

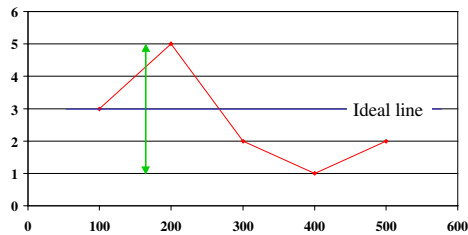
## What is straightness error?

ISO 1101-1983: The straightness or flatness of a single tolerated feature is deemed to be correct when the distance of its individual points from a superimposed surface of ideal geometric form is equal to or less than the tolerance.

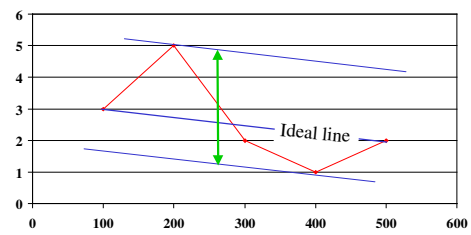
The orientation of the ideal line or surface shall be so chosen so that the maximum distance between it and the actual surface of the feature concerned is the least possible.

In other words: **The total maximum distance between the individual points and an ideal line is the straightness error**

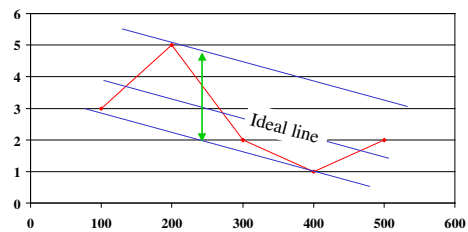
### Straightness error with respect to a horizontal line



### Straightness error with respect to the end-point line



### Straightness error with respect to the least squares line



### Straightness error with respect to the minimum zone line

