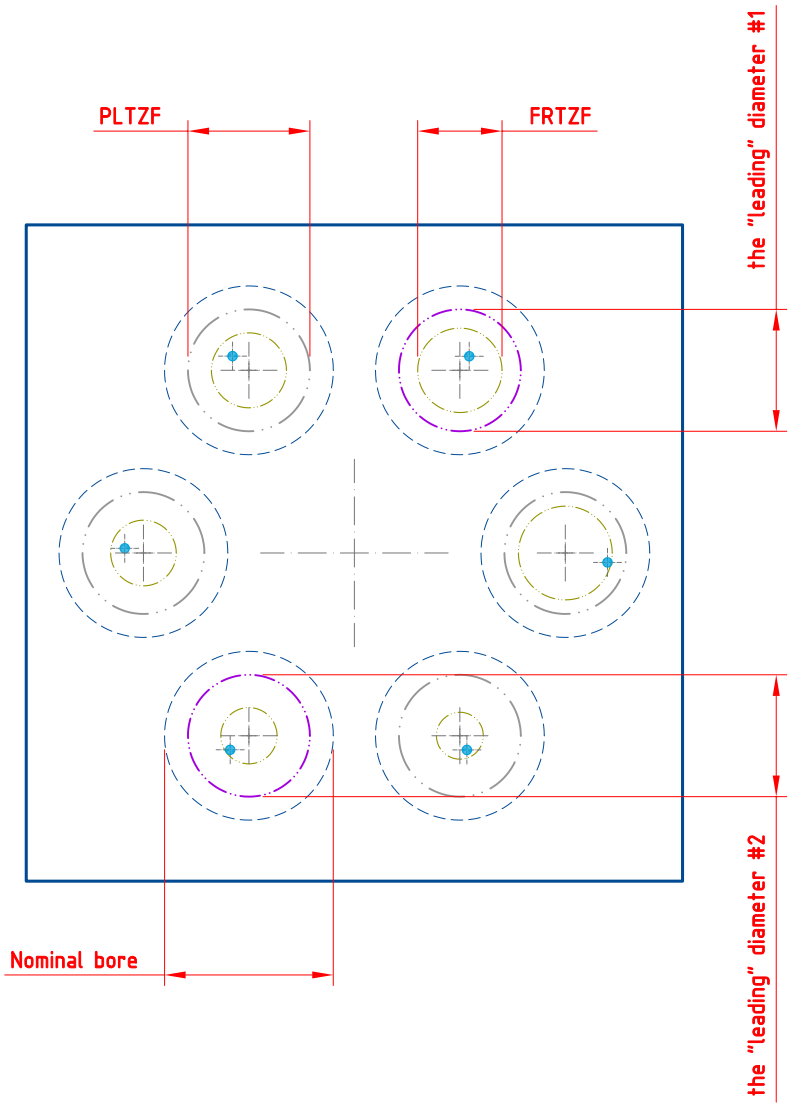
The Pattern Locating Tolerance Zone Framework

Pic. #1

To realize the idea of "PLTZF" you need
only two of the six circular zones.

