Parameter optimization of a tribometric device for rapid assessment of substrate surface cleanliness

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Abstract

The authors optimize the parameters and operation modes of a device for rapid assessment of surface cleanliness, relying upon a tribometric interaction of two surfaces. As a result of the optimization, the device parameters and operation modes that ensure a precise measurement of substrate surface cleanliness are quantified. It is shown that in combination with the computer-aided analysis the rapid assessment device enables a multiple use of the indenter substrate when assessing the cleanliness of the entire substrate surface and the surfaces characterized by different contamination level.

Keywords: tribometric device, surface cleanliness, computer-aided analysis, contamination level.

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