

## Installation of Remote Temperature Sensor

The Remote Temperature Sensor (RTS) that was shipped with the system is used to measure the actual temperature of the air flowing through the High Beta Pitot Assembly. The location of this probe is important in the sense that it needs to be installed on the duct wall, after the discharge of the air through the “throat” section (section containing the probe array) of the High Beta Assembly. To mount the sensor, a coupling will need to be mounted/welded to the outside of the duct. This coupling should have a ½” NPTF thread to accept the ½” NPT on the probe. It is important to note that the probe must not be shortened from the standard length. This will cause the probe not to function. The wiring of the probe can be seen in the supplement to the DPS Installation & Operations Manual.

When mounting the sensor, the center of the sensor tip should be no less than 2 inches away from the discharge of the High Beta Pitot Assembly throat, but no more than 4 inches. Since this temperature measurement is used to compensate for variation in density of the air being measured, it needs to be representative of the actual temperature in the throat. The location of the sensor with respect to the throat should be to attempt to locate the sensor as close to the tip being centered on the discharge pipe diameter (see reference drawings for more detail)