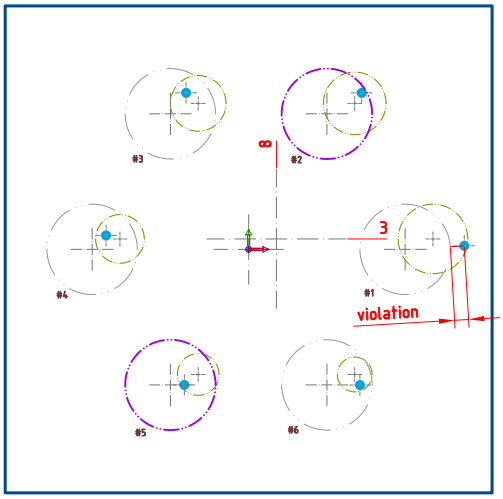


The Pattern Locating Tolerance Zone Framework

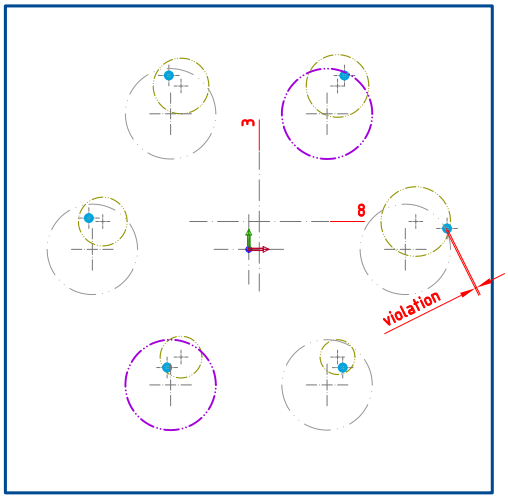
Pic. #2

Translation of FRTZF – not violating the limits of zone #2 and #5
The limits of #1 ; #3 ; #4 ; #6 not regarded

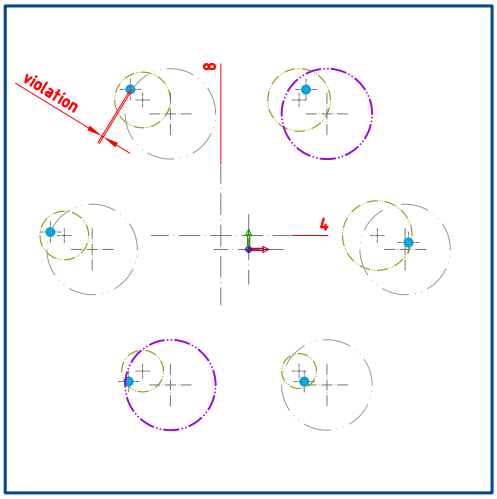
Translation X=8.0000 Translation Y=3.0000



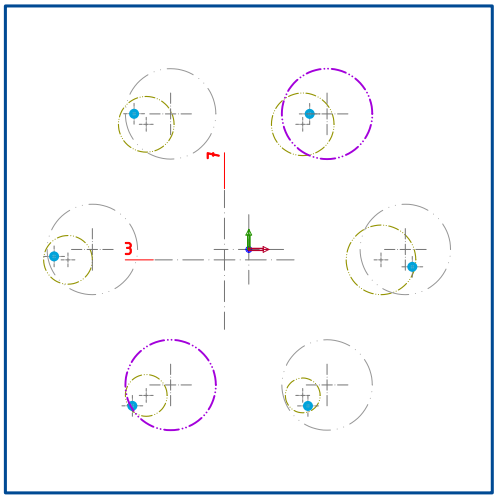
Translation X=3.0000 Translation Y=8.0000



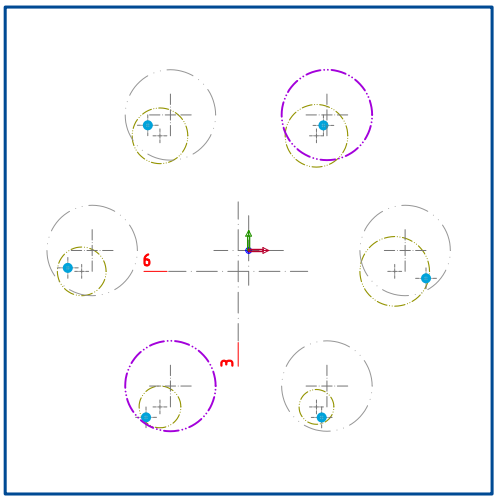
Translation X=-8.0000 Translation Y=4.0000



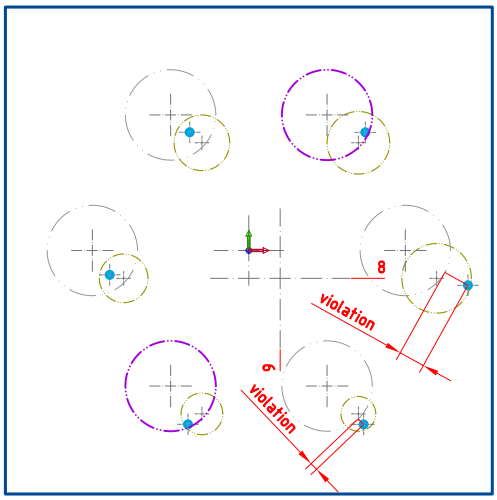
Translation X=-7.0000 Translation Y=-3.0000



