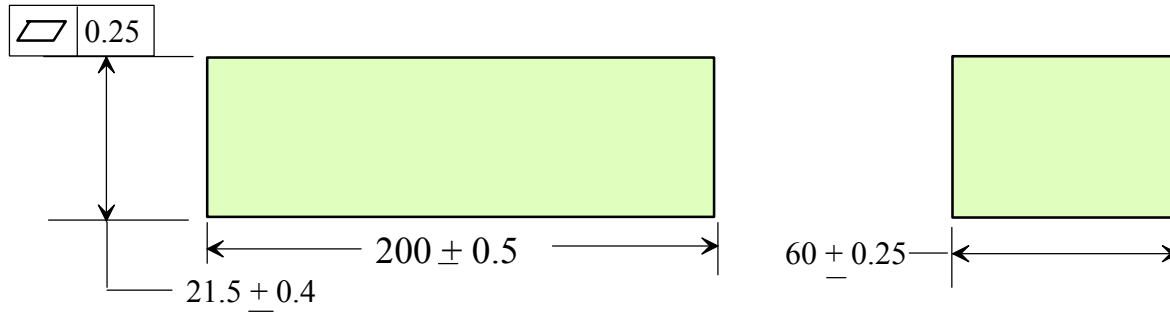


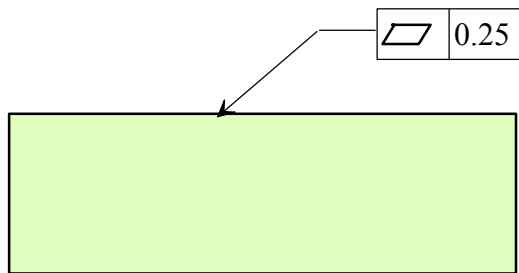
Geometrical Dimensioning & Tolerancing

Flatness

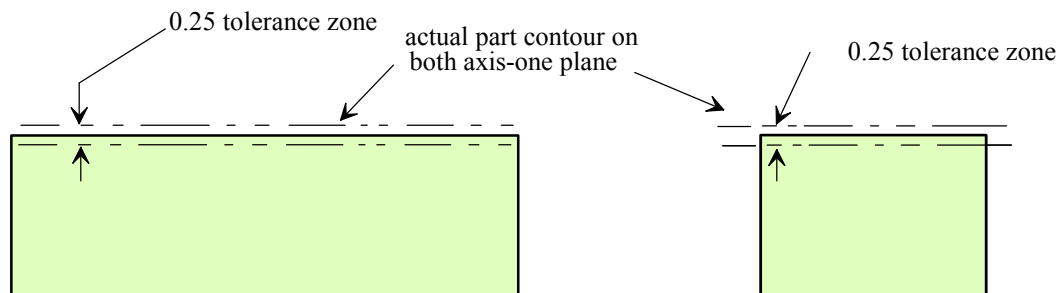


Flatness is applied to a single uninterrupted plane and is a component of the height tolerance range in this situation..

Flatness must be shown on the drawing directly onto the surface by the use of an extension line or leader line.



Means

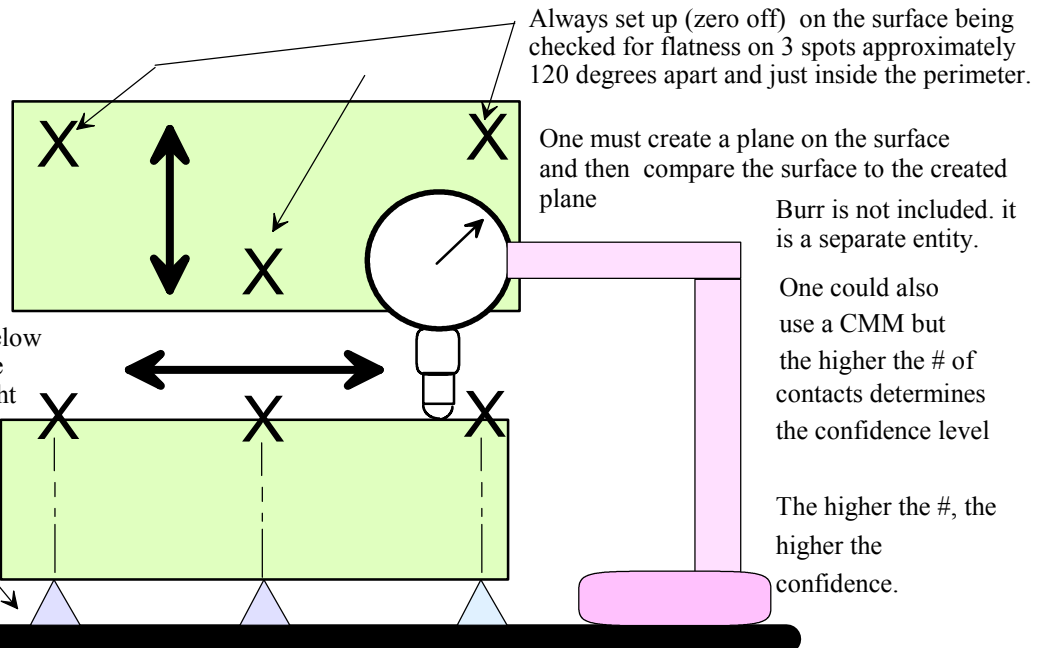


Once the part is zeroed off, sweep the surface with the dial indicator.

The actual flatness is the TIR (total indicator reading) or FIM (full indicator movement)

Use 3 adjustable jacks just below the set up spots. Adjust so the set up spots are of equal height from the granite table.

High volume - one could have a variable checking fixture located on 3 points - dial indicators at various spots.



Always set up (zero off) on the surface being checked for flatness on 3 spots approximately 120 degrees apart and just inside the perimeter.

One must create a plane on the surface and then compare the surface to the created plane

Burr is not included. it is a separate entity.

One could also use a CMM but the higher the # of contacts determines the confidence level

The higher the #, the higher the confidence.