

ABSTRACT

A substrate polishing device polishes a substrate by sliding contact with a polishing member and includes: a dresser that oscillates on the polishing member and adjusts load and rotational speed in multiple scan areas; a height detection unit that measures surface height in multiple monitor areas along the oscillation direction; a dress model matrix production unit that generates a matrix defined by the monitor areas, scan areas, and a dress model; an evaluation index production unit that predicts a height profile using the dress model and dresser oscillation speed or dwell time and produces an evaluation index based on a difference from a target profile; and a calculation unit that determines the load and rotational speed for each scan area based on the evaluation index.

Fig. 7