Translation X=-3.0000 Translation Y=-6.0000



Translation X=9.0000 Translation Y=-8.0000

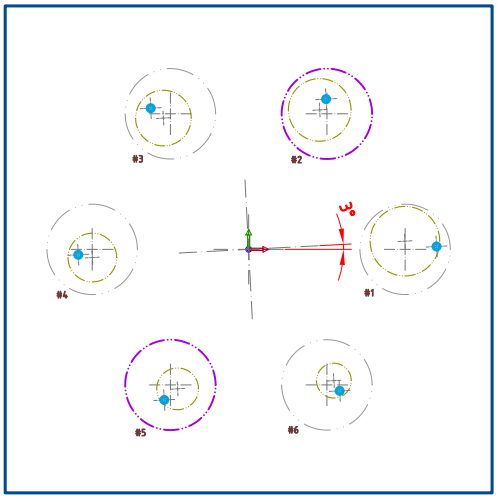


The Pattern Locating Tolerance Zone Framework

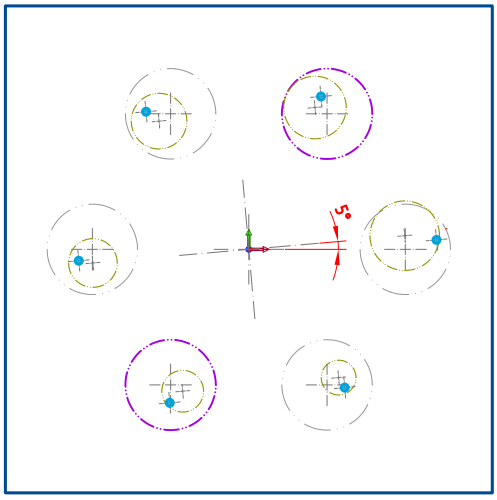
Pic. #3

Rotation of FRTZF – not violating the limits of zone #2 and #5
The limits of #1 ; #3 ; #4 ; #6 not regarded

