Question from IDIADA (mail 9/6 2020)

I would like to inform that we did some measurements to one SRTT of our collection following the document prepared by the IWG and the shoulder points are too narrow for standard depth gauge meter, there is not enough room for the measurement needle.

After some blind measurements with different people, the results were not consistent because the needle rubs the shoulder groove and the curve of the shoulder disturbs the measurement (results from 4.80 mm to 5.20 mm in the same point with different people)

In my opinion, it should be discussed to measure only the 4 center groove points in order to have more consistent measurements.

ETRTO response

* Test centers are not requested to measure the treaddepth in the shoulder zone, as the purpose is to measure the tread depth evolution in the main grooves.
* In the current proposed procedure, there is no tolerance requirement for the groove depth in the shoulder zone (upon IDIADA input this point has been further clarified)
* It cannot be excluded the situation that a narrow groove is situated in the center zone. in this case the standard refered by the procedure provides some guidance:

(ASTM F421 *3.1.5.1* *Discussion—The reader is cautioned that the probe tip used for the depth measurement must have a sufficiently small cross-section compared to the width of the void being measured. The probe must be able to reach the bottom of the void without contacting the tread elements that form the sides of the void. Special consideration should be given to measuring sipes.*

*(See definition in Terminology F538.) Since the sipe is substantially narrower than a major groove, a very small diameter probe tip must be used to achieve an accurate measurement of sipe depth.)*

Suggestion to IWG WGWT

It is suggested to the IWG WGWT members to assess the F421 tread depth measurement method