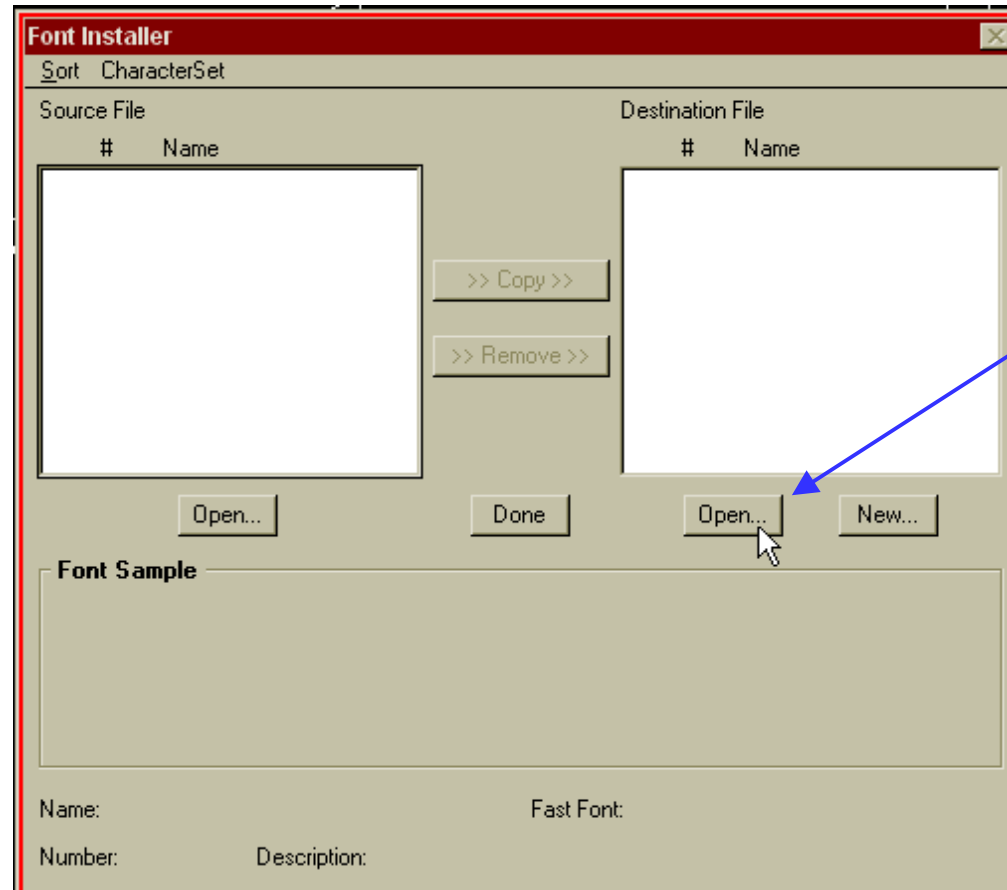
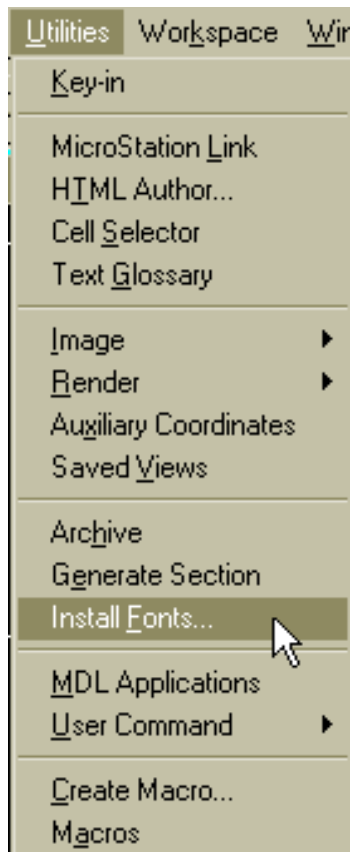
4. Save the revised file



