

MEASUREMENT AND POSITIONING SYSTEM BASED ON MACHINE VISION AND LASER TRIANGULATION

ABSTRACT

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The invention discloses a measuring and positioning system based on machine vision and laser triangulation ranging, including a machine vision system, a laser ranging system and a standard positioning target installed on a positioned object. The laser ranging system is used for projecting laser light onto a standard positioning target for
10 three-dimensional height measurement. The machine vision system is used for imaging and two-dimensional coordinate position measurement of the positioning target and the laser image projected on the standard positioning target. The measuring system of the invention can realize fast three-dimensional measurement and precise positioning of the spatial position of the positioned object through the standard
15 positioning target installed on the positioned object.

Figure 1