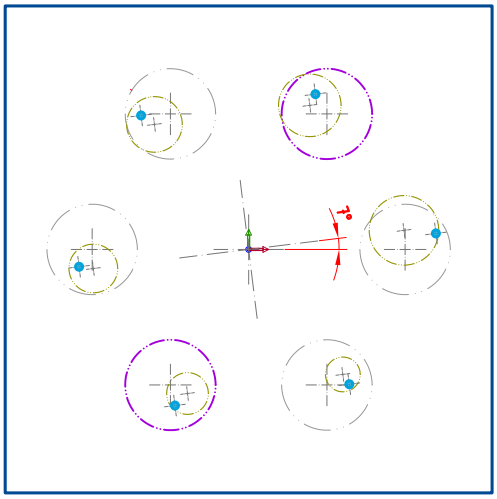
Rotation A=3.0000°



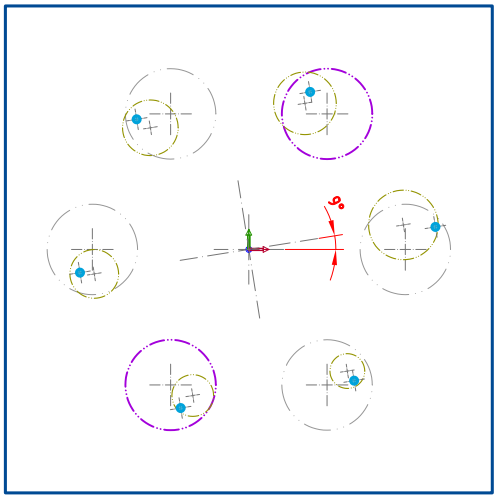
Rotation A=5.0000°



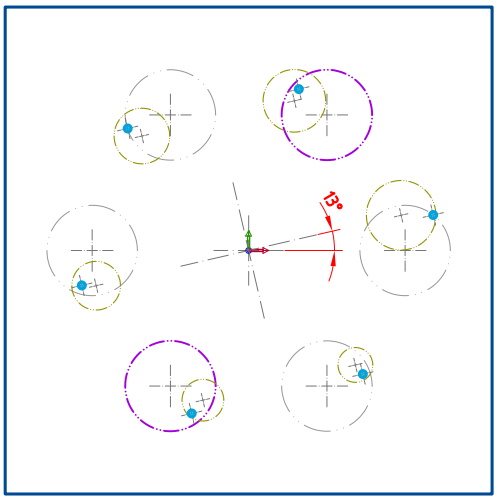
Rotation A=7.0000°



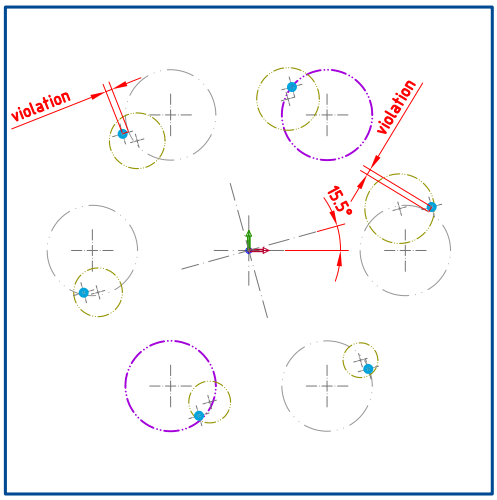
Rotation A=9.0000°



Rotation A=13.0000°



Rotation A=15.5000°



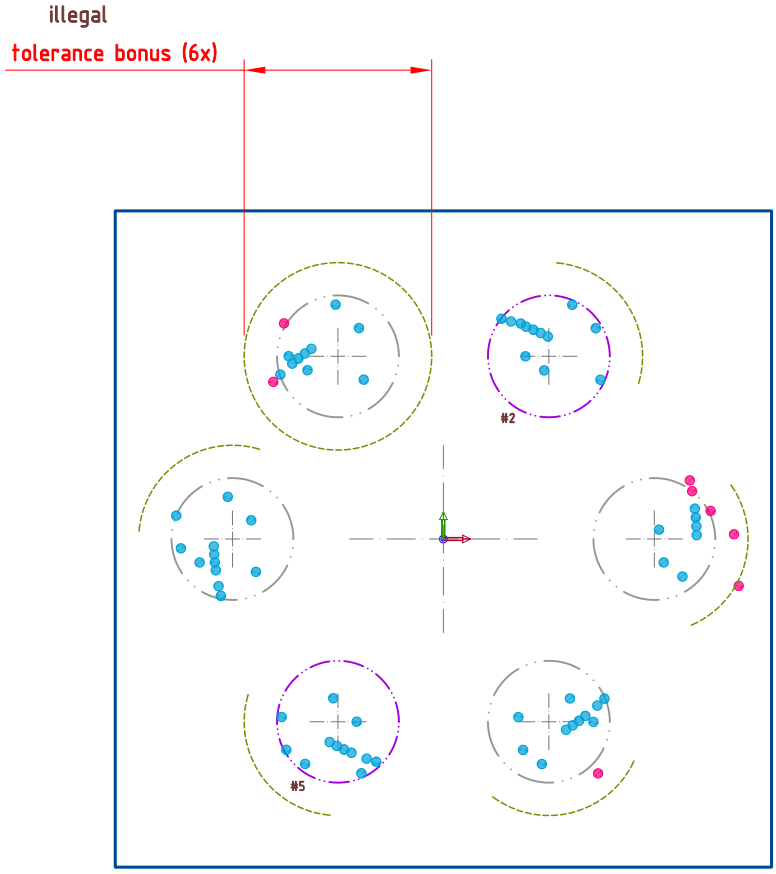
The Pattern Locating Tolerance Zone Framework