STYLE
2
ARIAL
70
0
40
2.3
41
0.86
50
0.0
71
0
42
0.2
3
arial.ttf
4

Font selection steps for MicroStation

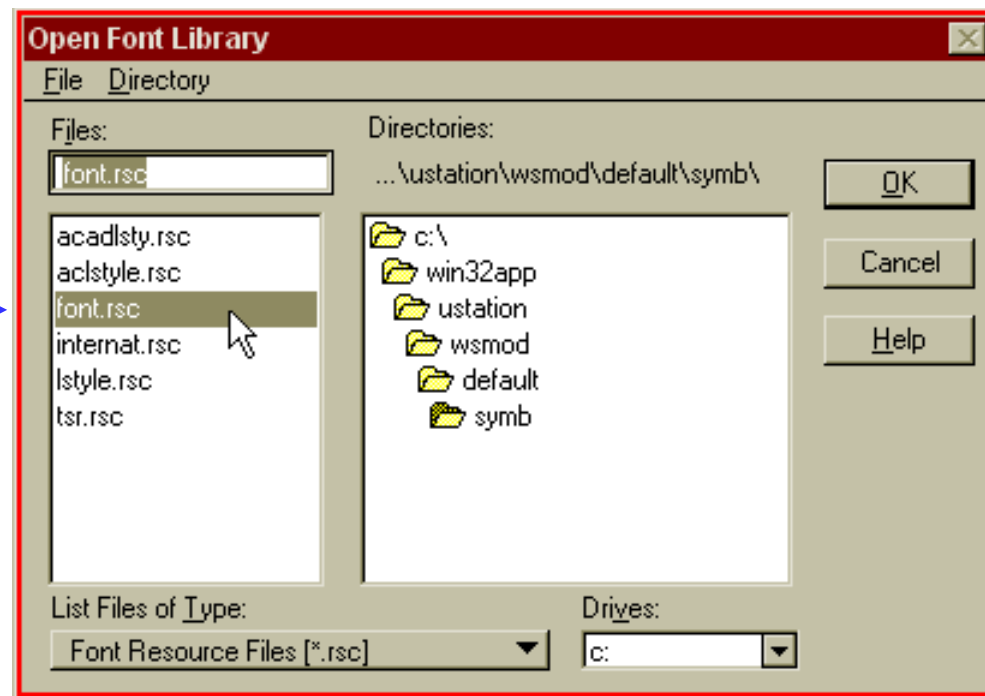
1. Select a particular font to use, for example ISOGEN-FONT 101 Arial
2. In MicroStation select **Utilities>Install Fonts**



3. When this panel appears, click the **Open** box

Font selection steps for MicroStation - contd.

