

### Introduction

The Secondary Standards can be used in three ways.

- A. As a quick check that any TurbSense<sup>®</sup> is measuring correctly. Compare the reading of the TurbSense<sup>®</sup> with the Secondary Standard in place, against the “Measured Value” from the sticker on the side of the Secondary Standard. If the reading of the TurbSense<sup>®</sup> is outside +/- 10% then re-calibrate the TurbSense<sup>®</sup>.
- B. As a more accurate check where the Secondary Standard has been matched (calibrated) to an individual sensor. In this case calibrate each TurbSense<sup>®</sup> of interest using a primary standard. Immediately after calibration place the TurbSense<sup>®</sup> into the Secondary Standard. Wait until the reading has stabilised and then record the “Calibrated Value” for the Secondary Standard for each TurbSense<sup>®</sup> that it will be used with. Use the Secondary Standard as in A above but compare with the “Calibrated Value” instead of the “Measured Value”.
- C. As a method to calibrate a TurbSense<sup>®</sup>. Calibrate the Secondary Standard as in B above. Following the initial calibration of the Secondary Standard it can then be used for future calibrations.

***For more information refer to the TurbSense<sup>®</sup> manual and Technical Notes available on [www.processinstruments.co.uk](http://www.processinstruments.co.uk)***

### In All Cases

- 1 Remove the TurbSense<sup>®</sup> sensor from its flowcell following the instructions in the manual.
- 2 Clean the end of the sensor if necessary with a soft cloth, and dry using these instructions.
- 3 Open the case and remove the cap from the Secondary Standard.
- 4 Insert the sensor into the Secondary Standard. The sensor needs to be pushed in as far as it will go. Align the shape of the Secondary Standard to the shape of the TurbSense<sup>®</sup>.
- 5 Wait (at least 2 minutes) for the sensor to stabilise allowing for the settings on the TurbSense<sup>®</sup> e.g. averaging of the sensor signal.
- 6 When the reading is stable use the reading from the TurbSense<sup>®</sup> as in A, B or C on page 1.

