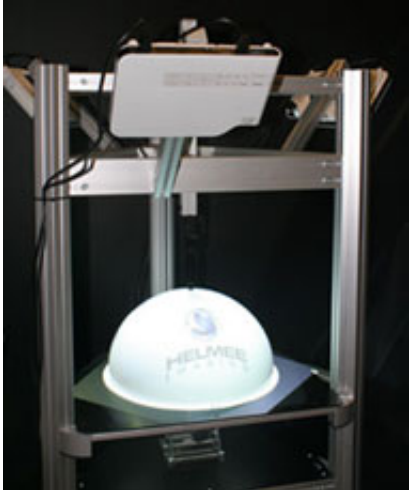


Quality control of glossy objects

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VTT Technical Research Centre of Finland has developed a new machine vision system for quality control of glossy objects. The system enables quality control of complex products, such as bathroom mixers, tableware, cutlery, and even artificial joints. The system will be commercialised by VTT's new spin-off company, Helmee Imaging Ltd.

Although [machine vision](#) is widely used for [quality control](#) of industrial processes, up to now it has only been possible to inspect glossy surfaces manually. Manual work is expensive, and the quality level can vary for a number of reasons.

VTT-sourced Helmee Imaging Ltd offers industry a new system of

quality control, with benefits that include increased inspection capacity, lower inspection costs, and better and more consistent quality.

With the aid of a unique innovation related to machine vision systems, we are able to image all kinds of glossy, high-curvature or angular objects and components. The system is capable of simultaneous measurement of the object's surface quality and 3D shape.

Based on a combination of structured lighting and stereo imaging, the system measures how the surface distorts predetermined illumination patterns, in place of traditional surface imaging.

Provided by VTT Technical Research Centre of Finland

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