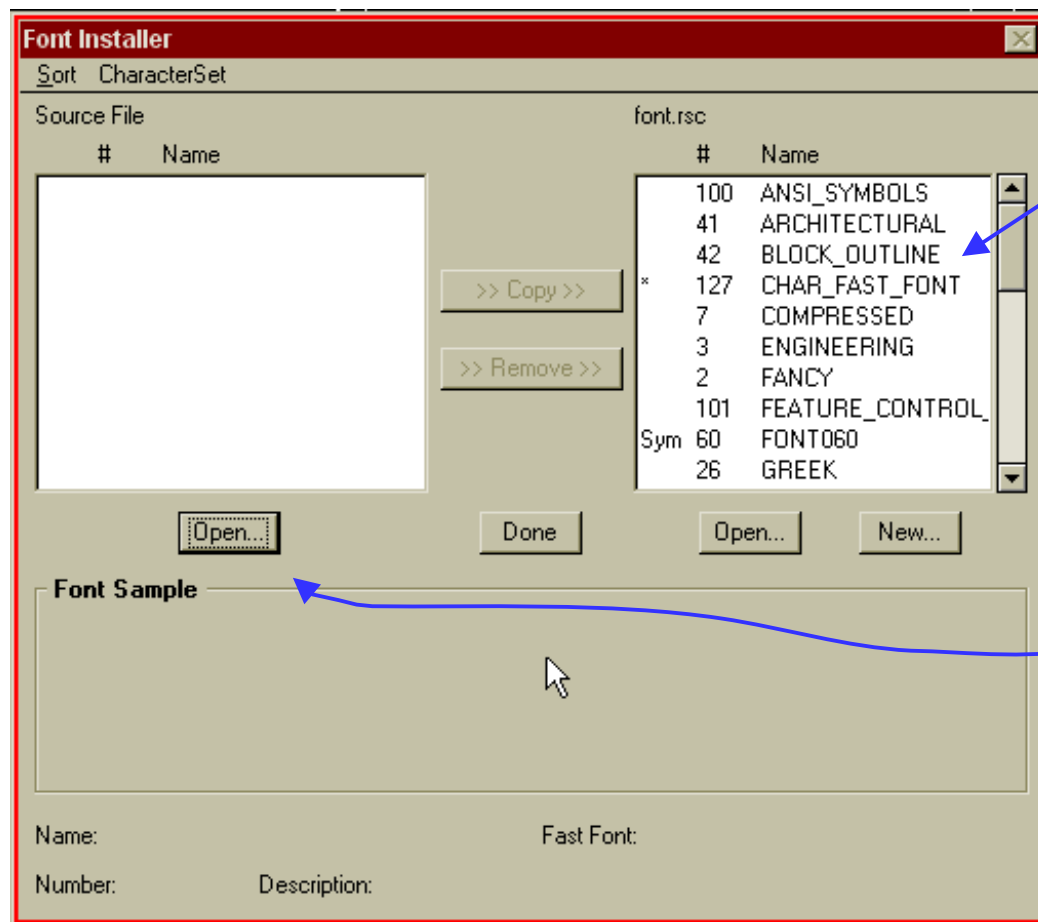
4. Then select the file
font.rsc



5. And click
the **OK** box



Font selection steps for MicroStation - contd.



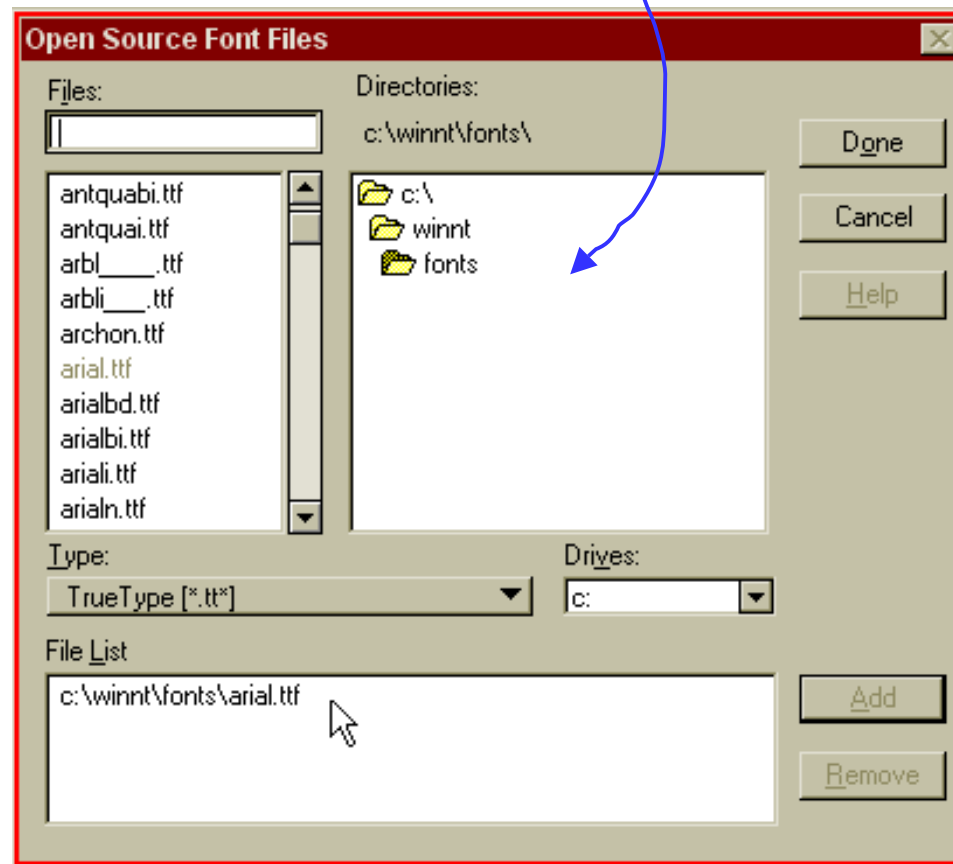
6. This is how the **font.rsc** file looks when it's opened. The list of available fonts in the file is shown in this panel

The next job is to add the font arial to **font.rsc** so it can be used

To do this, click in this **Open** box to open the Source File font set in the panel above

Font selection steps for MicroStation - contd.

