

34-51 NUMERICAL ANALYSIS OF FREE METAL SHEET FORMING USING UNDERWATER SHOCK WAVE

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In recent years, many studies of metal forming have done for a better productivity. In these fields, it is important problem the production cost make lower. However, in generally the very expensive metal die is indispensable for metal forming. Consequently, it is difficult the metal die excludes for the lower cost. Therefore, we have been developing the technique for the metal sheet forming not using the expensive metal die. We considered the metal sheet forming by the explosive forming. This technique uses only a metal die has circular edges. We have been trying that deformation shape of the metal sheet is changed by set up position of the explosive. Therefore, we did numerical analysis to estimate this technique. In this paper, that result is presented and discussed.

(Proceedings of the 4th Asia-Pacific Conference on Shock & Impact Loads on Structures, Nov21-23, 2001, Singapore)