

ABSTRACT

In a gas-liquid separator wherein a high-pressure air introducing port (1a) and an air discharging port (1b) are provided respectively in lower and upper portions of a cylindrical container having a hollow chamber formed therein, provided are a blow guide plate (5) in the cylindrical container (1), with which air supplied from the high-pressure air introducing port (1a) collides, thereby changing the flow direction of the air, a conical receiving plate (6) having an opening formed at the center thereof in an upper portion of the hollow chamber to partition the hollow chamber into upper and lower hollow chambers, the upper hollow chamber partitioned by the conical receiving plate (6) which is communicated with the air discharging port (1b), and a partition (8) having a venthole formed therein and defining the upper hollow chamber disposed above the conical receiving plate (6) in opposed relation, the collision surface of the blow guide plate (5) being curved to follow an inner wall surface of the cylindrical container (1) or inclined to widen a flow passage toward the downstream side.

With such a structure, liquefaction of moisture by collision with the surface, i.e., separation into gas and liquid, is efficiently performed, and energy loss caused

upon subsequent change in the flow direction of the incoming air is reduced, resulting in that the gas-liquid separation can be achieved with high efficiency.