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## STRAIGHTNESS MEASUREMENT BY REVERSAL METHOD

Straightness measurement is an important parameter of dimension metrology. It is widely used in various instruments and machines especially in the industrial segment such as rulers, CNC machines, theodolites and infrastructures. At the moment, there are not have high performance straightness measuring system in Thailand because there is no approved calibration system. This leads to a questionable performance of the straightness in the instruments and machines. We have developed the self-calibration straightness method to solve this problem. It consists of straightedge and straightness measuring machine. The measurement principle of a self-calibration is based on the Reversal Method. The system provides the uncertainty of measurement of 0.6 micrometer per meter. The system can be used to validate and to evaluate straightness instruments.

**Primary author:** Mr SAMIT, Watcharin (National Institute of Metrology (Thailand))

**Co-author:** Ms VACHARANUKUL, Ketsaya (National Institute of Metrology (Thailand))

**Presenter:** Mr SAMIT, Watcharin (National Institute of Metrology (Thailand))

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