Abstract Submitted
for the DFD09 Meeting of
The American Physical Society

Draw Resonance in Viscous Sheets OLUS BORATAV, ZHEMING ZHENG, ALEXEY AMOSOV, Corning Incorporated — The instability known as the "draw resonance" in literature is studied for a viscous sheet considering the visco-gravity balances (Stokes number) and the heating/cooling effects (Stanton number). The analysis considers lubrication approximation for continuity, momentum and energy equations and determines the critical draw ratio for a range of Stokes numbers and Stanton numbers. The critical draw ratio is very sensitive to the variation of Stokes and Stanton numbers. It is shown that the decrease in Stokes number and/or the increase in Stanton number results in a decrease in the critical draw ratio.

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Date submitted: 12 Aug 2009 Electronic form version 1.4