

## Part & Document Numbering Principles

### Scope

This paper contains my personal recommendations for creating of part and document numbering schemes.

### Recommendations

Numbers (in CM sense) are used for identification and for classification. In the past part and document numbers often have had identifying and classifying function in common. And so they often have up today ... Don't do so!

If you are free to create a new numbering scheme and if you have an PDM database to maintain all your parts and documents be happy and use the following principles:

1. Use each database field for storing of only one information. (Or: Store each singular information into another database field.) Avoid redundancy of data.
2. Incorporate no or only minimal significance into an identifying number. The best ID number is a non-significant sequential number.
3. Classification numbers may have significance, but remember that each significant numbering scheme may (or will?) collapse in future. Significant numbers should have enough "free space" for future.
4. Parts are identified by the unique part number.
5. Never code into the part number (part ID number):
  - classification information,
  - status or revision information,
  - sourcing or manufacturing methods,
  - project related (where used) information,
  - or any other temporary information.
6. My preferred part number format is Yxxxxxx[-zz] where
  - Y = a defined constant numeral > 0 to show that it is a part number (the only one significance) and to force constant length of part number avoiding leading zeroes,
  - xxxxxx = a sequential number
  - zz = an optional suffix (often called dash number or tab number) for parts on multi part drawings:
    - opposite parts: Left: -01, Right: -02
    - bulk items: f.e. cable assemblies: 1m: -01; 1.5m: -02
    - Options, features: red: -01; blue: -02(The drawing number always is Yxxxxxx. This technique saves drawing expense.)
7. Documents are identified by the unique combination of **Doc type + Doc Number + Revision**.
8. Each document type may have its own independent document number range. Doc Numbers can be doubled, the combination per par. 7 not. If you don't do so, you need a central organization assigning document numbers. IMHO it is better to let the sub-organizations/departments control the numbers of their own specific doc types by them self, according to rules stated by CM.
9. Strictly part specific documents - like drawings - should get the part number or part of the part number as document number (see par. 6).

10. All other document types get a non-significant number as document number. Separate sub-documents can get the main document number plus an additional dash or suffix number.

11. Use letters as revision indicators for documents. Revision letters can be better distinguished from part and document numbers than numeric revision indicators. Count revision letters like columns in MS Excel: A, B ... Z, AA, AB ... AZ, BA ...

The first (initial) revision gets the revision letter A.

12. Never code status information into the revision indicator. The document revision is just the counter of released document versions.

13. Releasing a document means providing or passing on the document for use. A document is considered released just by providing it or passing it on to someone for use/for application, regardless of whether it is marked „Released“ or not.

12. Link part related documents to all related parts using functionality of your PDM system.