## Simulation of glass flow in an owen

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Glass is produced in a so called Glass Tank, where the raw material (siliciumoxide, soda) at one side is coming in, and fluid, though still very viscous, glass is flowing out at the other side. The tank is heated by electrodes or gas burners. The actual processes involved are quite complicated. We shall consider a simplified model for the flow only. Since we have a complicated geometry this may still be a very difficult problem to solve numerically. Our approach is to solve Navier-Stokes and the energy equation by a finite volume method. We shall discuss some details of the algorithms involved. Our major objective is to have an efficient gridding technique. We propose a so called local defect correction (LDC) method which enables us to use uniform grids, on those parts of the domain where higher resolution is required. We intend to show some simulations of the flow.