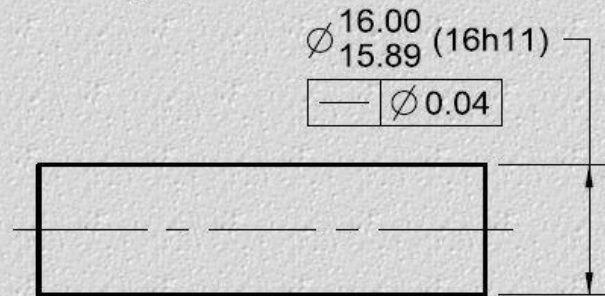


Straightness of an axis

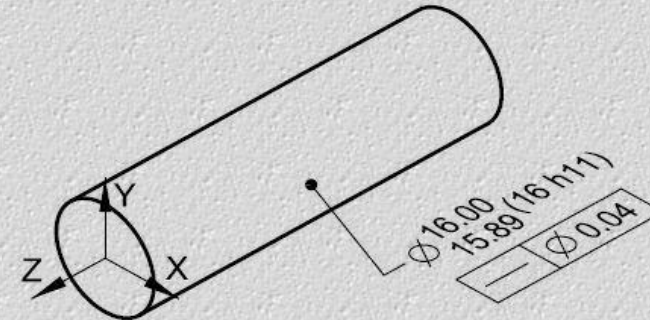
ASME Y14.5 - 2018

Figure 8-3 Specifying Straightness RFS

This on the orthographic view

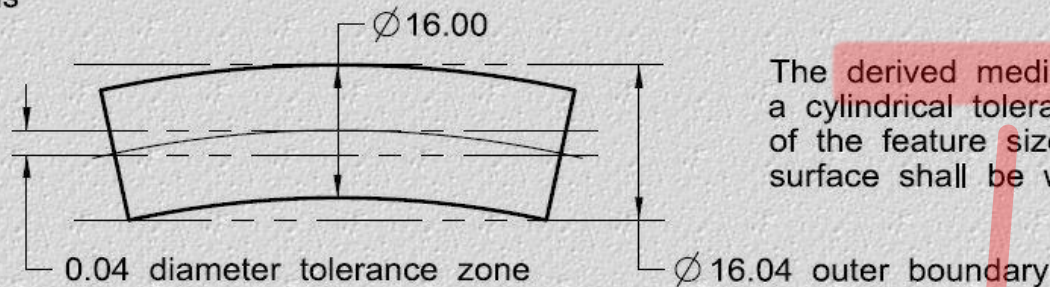


or this on the model



8.4.1.3

Means this



The **derived median line** of the feature shall be within a cylindrical tolerance zone of 0.04 diameter, regardless of the feature size. Each circular element of the surface shall be within the specified limits of size.

3.22 DERIVED MEDIAN LINE

derived median line: an imperfect (abstract) line formed by the center points of all cross sections of the feature. These cross sections are normal (perpendicular) to the axis of the unrelated AME. See [Figure 3-1](#).

Straightness of an axis

ASME Y14.5.1 - 2019

of in ASME Y14.5.1-2019, Chapter 2.3.3.1, "Establishing the local size spine". It states, that a flawed derived median line will be substituted by a smoothed-out derived median line, that will

create sections, you take the one (1) centroid of each section and use those to create an imperfect line, imperfect meaning, that it is a line that can be curved. A little reminder of

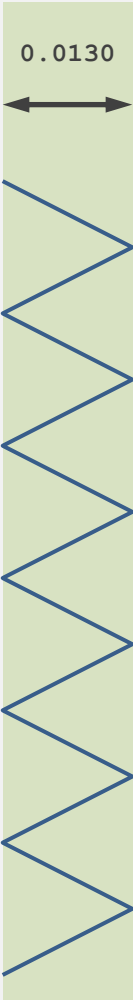
Straightness of an axis

ASME Y14.5 - 2018

a flawed derived median line will be substituted by a smoothed-out derived median line, that will

a flawed derived median line will be substituted by a smoothed-out derived median line, that will

Straightness #1



Flawed line



*Straightness #1 equal to straightness #2.
So, what is the difference between a **flawed line** and a **smoothed line** when it comes to the result of straightness?*

Straightness #2



Smoothed line