7. If necessary, first browse to the WINNT\FONTS directory and pick the TrueType font arial.ttf from the source list



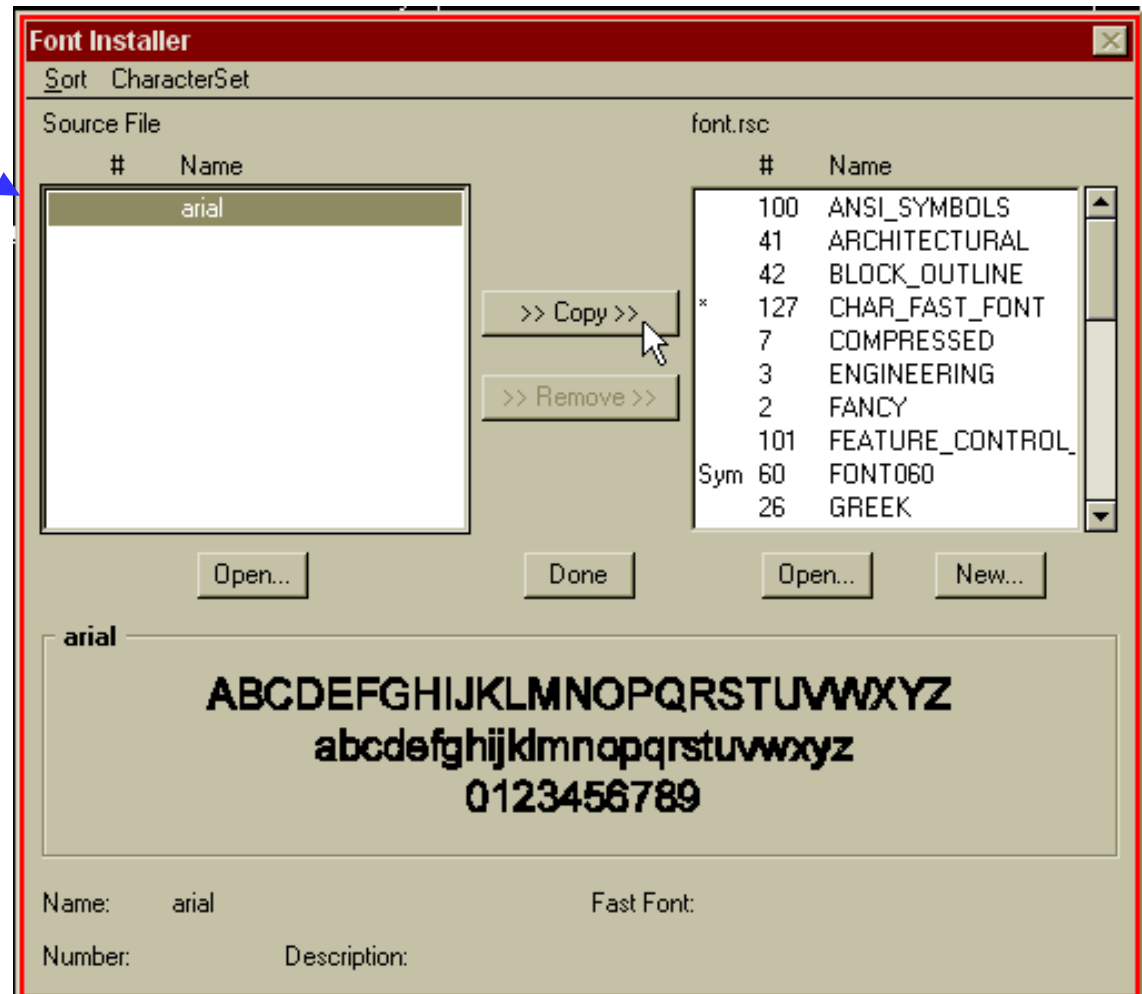
9. Then click the **Done** box

8. Then click the **Add** box to add the file to the File List panel

Font selection steps for MicroStation - contd.

