



Tips for Understanding UID

No doubt about it, UID can be very confusing, especially when you don't deal with it every day. It's with this idea in mind that we bring to you UID tips designed to simplify some of the issues that may come up when dealing with UID.

Tip #1 2D doesn't always equal UID, but UID always equals 2D

If this statement sounds confusing to you - don't worry, you are not alone. Understanding the relationship between the 2D bar code and UID is an important step in becoming more comfortable with UID as a whole. A two dimensional (2D) DataMatrix bar code is simply another bar code symbology just like Code 39 or Code 128, etc. Companies may choose to use this symbology when they have large amounts of data they want to incorporate into the bar code or they have a small space in which to put the mark. Consequently, a 2D bar code doesn't always equal a UID. On the other hand, the DoD Guide to Uniquely Identifying Item specifies the use of the 2D bar code as their symbology of choice regardless of the information contained within the bar code - so the 2D bar code essentially is the UID.



Tip #2 Construct 1 vs. Construct 2

OK, you have a choice - do you want to use Construct 1 or Construct 2 for your UID tags? The differences between these two are pretty easy to identify. It all has to do with the elements used to construct the UID and how they are serialized within that construct. Let's start with the similarities first. Both Constructs contain the EID (Enterprise Identifier). Common EIDs are Cage Code and DUNS Number. Both Constructs also contain a serial number. For Construct 1 that's it - Enterprise Identifier and serial number. For Construct 2 there is an additional element - the original part number. Basically it just adds an additional level of serialization; instead of being serialized within the Enterprise ID (like Construct 1), UIDs using Construct 2 are serialized within the original part number. That's it - pretty simple, right? Opinions differ as to which one is best so it's best to examine which one works better in your specific situation.

Tip #3 Validation vs. Verification

All UIDs should be both validated and verified. Easy to say, right? But what exactly does that mean? Is there a difference? What comes first? These two concepts sound very similar, but in actuality, mean very different things. Validation refers to the elements contained within the 2D bar code for UID. For example, are the correct data identifiers used (i.e., 17V, CAG, etc.)? Do the separate elements have the correct number of characters (i.e., Cage Code)? Are there any illegal characters being used? Validation occurs when the UID is constructed or concatenated and special software (i.e. A2B's UID Comply) must be used in order to "validate" the information.

Verification, on the other hand, refers to the quality of the actual 2D symbol. Does it even read? Does the 2D bar code meet the required print standards for the respective type of marking (i.e., labels, nameplates, DPM)? Regardless of whether the bar code contains UID information or not, the bar code should be verified to ensure the information can be read.

Remember - you must also register your UIDs to be totally UID compliant. Read below for details.