

ABSTRACT

The present disclosure discloses a semiconductor process device and a pneumatic valve control method therefor, and belongs to the semiconductor process technology. The pneumatic valve control method includes: acquiring a plurality of pneumatic valves that need to simultaneously complete a same pneumatic valve action command in a current process step, and obtaining a response duration of each pneumatic valve corresponding to the pneumatic valve action command; calculating a command issuance delay value of each pneumatic valve based on a longest response duration among response durations of the plurality of pneumatic valves; and sending the corresponding pneumatic valve action command to each pneumatic valve in chronological order based on the command issuance delay value of each pneumatic valve to control the plurality of pneumatic valves to simultaneously complete the same pneumatic valve action command. The technical solutions of the present disclosure can achieve simultaneous opening or simultaneous closing of the plurality of pneumatic valves well, and ensure that process gases enter a process chamber synchronously to fully react in the process chamber, thereby improving process quality of a whole process while greatly improving utilization of the process gases.