

[ABSTRACT]

An acceleration-determination device (D) includes a gripping jig (1) that retains a gripping tool (1g) gripping a test piece (Y) in a state where the gripping tool is tilted from a horizontal state, detects a tilt angle of the gripping tool, and makes it possible to
5 change a gripping force of the gripping tool, a mass adjuster (B) that adjusts a mass of the test piece such that a component force of gravity in a tilt direction which varies according to the tilt angle equals gravity acting on the test piece before tilting thereof, and an acceleration calculator (3b) that calculates an acceleration of the test piece when the test piece is detached from the gripping tool based on the tilt angle and a gravitational
10 acceleration acting on the test piece when the test piece is detached from the gripping tool.