The following coding protocol is a system for coding and describing products, which can be applied to any database regardless of its type.

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Introduction

How we code our databases will determine how effectively our computerized systems operate. A poorly thought out coding system will result in a sub-optimization of the performance of the database and increased administration costs associated with its use. The following coding protocol is a system for coding and describing products, which can be applied to any database regardless of its type. It is designed to reduce the time and administration in processing purchase and sales orders and will reduce the non-value adding cost of placing orders and processing invoices i.e. the time wasted searching for database entries.

The coding protocol also offers the opportunity to import supplier database tables directly into the purchase order database rather than creating or amending product entries via the user interface method which is very time consuming, by following the same system of coding we can be assured that the imported products will find their way to the correct place in the database. This makes the database more flexible and enables the purchaser to quickly change suppliers and have instantaneous access to the database to raise orders to that supplier.

Product Description

The coding protocol is not a set of product codes in itself but a complete set of instructions to be followed when coding and describing products. The protocol sets out a framework that ensures consistency and guarantees information is presented in an orderly fashion resulting in less wasted time searching the database for the required product and wasted time comparing information due to uncertainty. The product coding protocol is description driven and begins with describing products in the following way.

Essential Product / Product Type / Options/Finish or Colour etc / Size/Quantity per pack etc

Essential Product

The Essential Product is the word or words in the description that describe the product or product range in the broadest sense. This will be the umbrella brand if the brand name forms the description or the category that the product belongs to.

Product Type

This is the specific type of product. This will be the brand name if the brand name forms the description or the name that distinguishes products within the category.

Options

Is the distinguishing characteristic of a product. This will be the model number if brand names are to be used. This again further distinguishes products within the preceding category.

Finish or Colour

We then detail any coatings or aesthetic attributes specific to the product entry.

Size

We then detail the dimensions using the industry standard for the product being described.

Quantity per Unit

Finally we identify the quantity per unit. ie.
WOODSCREW BZP POZI 4.5 x 80mm 200/box
PLYWOOD SHEATHING B/BB 18 x 1220 x 2440mm

It may be the case that a product will have all the attributes listed above, or the product may have several options or distinguishing characteristics. If a product has several distinguishing characteristics then it is important to arrange these characteristics in an order that will result in items of similar nature being grouped together in the database, this will become clearer when we talk about coding.

The description must also be in accordance with the following rules, which are designed to ensure that when a user looks at a description the information they will be quickly interpreted due to the order and presentation of the text.

a. The description must be in capital letters, except for supplementary information ie. quantity per box.
b. No abbreviations must be used describing the essential product or type unless they are the accepted description in the trade.
c. Only acceptable abbreviations must be used. See below
d. All measurements must use the International System of Units.
e. When detailing dimensions leave a space before the “x” sign i.e. 50 x 50mm.
f. The “x” sign must be in lower case.
g. The dimension begins with the thickness then the width and then the length or height.
h. The unit of measurement must immediately follow the measurement i.e. 25kg not 25 kg.
i. Quantities per unit should be written as follows. 100/box.
j. The use of the (no.) abbreviation in the unit field should only be used where a unit of measurement is not applicable and should only be used to describe individual items.
k. The “@” sign should be used when describing products length, ie.
   LINTOL PRESTRESSED CONCRETE 75 x 100mm @ 1500mm long

Abbreviations

Abbreviations used in the description must be in line with the recognized standard for units of measurement abbreviations, some of which are listed below.

A   Ampere
A.C. Alternating current
C   Centigrade
c.c. Cubic centimetre
c.g.s. Centimetre/gram/second
cl  Centilitre
cm  Centimetre
eV  Electron volt
fl  Fluid
gm  Gram
hr  Hour
hrs Hours
kc  Kilicycle, kilocycles
kg  Kilogram, kilograms
kHz  Kilohertz
kJ  Kilojoule
km  Kilometres
Once the product description has been established the product code can then be created. The importance of describing the product correctly should become clearer at this stage. The product code is created in the following way.

**AAABBB000000**

**AAA** = The first three letter of essential product

**BBB** = The first three letter of product type

**000000** = Number used to ensure product types which have different characteristics or sizes are placed in the database in a logical fashion.

The six letters that make up the first part of the code will be easy to determine. However the numerical part of the code will require some thought and will be governed by the type of product being coded ie. if all that differentiates the products is size then it will be a simple case of coding the product so that sizes run from smallest to largest. However if the products are further broken down into different types as well as size it will be necessary to use the first one or two numbers to ensure that all products of the same type are grouped together in the database. When operatives use the database they will usually key in the first few letters of the code then scroll down to the required product, this being much faster than attempting to key in the whole code correctly. So the important thing is that products are grouped in a logical fashion and sizes run from smallest to largest. ie.

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SCRRA145075 WOODSCREW BRASS SLOTTED 4.5 x 75mm 200/box
SCRRA145100 WOODSCREW BRASS SLOTTED 4.5 x 100mm 200/box
SCRZP045075 WOODSCREW BZP POZI 4.5 x 75mm 200/box
SCRZP045100 WOODSCREW BZP POZI 4.5 x 100mm 200/box
SCRZP145075 WOODSCREW BZP SLOTTED 4.5 x 75mm 200/box
SCRZP145100 WOODSCREW BZP SLOTTED 4.5 x 100mm 200/box
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Here the first numerical digit identifies the type of screw head i.e. 0 = POZI and 1 = SLOTTED, then the rest of the code ensures that sizes run from smallest to largest. The important factor is that products are coded in line with the description and products are described in such a way that when they are coded, similar products will be grouped together in the database. The code must also be in accordance with the following rules.

a. Alpha character must not be used in the numeric part of the code
b. Numeric characters must not be used in the alpha part of the code unless they form part of the trade name for the product.
c. Enough scope must be left for inserting future product sizes.
d. Products which come in only one size must be coded with the numerical section as 005000.
e. Products in a range of sizes must be coded such that sizes run from smallest to largest.