PP-FP0156: Z-Top-Plate

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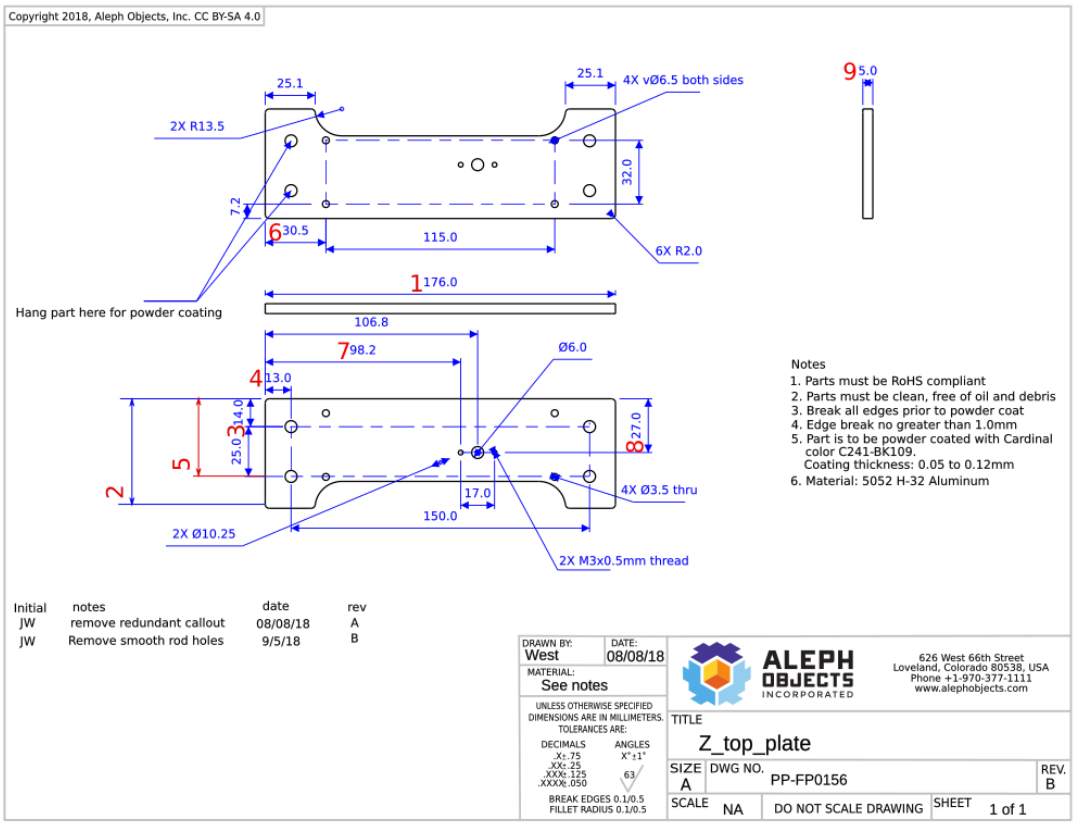

Figure 1: Schematic of PP-FP0156.

1 Dimension 01 & 02

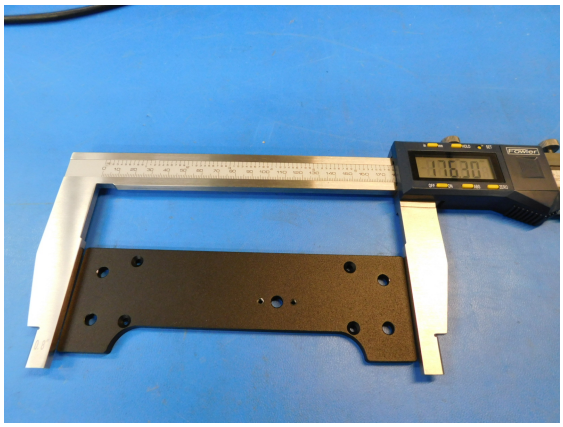

Figure 2: Dimension 01

Using the large set of calipers, we can measure the total length of the part, as shown in Figure [2], to check if its with tolerance to $176.0 \pm 0.75mm$. This puts the upper control limit at $176.75mm$ and the lower control limit at $175.25mm$.

Following the same procedure as above except using a smaller set of calipers we can measure dimension 02 for tolerance compliance to $55.0 \pm 0.75mm$. This creates a upper control limit of $55.75mm$ and a lower control limit of $54.25mm$.

2 Dimension 03, 04, 05, 06, 07, & 08

Figure 3: Dimension 04

Using the back end of a set of calipers and a pin gauge, as seen in Figure [3], we can measure the distance to the edge of the hole. We can subtract the radius of the hole were measuring to from the total dimension to find out if the part is dimensionally accurate.

Dimension	Specification	UCL	LCL
03	$14.0 \pm 0.75mm$	$14.75mm$	$13.25mm$
04	$13.0 \pm 0.75mm$	$13.75mm$	$12.25mm$
05	$29.0 \pm 0.75mm$	$29.75mm$	$28.25mm$
06	$30.5 \pm 0.75mm$	$31.25mm$	$29.75mm$
07	$106.8 \pm 0.75mm$	$106.05mm$	$107.55mm$
08	$27.0 \pm 0.75mm$	$27.75mm$	$26.25mm$

3 Dimension 09

Figure 4: Dimension 09

Using a micrometer we can measure the thickness of the part to check for adherence to written tolerance specifications of $5.0 \pm 0.75mm$, resulting in a upper control limit of $5.75mm$ and a lower control limit of $4.25mm$.