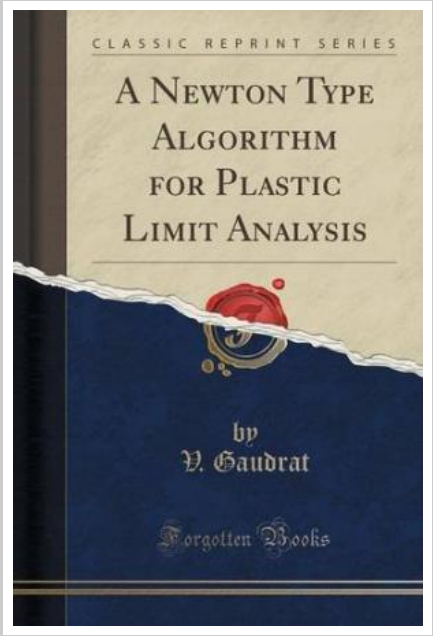

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A Newton Type Algorithm for Plastic Limit Analysis (Classic Reprint) (Paperback)

By V Gaudrat

Forgotten Books, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Excerpt from A Newton Type Algorithm for Plastic Limit Analysis This paper presents a new computational method for plastic limit analysis, based on a Newton-type minimization algorithm for the kinematic variational principle, whose solution represents a possible collapse mechanism. The model of plastic limit analysis is by now well known, see e.g. [3, 7]. The upper and lower bound theorem [3] identifies the limit multiplier of a given load as: (i) the largest multiple of it which can be equilibrated by a statically admissible stress lying within a specified yield domain, and simultaneously as (ii) the minimum of a certain convex minimization problem among all velocity fields which do work against the load at a unit rate. The functional analytic setting of these problems has been clarified by Strang, Temam, and others [8, 9]. A common approach to the numerical solution of limit analysis problems is to approximate the yield domain by a polyhedral domain in stress space. Then the dual variational principles become a dual pair of linear programs, which may be solved, for example, using...

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Reviews

This book is definitely not straightforward to get started on studying but extremely exciting to read. It is really simplistic but shocks in the 50 percent of the ebook. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- ***Ally Reichel***

This publication is amazing. It is definitely basic but shocks in the fifty percent of your publication. You wont feel monotony at anytime of your own time (that's what catalogues are for concerning if you question me).

-- ***Prof. Kirk Cruickshank DDS***