Axisymmetric squeeze flow of a viscoplastic Bingham medium

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Highlights

- The axisymmetric squeeze flow of a viscoplastic Bingham material is studied.
- The no-slip and threshold stick-slip boundary conditions are considered.
- We develop an asymptotic solution.
- The squeeze flow have shown 3 characteristic behaviors: stick, stick-slip and slip.
- The effect of dimensionless parameters on the total force is discussed.