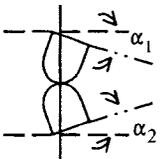
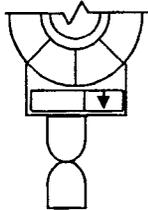
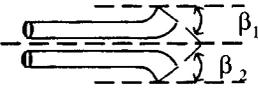
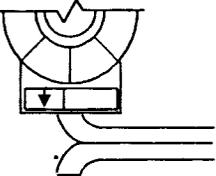
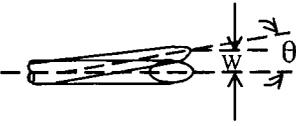
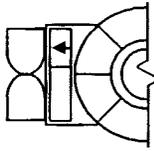
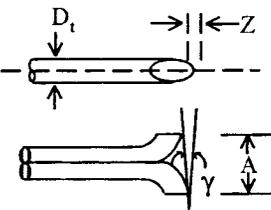
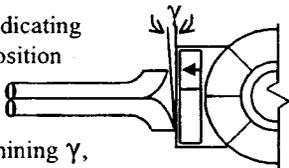


## Table 2G-1. Type S Probe Inspection Sheet

**Note:** Method 2 provides the criteria for an acceptably constructed Type S pitot tube. However, the procedure for making the necessary measurements is not specified. One approach is given below.

1. Use a vise with parallel and perpendicular faces. Use an angle-measuring device (analog or digital) for this check.
2. Place the pitot tube in the vise, and level the pitot tube horizontally using the angle-measuring device.
3. Place the angle-measuring device as shown below.
4. Measure distance A, which is  $P_A$  plus  $P_B$ . Method 2 specifies that  $P_A = P_B$ , but provides no tolerance for this measurement. Because this measurement is very difficult, it is suggested that  $P_A = P_B = A/2$ .
5. Measure the external tube diameter ( $D$ ) with a micrometer, machinist's rule, or internal caliper.
6. Record all data as shown on the form below.
7. Calculate dimensions w and z as shown below.

	Degree indicating level position for determining $\alpha_1$ and $\alpha_2$		
	Degree indicating level position for determining $\beta_1$ and $\beta_2$		
	Degree indicating level position for determining $\theta$		
	Degree indicating level position for determining $\gamma$ , then calculating z.		
			Level and perpendicular?
			Obstruction?
			Damaged?
			$\alpha_1$ <span style="margin-left: 20px;"><math>(-2^\circ \leq \alpha_1 \leq +2^\circ)</math></span>
			$\alpha_2$ <span style="margin-left: 20px;"><math>(-2^\circ \leq \alpha_2 \leq +2^\circ)</math></span>
			$\beta_1$ <span style="margin-left: 20px;"><math>(-2^\circ \leq \beta_1 \leq +2^\circ)</math></span>
			$\beta_2$ <span style="margin-left: 20px;"><math>(-2^\circ \leq \beta_2 \leq +2^\circ)</math></span>
			$\gamma$
			$\theta$
			$z = A (\tan \gamma)$ [ $\leq 0.5 \text{ mm (0.02 in.)}$ ]
			$w = A (\tan \theta)$ [ $\leq 0.5 \text{ mm (0.02 in.)}$ ]
			$D_i$ [ $\geq 9.5 \text{ mm (3/8 in.)}$ ]
			A
			$A/2D_i$ $(1.05 \leq P_A/D_i \leq 1.5) *$
* Recommended dimensions			

### QA/QC Check

Completeness \_\_\_\_\_  
Specifications \_\_\_\_\_

Legibility \_\_\_\_\_  
Reasonableness \_\_\_\_\_

Accuracy \_\_\_\_\_

### Certification

I certify that the Type S probe ID \_\_\_\_\_ meets or exceeds all specifications, criteria, and applicable design features.

Certified by: \_\_\_\_\_

Date: \_\_\_\_\_