

Bürger, Raimund; Karlsen, Kenneth H.; Towers, John D.

A mathematical model of clarifier-thickener units. (English) Zbl 1391.76789

PAMM, Proc. Appl. Math. Mech. 5, 589-590 (2005).

Summary: We review a recent analysis of a clarifier-thickener model for flocculated suspensions. The resulting governing PDE is a strongly degenerate convection-diffusion equation with discontinuous flux. A new numerical example illustrates how control actions speed up thickener operation significantly.

MSC:

[76T20](#) Suspensions

[35Q35](#) PDEs in connection with fluid mechanics

[76M25](#) Other numerical methods (fluid mechanics) (MSC2010)

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