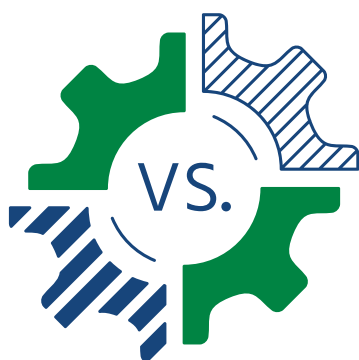


Revision

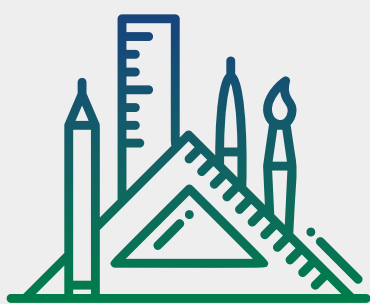


New Part Number

The F3 Rule Guides Manufacturers to a Decision

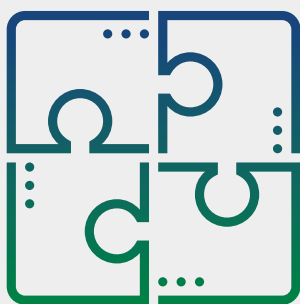
Design and engineering changes are a fact of life for manufacturers, but individual organizations deal with them differently. The rules, however, can get a little hazy when it comes to deciding whether to implement a **DRAWING REVISION** or create a **NEW PART NUMBER**.

A widely accepted best practice relies on the “Form, Fit, and Function” (F3) rule.



Form

refers to the part's dimensions, shape, weight, size, material, and visual appearance



Fit

is the part's ability to interface with, connect to, or join with other features of the assembly



Function

encompasses how the part is designed to perform within the assembly

If the change affects the form, fit, or function of the part, the organization should create a new part number. If not, a revision will suffice.

Consider
creating a new
PART NUMBER
if you're:

- Adding a new lever/switch/button, etc.
- Replacing heat shrink with overmolded components
- Removing, changing, or adding a function of the assembly
- Changing component materials (e.g. switching from metal to plastic, or from steel to aluminum)
- Changing a color that affects the overall aesthetics

Consider
implementing a
REVISION
if you're:

- Clarifying something on the drawing
- Adding an extra mounting hole
- Inserting drawing notes
- Updating dimensions if the drawing is incorrect
- Adding a new view on the drawing
- Making a minor color change (e.g. the manufacturer changes the color of a connector but it still functions the same)



If the design/drawing changes before the product is manufactured, you don't need to do a revision or create a new part number.



If the drawing has been shared with anyone, it needs to be updated pursuant to your organization's process.

Changes happen, and the F3 rule is a good guide when deciding on a drawing revision or a new part number. However, when you need in-depth manufacturing and engineering expertise, [CONNECT WITH MCL](#) for a consultation.

sales@mcl.bz
866-822-4100

