

ABSTRACT

The present disclosure provides a vaporization system and semiconductor process equipment. The vaporization system comprises a jet mixer, a mixing heater, a process liquid source, and a plurality of pipelines. The process liquid source is configured to store and output process liquid. Two inlets of the jet mixer communicate with an external gas source and the process liquid source, respectively. The first inlet of the jet mixer is communicated with the gas source through a gas inlet pipeline, and a second inlet of the jet mixer is communicated with the process liquid source through the liquid inlet pipeline. The jet mixer is configured to mix the carrier gas transferred from the gas source with the process liquid transferred from the process liquid source to form a mist-like mixture. The inlet of the mixing heater is communicated with the outlet of the jet mixer. The mixing heater is configured to heat the mist-like mixture to vaporize the mist-like mixture into steam. The outlet of the mixing heater is communicated with the process chamber through the gas outlet pipeline. The vaporization system of the present disclosure effectively ensures the process liquid to be sufficiently vaporized and effectively control the flow rate of the generated steam.