

Abstract

Installation and method for polishing semiconductor wafers

5 Installation and method for polishing semiconductor wafers. The installation comprises at least two polishing machines for the simultaneous double-sided polishing of semiconductor wafers;

one or more carriers which lie on a polishing pad of a respective lower polishing plate

10 of the polishing machines and have recesses for receiving semiconductor wafers;

an overhead-mounted transport system for delivering a cassette which contains semiconductor wafers for polishing;

assigned to each of the polishing machines, a vertical transport system for taking the delivered cassette from the overhead-mounted transport system, and comprising an

15 integrated wafer lifter for lifting the semiconductor wafers for polishing out of the cassette;

a robot which moves autonomously to the at least two polishing machines and which has a manipulator for taking the semiconductor wafer for polishing from the wafer lifter, for inserting the semiconductor wafer for polishing into one of the recesses and,

20 at the end of a polishing operation, for lifting the polished semiconductor wafer out of the recess;

assigned to each of the polishing machines, an x/y linear unit having a wafer gripper for taking the polished semiconductor wafer from the manipulator of the autonomously moving robot and for depositing the polished semiconductor wafer into a wet transport

25 container with integrated wafer receiver; and

a driverless transport vehicle for transporting the wet transport container to a cleaning unit for polished semiconductor wafers.

30 Drawing for the Abstract: Fig. 1