

## Contribution to a new method for deep drawing with kinetic control

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**Abstract.** The paper presents a new deep drawing sheet metal method in which, due to the complex geometric shape of the part, there are significant variations in the level of deformation in different areas of the piece. The method aims to improve the quality in the deep drawing process by reducing the variation of the wall thickness of the part, caused by the different degree of stretching of the sheet in different areas of it. In the proposed method the vertical movement of the punch is completed by two vertical rotational movements of it which will have the effect of increasing the flexibility of the deformation process, the active elements occupying the most favourable position dictated by the material flow in the die. It results in improved material deformability and a higher degree of deformation. Also, the new method offers a relatively simple constructive solution of the press and does not require long auxiliary times for assembly-disassembly.

**Keywords:** deep drawing, deformability, hydraulic presses, kinetic control

*The full paper is published in MATEC Web of Conferences, Volume 368 (2022):*

DOI: <https://doi.org/10.1051/mateconf/202236801022>

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