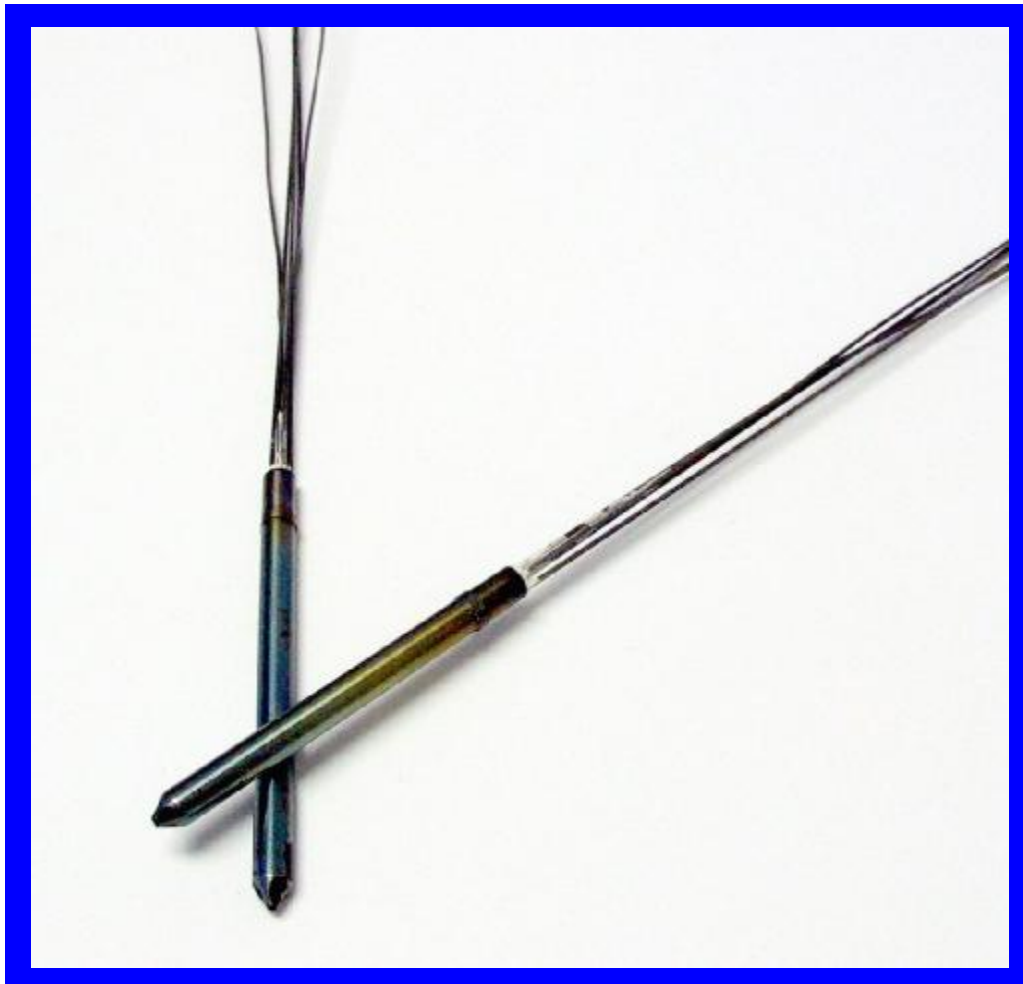


Inconel Multi-Hole Probes for High-Temperature Flows

- **Fluid Flow Applications to 900°C**
- **Determine Pt, Ps, Flow Angles, Flow Velocity Components**
- **Application Flow Speeds from 5 m/s to Mach 1.0+**
- **Probe Geometry Customizable, Outer Diameters 3+ mm**
- **Contact Aeroprobe for Details and to Discuss Your Application**



Five-hole Inconel Aeroprobes (3 mm OD) for use at temperatures up to 900°C. Developed for vane-mounting in jet turbines, they also provide flow measurement solutions for other high-temperature applications. Note that the surface oxidation and discoloration in the picture is normal and was sustained during probe testing. This does not affect the calibration of the probes. Other than the ability to sustain higher temperatures, these probes have the same capabilities as conventional Aeroprobes (see next page for more information).

High-Temperature Multi-Hole Aeroprobe Specifications

Geometry and Construction		Measurement Accuracy(w/Aeroprobe Calibration)	
Probe Geometry	Straight	Flow Angles	< 0.4°
Number of Holes	3, 5	Total Flow Velocity	< 0.8%*
Tip Geometry	60° Conical (3HP, 5HP)	Required Auxiliary Data**	Reference Pressure, Total Temperature
Tip Diameter	4.8 mm, 3.2 mm		
Material	Inconel, Ceramic/Metallic	Flow Angle of Receptivity	±15° (3HP, One Angle), 60° (5HP, Cone)
Pneumatic Connection	Custom, Depending on Temperature at Connection. Typically Inconel Tubing of Variable OD.	Calibration Flow Speeds	5 m/s to 1000 m/s (Mach = 3.0)
		Pressure Data Reduction	Polynomial Fit (3HP), Multiprobe Software (5HP)
Mounting	Custom, Depending on Application, Typically a Cylinder with Flat	Frequency Response	Low, Best for Determining Time-Averaged Flows, Time Lag Available Upon Request
Probe Reference			
Straight Probe	Roll Reference Flat		
Bent Probe	N/A	Media	Non-Reactive Gases, Water; Other Media Possible – Contact Aeroprobe
Flow Temp. Limits	0°C – 900°C (Inconel), 0°C – 1250°C (Ceramic/Metallic)	Temperature Measurement	N/A, Contact Aeroprobe for Development Possibilities
		*Utilizing 0.1% Accurate Pressure Sensors Properly Rated for Flow Speed	
		**For Most Accurate Compressible P-V Reduction	