



Deciding upon Barcode ID formats

When determining how to set up your project's barcode identifiers for Employee IDs, Location IDs or Asset/Tool/Inventory IDs, the decision first needs to be made as to what "Type" and what "Symbology" or "Language" of barcode will be used. Some industries specify what *symbologies* are to be used in those industries; some businesses have standardized on the *symbology* used in their business.

"Type" typically refers to whether or not the barcode is "linear" or "2D". The "Type" will affect the kind of barcode scanner can be used to decode it. Typically, a *linear scanner or imager* will decode *linear barcode*; while a *2D area imager* will decode both 2D **and** linear barcode.

"Symbology" could also be referred to as the "language" of barcode. This is evident in the display patterns (linear, stacked, seemingly 'random' patterns of dots and dashed, etc.) of the barcodes. It is what specifies and determines what embedded information options (alphanumeric, alpha only, characters, numeric) are available. There are varieties of 'symbologies' much as there are of languages; codes such as Code39, 128, QR code, Data Matrix, or some hybrid form, etc.

GigaTrak applications currently support both "linear" and "2D" barcode types, and, depending upon the product, the following 'symbologies: Code3of9, 128, 128 alphanumeric, DataMatrix and QR.

When designing/printing your own barcode labels, the following guidelines should be followed:

- Use of alpha characters, lower or upper case
- Use of numeric characters (numbers 0 through 9)
- Use of certain other characters: a Space
- a Hyphen
- a Period

Other characters, such as those indicated below, must be avoided. They translate to character combinations, that, when scanned with a barcode scanner, will not provide an accurate barcode ID translation:

For Example..... using Code 3of9 for the 'characters':

<u>Char</u>	<u>Decoded Result</u>
_	scanned/translates to %O; so, barcode SO25_Bin32 will actually translate to SO25%OBin32 , and this resulting decoding of the barcode will not match the actual barcode for that item, person or location set up in your system.
=	scanned/translates to %H
:	scanned/translates to /Z
;	scanned /translates to %/F



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! scanned/translates to /A
@ scanned/translates to %V
scanned/translates to /C
\$ scanned/translates to /D

% scanned/translates to /E
^ scanned/translates to %M
& scanned/translates to /F/F
* scanned/translates to /J

(scanned/translates to /H
) scanned/translates to /I
_ scanned/translates to %O
+ scanned/translates to /K

- scanned/translates to -
= scanned/translates to %H
: scanned/translates to /Z
; scanned/translates to %F

“ scanned/translates to /B
' scanned/translates to /G
, scanned/translates to /L
. scanned/translates to .

Space scanned/translates to space
? scanned/translates to %J
/ scanned/translates to /O
\ scanned/translates to %L