

PRODUCT GAS SUPPLY QUANTITY ADJUSTMENT DEVICE AND AIR SEPARATION APPARATUS
COMPRISING SAME

ABSTRACT

[Problem to Be Solved] To provide a supply quantity adjustment device that allows adjustment of the supply quantity of a product gas (for example, oxygen gas, nitrogen gas, argon gas or the like) in a piping supply type on-site plant requiring a gas buffer, without relying on the experience and intuition of an operator, and allows the production quantity to be controlled by way of predicting demand fluctuations.

[Means for Solving the Problem] A supply quantity adjustment device 500 comprises: a total demand quantity calculation unit 502 that calculates a total demand quantity (CPV_1) used at a supply destination, based on plant information; an excess/deficit information setting unit 503 that compares the total demand quantity (CPV_1) and a flow rate set value (SV_1) and sets a first calculated pressure value (MV_1); a backup coefficient setting unit (504) that sets a backup coefficient set value (MV_bc) based on a reference gasholder pressure (SV_gh), the first calculated pressure value (MV_1), a reference backup pressure set value (SV_bc), and a measured gasholder pressure value (PV_gh); and a production coefficient setting unit (505) that compares a production pressure set value (SV_a) obtained by adding the reference gasholder pressure (SV_gh) and a first pressure output value (MV_1) with the measured gasholder pressure value (PV_gh), and sets a production coefficient (MV_a) so as to modify a variation in the quantity of product gas produced by the air separation apparatus.

[FIG. 1]