

1086-01-653      **Rolf Nossun\*** ([rolf.nossum@uia.no](mailto:rolf.nossum@uia.no)), Department of Mathematics, University of Agder, P.O. Box 422, N-4604 Kristiansand, Norway. *Von Mises and the Mathematical Theory of Plastic Deformation.*

Von Mises and the Mathematical Theory of Plastic Deformation.

Drawing on Cauchy's formulation of stress in solids and Mohr's graphical representation of primary stresses, Richard von Mises gave yield criteria for plastic deformation of isotropic and crystalline materials in two articles published in 1913 and 1928. We review these papers, trace the influence on von Mises' work by Maxwell and Hopf, and compare with the parallel efforts of Hencky and others. Finally we present some other yield criteria in common use.

#### References

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