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带有中间储罐的塔用于间歇萃取精馏

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摘要 Batch extractive distillation was studied in a column with a middle vessel. The process was simulated by a constant holdup model and solved by two point implicit method. Acetone and methanol mixture was separated in such a setup using water as solvent. The simulation agrees well with experimental results. The experimental and simulation results show that the solvent at the bottom and the product at the top of the column can be withdrawn simultaneously for a long period of time. It needs more time for the solvent to reach high purity than that required for the more volatile component to reach high purity, so that the time to withdraw solvent from the bottom is delayed.

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Batch Extractive Distillation in a Column with a Middle Vessel

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Abstract

Batch extractive distillation was studied in a column with a middle vessel. The process was simulated by a constant holdup model and solved by two point implicit method. Acetone and methanol mixture was separated in such a setup using water as solvent. The simulation agrees well with experimental results. The experimental and simulation results show that the solvent at the bottom and the product at the top of the column can be withdrawn simultaneously for a long period of time. It needs more time for the solvent to reach high purity than that required for the more volatile component to reach high purity, so that the time to withdraw solvent from the bottom is delayed.

Key words [extractive distillation](#) [batch extractive distillation](#) [middle vessel](#) [simulation](#)

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