

ABSTRACT: The Forming Limit Stress Curve (FLSC) approach of Arrieux is one approach which takes the forming history into account when judging forming severity in sheet forming processes. Theoretical considerations and consequences of the intrinsic characteristic of FLSCs are outlined. Predicted FLCs for A-K steel and Al 6111-T4 are presented assuming different strain paths. A comparison with experimental FLC data is given and the predictive quality of FLSCs is investigated. The limitations of Arrieux's FLSC approach using isotropic hardening are discussed.