10. This action causes the font **arial** to appear in the left hand panel as shown here

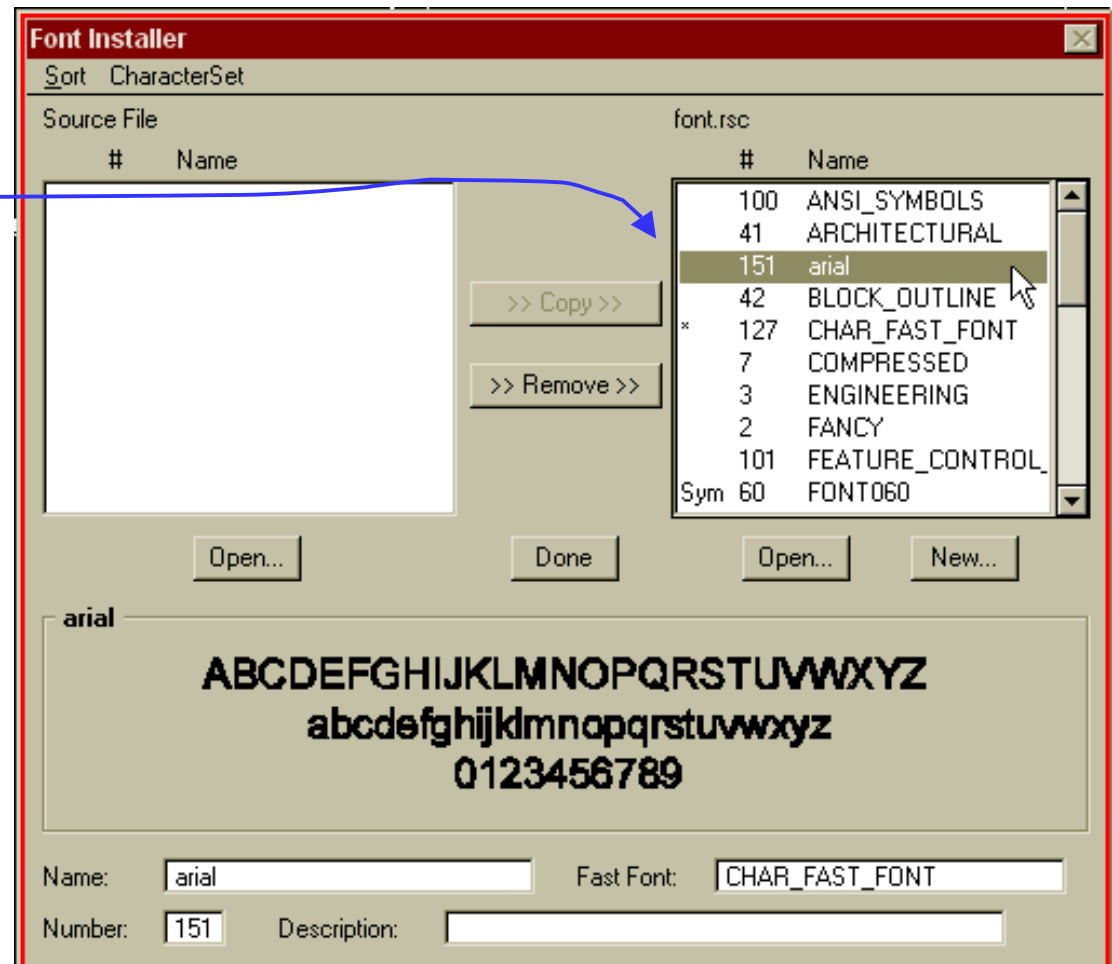
To copy the font name over to the right hand panel - click on it to select it - then click the **>>Copy>>** button



Font selection steps for MicroStation - contd.

