

## **S2.5.3 ISO 11171 – IMPACT OF THE NEW SRM2806B UPON APC CALIBRATION AND CLEANLINESS CODE**

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As a new standard reference material 2806B has been released from NIST beginning of 2015, round robin tests have been initiated among 17 laboratories worldwide to evaluate the potential impact on both standards: ISO 11171 (HFP: Calibration of automatic particle counters for liquids) and ISO 11943 (HFP - On-line automatic particle-counting systems for liquids - methods of calibration and validation)

Due to a more accurate method used by NIST to certify the SRM2806B (in comparison with SRM2806A) an impact has effectively been identified upon the calibration size. A correlation has been established between the new calibration size (relative to SRM2806B) and the former calibration size  $\mu\text{m}$  (c) (relative to the former SRM 2806A).

This situation has an effect on the filtration efficiency and on the expression of the cleanliness code (measured by APC based on light extinction techniques) which puts the Industry in the same trauma experienced 15 years earlier when  $\mu\text{m}$  were changed into  $\mu\text{m}$  (c). This is the reason why the ISO 11171 and ISO 11943 have been reviewed accordingly as well as the multipass and single pass procedures relative to the determination of the filtration efficiency of lubricating and hydraulic oil filters (as for example ISO 16889, ISO 4548-12.).

This paper will highlight the changes being made to those standards and propose a way to prevent in the future such consequences already forecast when a new batch of standard reference material would be placed on the market.