

ABSTRACT

The propylene oxide purification system comprises: a first distillation column 10; a second distillation column 20; liquefaction separation equipment LQ configured to liquefy at least part of a flow fed from a column top outlet 20t of the second distillation column, and discharge a gas phase from a gas phase outlet 22g and a liquid phase from a liquid phase outlet 22o; a third distillation column 30; a line LA connecting a column top outlet 10t of the first distillation column 10 and an inlet 20i of the second distillation column 20; a line LC connecting the liquid phase outlet 22o of the liquefaction separation equipment LQ and a reflux inlet 20r of the second distillation column 20; a line LD connecting a column bottom outlet 20b of the second distillation column 20 and an inlet 30i of the third distillation column 30; and a line LE connecting a source of extractant supply and at least one selected from the group consisting of the line LA, the liquefaction separation equipment LQ, the line LC, and the second distillation column 20.