

ANNULAR JETS

by

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SUMMARY

In this thesis annular jets, falling vertically (when gravity is included), are considered. Thus in any horizontal plane the jet lies between two concentric circles. The three main jet parameters examined are surface tension, jet thickness and a pressure difference across the annulus. Various types of dynamic behaviour are also considered, including formation of jets from nozzles and stability of jets.

Techniques are developed where the behaviour of such jets may be described mathematically, and solutions for a wide spectrum of jet parameters presented.

i.

SIGNED STATEMENT

I hereby declare that this thesis contains no material which has been accepted for the award of any other degree or diploma in any University and, to the best of my knowledge, it contains no material previously published by any other person, except where due reference is made in the text of the thesis.

M. S. BORGAS.

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