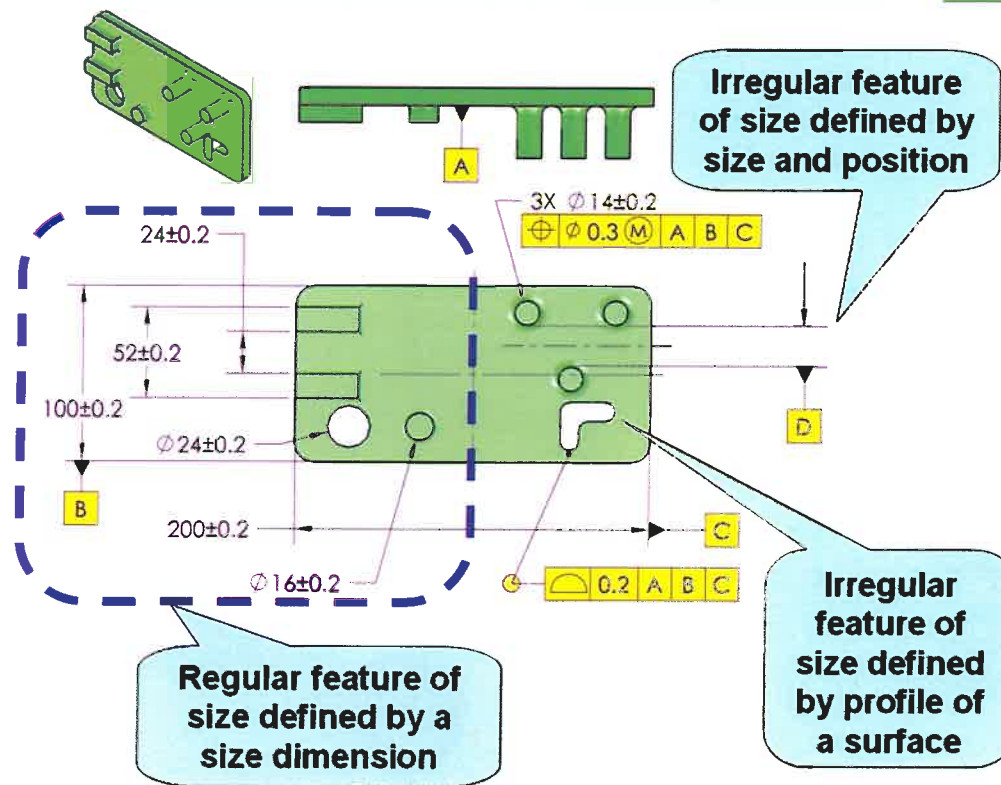
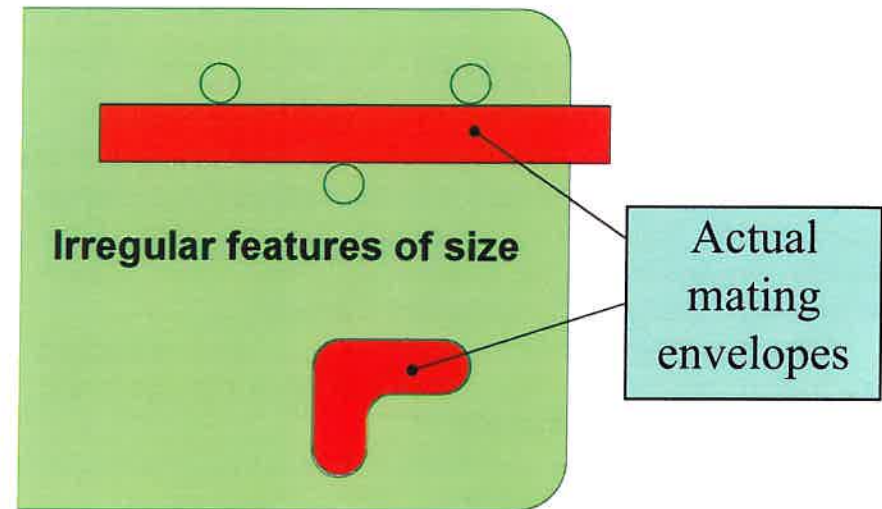


## Irregular Features of Size

The irregular features of size have some but not all of the attributes of a regular feature of size. Irregular features of size do not rely on Rule #1 to define the meaning of size. The feature's size might be controlled by profile of a surface or a combination of size and position. Also, some irregular features of size do not have a clearly defined or reproducible center, axis or center plane.

**Irregular features of size are features or collections of features that may either contain or be contained by an actual mating envelope.** If the irregular feature actual mating envelope is a sphere, cylinder or pair of parallel planes, a center, axis or center plane respectively will be obvious.



**This new category of features of size greatly enhances the application of datums and geometric tolerances by:**

- Better defining the application of Rule #1
- Expanding the types of features that may have geometric tolerances which are modified at MMC or LMC
- Clarifying the features that may establish a datum center point, axis or center plane.

The Standard offers many options of how to tolerance a part. It nearly always depends on how the part will be used or what the intended function of the part is. This is referred to as **design intent**. All of these features have surfaces. They all could have been toleranced using profile of a surface. The best approach to dimensioning and tolerancing should be driven by the design intent. It is necessary to assure that parts can be economically produced and inspected but the bottom line is that the parts must satisfy design intent. If the parts do not work, there is no point in making them.