

# LS-DYNA 를 이용한 프레스 성형 해석의 최신 동향

정 우 식<sup>1</sup>, Jeanne He<sup>2</sup>

## Recent Press Simulation Trends using LS-DYNA

W.S. Chung and Jeanne He, Ph.D.

### Abstract

Over the past two decades, the finite element analysis has emerged as one of the most important engineering tools in the many industries, due to its flexibility and accuracy in prediction. Nowadays, it is widely used in stamping industry to predict the forming feasibility of widely variety of complex components, ranging from automotive components and aerospace to household products. As the demand of FEA accelerates, the need for a robust and streamlined process based CAE tools has become crucial, especially in the tool and die manufacturing industry.

DYNAFORM based on LS-DYNA has been widely used all over the world and now it has become the most competitive global standard tool. Its extremely accurate results and its new "state of art" features like die face and blank size engineering, multi-stage tooling, process guidance quick setup, forming effects mapping to crash/durability, springback, modified one step, anisotropic material technology and so on allow stamping engineers to create, re-design and re-engineer the tooling from part geometry.

Here we now introduce recent press simulation technologies and trends with our worldwide success stories and some of excellent applications.

**Key Words:** LS-DYNA, DYNAFORM, Die Face Engineering, Blank Size Engineering, Springback Modified One Step, Quick Setup, Hydroforming, Multi-Stage Tooling, Forming Effects Mapping, Die Structure Analysis

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<sup>1</sup> 테마엔지니어링(주), wschung@kornet.net

<sup>2</sup> Engineering Technology Associates, Inc.