Pic. #4

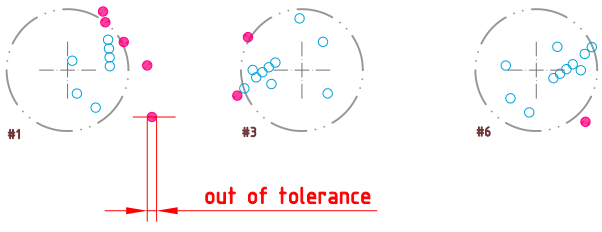
Twelve actual patterns in one tolerance pattern

within tolerance

out of tolerance



The parts "out of tolerance" don't have to be rejected, since the bore-locations don't have any impact upon the mating ability of further parts #2 and #3.
It's important to avoid any unnecessary rejections.

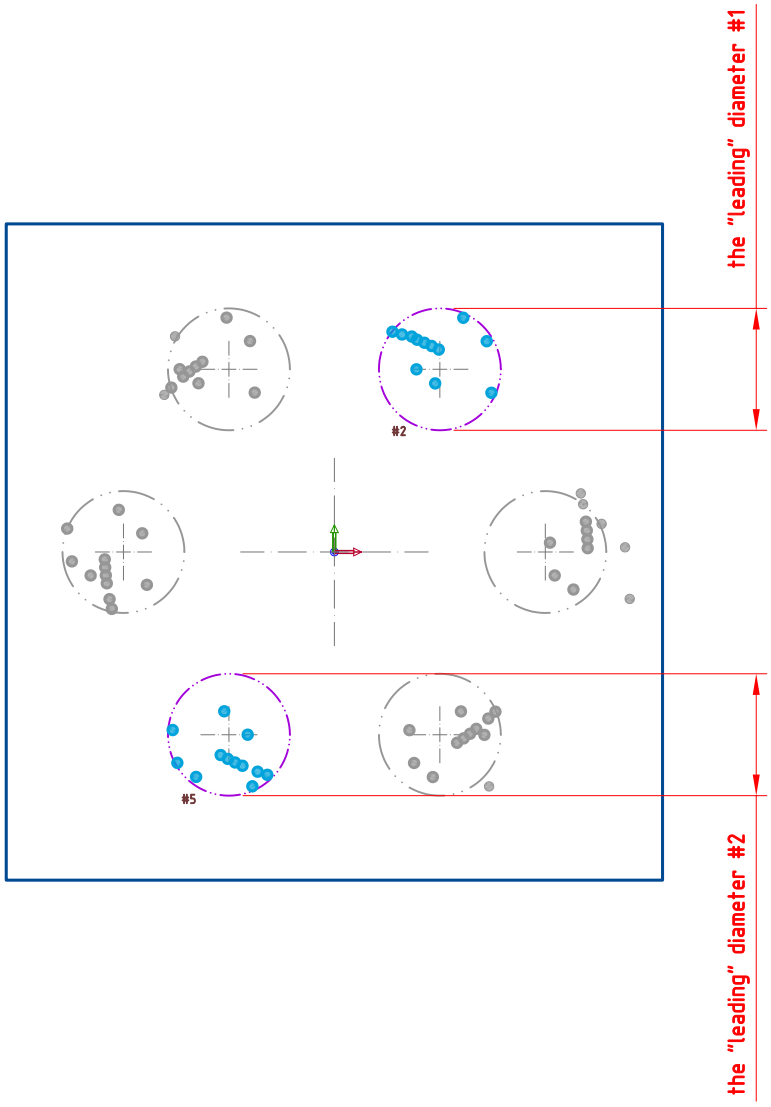


The Pattern Locating Tolerance Zone Framework

Pic. #5

The two "leading" features
All actual bores are located within the
tolerance zone of bore #2 and #5

This is a kind of "reduced PLTZF"



The Pattern Locating Tolerance Zone Framework

Pic. #6

The new dimensioning