

Accepted Manuscript

The motion of a rotating circular cylinder in a stream of Bingham plastic fluid

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PII: S0377-0257(16)30091-X
DOI: [10.1016/j.jnnfm.2016.06.013](https://doi.org/10.1016/j.jnnfm.2016.06.013)
Reference: JNNFM 3807



To appear in: *Journal of Non-Newtonian Fluid Mechanics*

Received date: 4 January 2016
Revised date: 23 June 2016
Accepted date: 24 June 2016

Please cite this article as: Pooja Thakur , Shikhar Mittal , Naveen Tiwari , R.P. Chhabra , The motion of a rotating circular cylinder in a stream of Bingham plastic fluid, *Journal of Non-Newtonian Fluid Mechanics* (2016), doi: [10.1016/j.jnnfm.2016.06.013](https://doi.org/10.1016/j.jnnfm.2016.06.013)

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Highlights

- CFD model of a Bingham plastic to study momentum transfer from a rotating cylinder
- Comparison between Papanastasiou and bi-viscous model for Bingham plastic
- Effect Re , Bn and rotational velocity on yielded/unyielded regions within the flow
- Correlation of total drag with Re and Bn derived
- Effect of Bn and rotational velocity on torque applied on the cylinder

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