

PATENT NO. 372999
A SYSTEM FOR NON-CONTACT MEASUREMENT AND ANALYSIS OF
SURFACE PROFILE OF A SAMPLE/3-D OBJECT

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APPLICANT

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ABSTRACT

Improved method and system based on laser distance sensor for non-contact measurement and analysis of the surface profile of an object utilizing two-axes linear motion directed to acquire and analyze information about the physical attributes of such objects. The analysis of physical attributes of such objects relates to the roughness analysis of a surface, preferably a rock surface wherein the system by employing the said method developed for the purpose of controlling the two-axes of motion, data collection, graphical display and subsequent roughness analysis of the subject surface.

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CLAIM 1

A system for non-contact measurement and analysis of surface profile of a sample/ 3-D object comprising means for mounting the sample and moving incrementally in one direction; a laser distance sensor adapted to travel along another axis for scanning the sample; a computer means operatively connected to two stepper motors adapted to provide a controlled two-axes linear motion that controls the movement of said sample and said laser sensor; computer means adapted to collect the data from said laser sensor and making the same available for said non-contact measurement and analysis of the surface profile of the sample.