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Metal Forming and Texture Development Modelling

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A description of plastic anisotropy evolution due to texture development during metal forming processes is presented. It bases on a model of single crystal with the regularized Schmid law and a model of polycrystal behaviour with the Taylor assumption. The description makes possible to predict the texture development at each step of the plastic deformation process. The evolution of plastic anisotropy in drawing wires, rolled sheets, and sheets under pure shear, associeted with the accompanying texture development, is discussed in details.

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