

Abstract

Method for Monitoring the Operational State of a Surface Inspection System for Detecting Defects on the Surface of Semiconductor Wafers

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Method for monitoring the operational state of a surface inspection system for detecting defects on the surface of semiconductor wafers, comprising

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the provision of a reference semiconductor wafer having defects of a particular number and size and density on an examination surface of the reference semiconductor wafer;

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the conduct of a reference inspection of the reference semiconductor wafer and at least one control inspection of the reference semiconductor wafer by using the surface inspection system, the position and size of the defects on the examination surface being measured;

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the identification of defects which, because of their position, are regarded as common defects of the reference inspection and of the control inspection;

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for each common defect, determination of a size difference which is obtained from a comparison of its size on the basis of the reference inspection and the control inspection; and assessment of the operational state of the surface inspection system on the basis of the size differences determined.

Fig. 3