

ABSTRACT

A gas injection module (M) and an active gas injection system (Z) are provided. The gas injection module (M) includes a device body (M1), the internal of which has a delivering cavity (M10) and an annular gas-flow generation cavity (M11). One end of the device body (M1) has a gas input portion (M2), and another end thereof has a gas output portion (M3). One side of the device body (M1) is configured to extend outward to form a gas guiding portion (M4). The annular gas flow generation cavity (M11) includes a side connecting portion (M110) and a nozzle portion (M111) in spatial communication with each other. The side connecting portion (M110) is connected to the gas guiding portion (M4). The nozzle portion (M111) is connected to the delivering cavity (M10). The nozzle portion (M111) is configured for generating a pushing gas-flow (PA) in a pre-determined path (PR) toward the delivering cavity (M10). A pre-determined angle (PG) between 0-89 degrees is between the pre-determined path (PR) and central axis (CA) of the device body (M1).

Fig. 3