

I am evaluating a profile using a FCF and Secondary Alignment and am coming up with drastically different outputs.

Datum C is the back wall of part (pink)
Datum B is the 10.00mm diameter arc
Datum A is the top surface

Using the FCF, Datum C is primary, Datum B secondary, and Datum A tertiary the profile output is .073mm

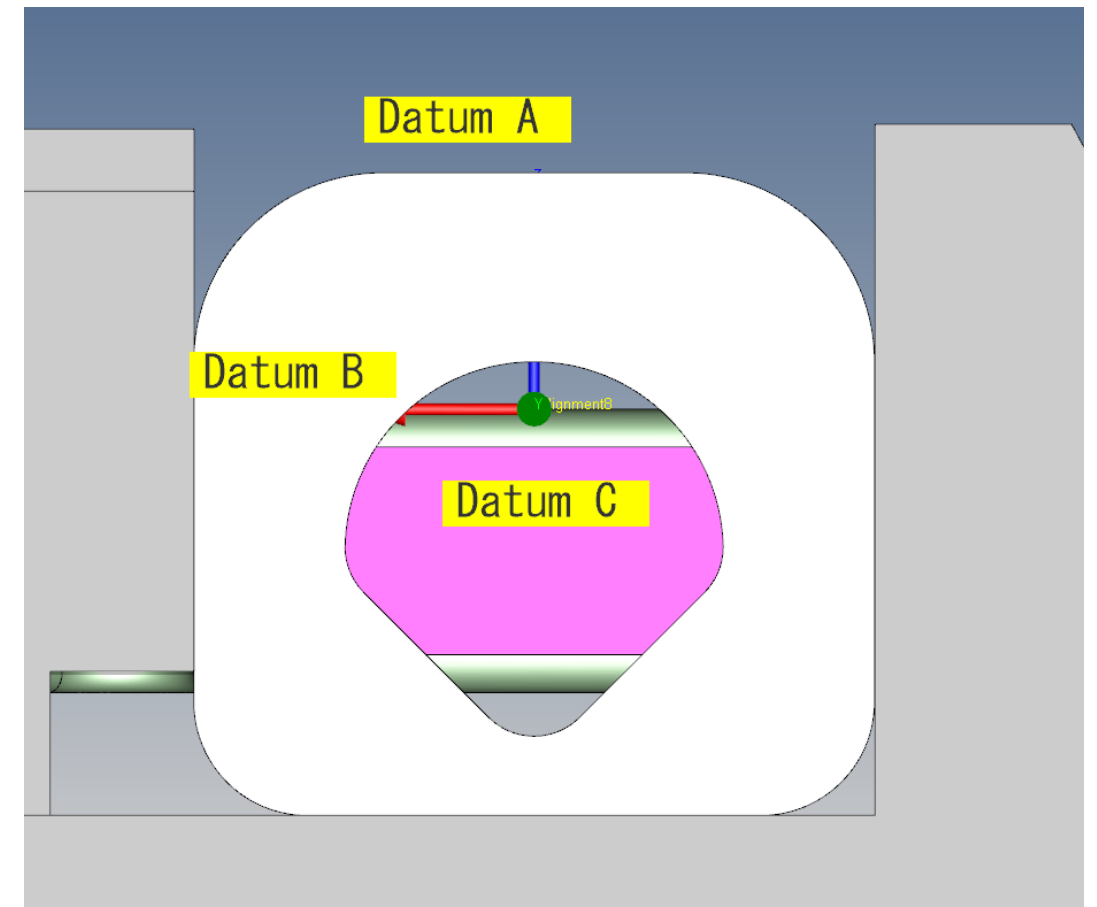
Using the Secondary alignment, using the same datum structure, the output is .165mm

Using the FCF the profile is in tolerance but with the secondary alignment out of tolerance.

In the upper-level drawing the profile is only evaluated to Datum A.

My finding is the use of the secondary alignment represents the true relationship of the profile in respect to its location from Datum A.

My question is why does the FCF seem to disregard the profile relationship to Datum A? This is problematic when trusting the software to do its job.



