

# **The New Digital Measuring Instruments of Leather's Thickness**

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**Abstract:** A new method was developed to get the moment of contacting with the leather thought the software which based on the peculiarity of the measuring process. It overcomes the limitation of the measuring instruments of leather's thickness which can't lock the data after the automatic time element and improves constant pressure by gravity in the vertical direction. It also realized locking the data after the automatic time element. What's more, handled digital measuring instruments of leather's thickness were developed to get a measuring condition which holds constant pressure at three-dimensional space in any direction by way of constant force spring. Digital and handled measuring instruments of leather's thickness can meet the needs of scientific research and production.

**Key words:** leather's thickness; measurement; time keeping instrument; data acquisition software; constant pressure in any direction