

Auslegung des Fertigungsprozesses „Biegen im Gesenk“ mit Hilfe der Fertigungs- und Rückfederungssimulation

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Abstract:

New trends in the automobile industry lead to cheaper parts, to a reduction of machine investments and to efficient processes. One way to realize these goals is the application of new technologies for the bending of hollow profiles. In case of aluminium semi-finished products different forming processes can be used to fulfil these requirements.

Press bending is one possible method to produce hollow parts: by adopting the pressure, the walls of the profile can be reinforced. With the help of the forming simulation the connection between the finished geometry of the part, the process parameters and tool geometry can be analyzed.

Keywords:

springback, surface reconstruction, bending, simulation