

Abstract

A defect detection device is configured to detect a defect having at least an inclined surface portion in a semiconductor product or a workpiece, which is a part of the semiconductor product. The defect detection device includes an inspection mechanism. The inspection mechanism includes: an illumination unit configured to irradiate the workpiece with bright-field illumination light; and an image pickup device, which forms an observation optical system, and is configured to observe an observation site of the workpiece irradiated with the bright-field illumination light by the illumination unit. The inspection mechanism is configured to observe reflected light from the workpiece, which is output from an out-of-focus position defocused from an in-focus position in an optical axis direction, and emphasize a defect on an observation image formed by reflected light from the out-of-focus position as compared to a defect on an observation image formed by reflected light from the in-focus position.