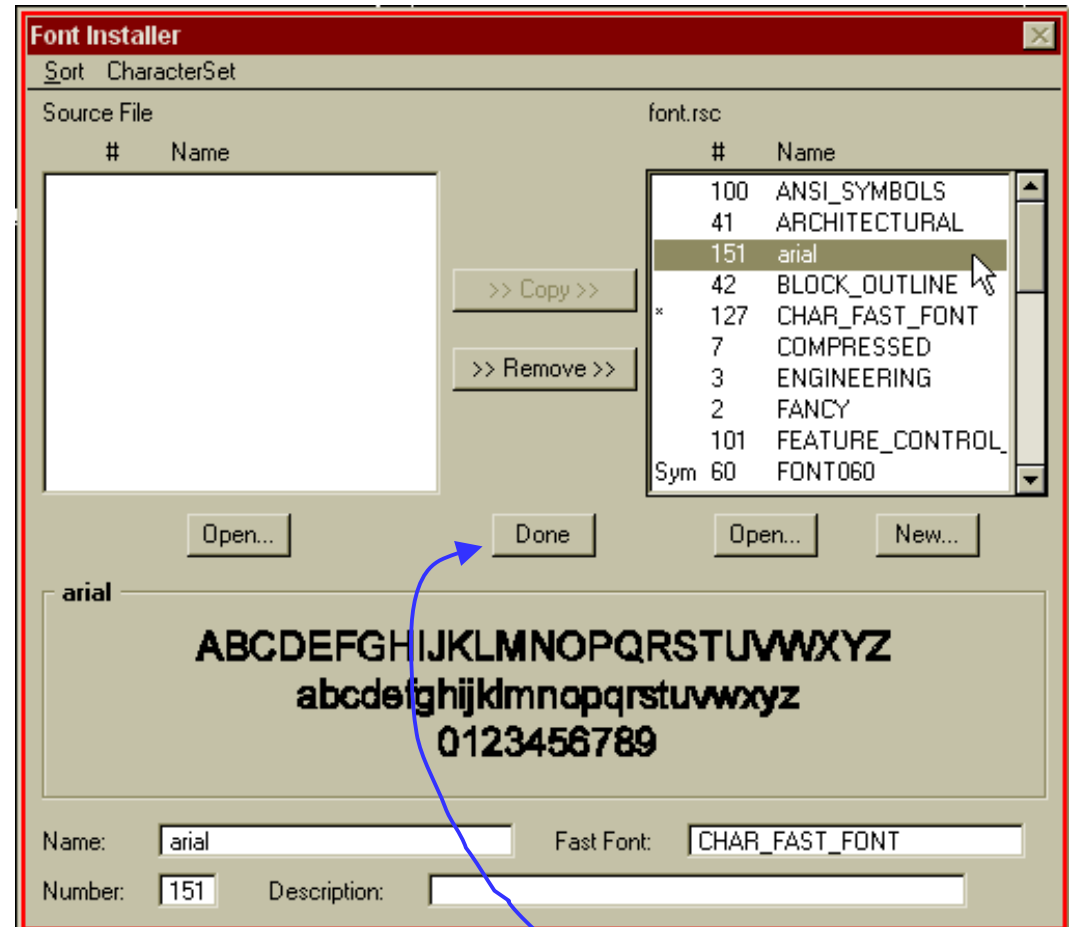
11. This action causes the font **arial** to be copied into the font file **font.rsc** where it can be seen in the updated panel on the right hand side as indicated here

Because the **arial** font is Microstation font number 151 in the ISOGEN font file Fontstd.fif - this font number also needs to be set at 151 in Microstation as shown here



Font selection steps for MicroStation - contd.

12. If the number allocated to the added font by Microstation is not 151 then it must be changed by first selecting the font in the panel to highlight it - and then changing the font number to 151 in this box.



13. Finally, click on the **Done** box to finish the operation

Explanatory Note.

There is a fundamental difference between the way AutoCAD and MicroStation store fonts

AutoCAD stores them in each isometric backing sheet whereas in MicroStation they are stored globally in a font file (e.g. font.rsc) and automatically become available in every MicroStation session