Line Profile

Dim22.1 Comment

Bilateral - one result Shape Of Zone

0.080000 Tolerance

0.000000 Tolerance (one side)

Feature

3D curve1

Clear Datum Refere Datum Ref. Frame

Primary Datum

C

Secondary Datum [RFS]

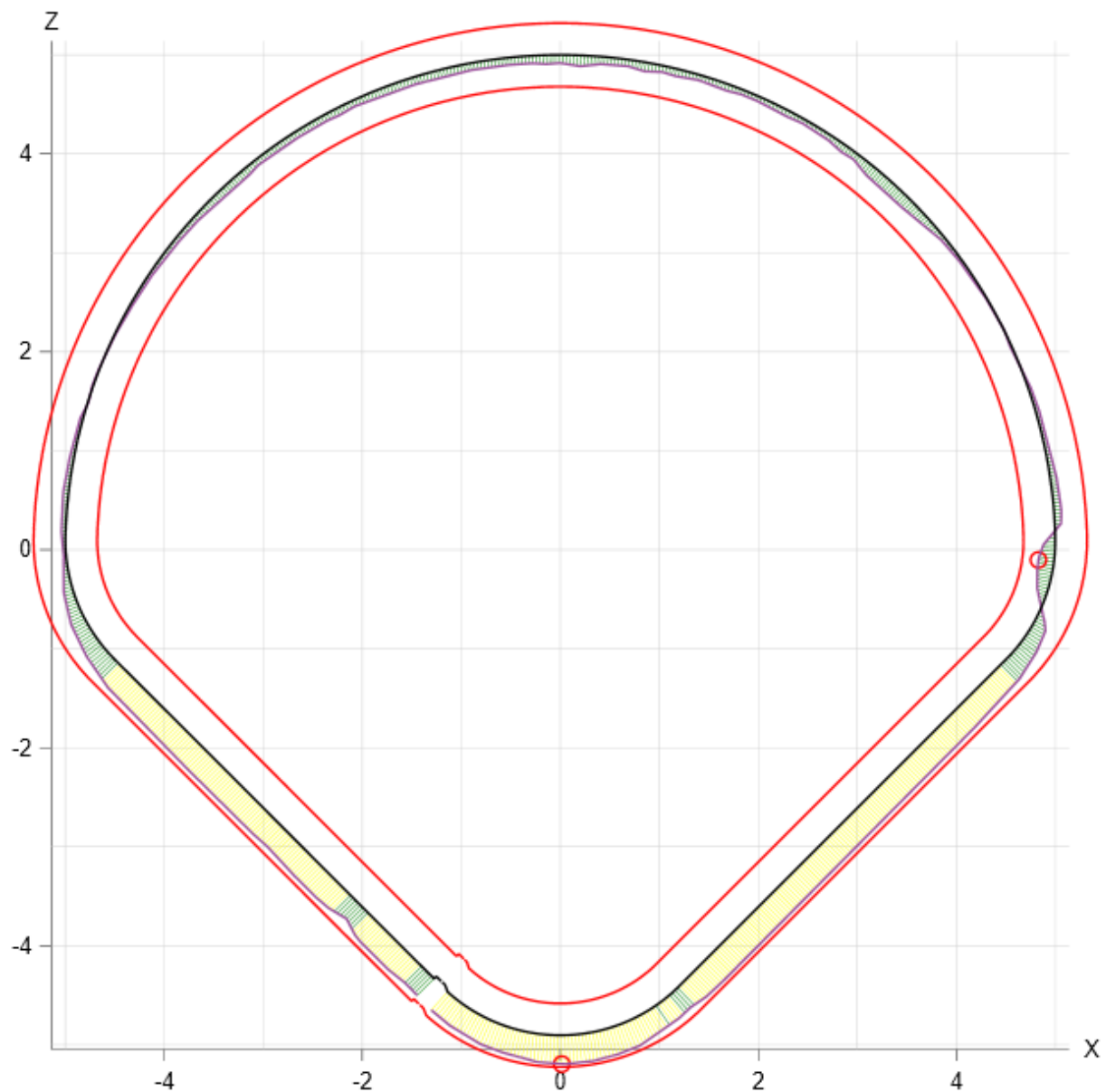
B

Tertiary Datum

A

Actual 0.072811

OK Reset



Measured value	Upper limit Lower limit	Points	Filter type	Lc	Probe radius	v
0.072811	0.080000 0.000000	858	Gauss	0.25 -	1.250260	

Alignment

Alignment8 Special

Base Alignment Comment

Spatial Rotation +Y Axis

C

Planar Rotation +Z Axis

A

X Origin

B

Y Origin

C

Z Origin

A

OK Reset

