

testo 308 FAQ

Q: Why does the 308 only measure to a smoke-number of 6.0, when the smoke-pump goes to 9?

A: The 308 is designed to be used in conjunction with an analyser such as a 327 or a 330. For this work the lower numbers are most important. Indeed, a burner producing a smoke number of more than 6.0 would be so polluted that it would need to be cleaned before analysis or tuning.

Q: What standard is applied to the method used in the 308?

A: The 308 has been certified in Germany by the TUV [like the SAE or Standards Australia] to work according the regulation laid down for soot-number [smoke-number] by the German Federal Emission Control Regulator [BImSchV].

Q: Does that mean it is OK to use the 308 in other countries?

A: TUV Certification is generally acceptable worldwide. In addition the 308 fulfils the following standards:

- ÖNORM 7535-1
- EN 50379 (Vibrationstest)
- DIN 51402 (D)
- ASTM D 2156-94 (USA)

Q: How do the testo smoke-numbers compare with other numbering systems?

A: The methodology set up by the BImSchV for smoke-number for heating systems uses the ASTM [Bacharach scale], and thus testo numbers are equivalent to Bacharach numbers which are generally applied in Australia.

Q: What about Bosch numbers?

A: In general, in Germany and elsewhere [including Australia], diesel engines are tested using the Bosch scale. At present the only way to relate ASTM [308] numbers with Bosch numbers is to use a comparison curve or calculator. This issue is under investigation.

Q: Can the 308 be used for work on diesel engines?

A: The 308 should not be used for direct exhaust measurement on a stationary or truck-engine. There are two reasons for this: Firstly typical diesel exhaust temperatures are too high for the model 308 to handle. Secondly the much higher overpressures of a diesel exhaust will overwhelm the 308 pump, force gas and soot into the instrument and produce incorrect results [there is also the possibility of damage from the excess pressure].