알루미늄합금판재 성형한계 예측을 위한 파단모델 적용
Application of Failure Criteria in Aluminum sheet Forming Analysis

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초 록 The numerical simulation of the Forming Limit Diagram(FLD) test was carried out to calculate the limiting dome height(LDH: ISO12004-2) for aluminum alloy sheet Al6061-T6. The finite element analysis was used as an effective method for evaluating formability and diagnosing possible production problems in sheet stamping operations. To predict fracture during the stamping process, several failure models such as Cockcroft-Latham, Rice-Tracey, Brozzo and ESI-Wilkins-Kamoulakos(EWK) criteria were applied. The predicted results were discussed and compared with the experiments for Al6061-T6