## STUDIES REGARDING THE DIE FITTING AND RIGGING ON THE PRESS

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**Rezumat**: Scopul acestui articol este de a prezenta rezultatele unui studiu cu privire la procesul de fixare și reglare a unei matrițe nou proiectate pe presă. Subiectul poate fi baza unor studii viitoare cu scopul de a reduce numărul de pași până la obținerea unei piese corespunzătoare fără dificultate și cu reducerea timpului. Într-o companie trebuie avută în vedere o strânsă colaborare între departamentele de simulare, laboratorul 3D și atelierul de încercări pentru a descoperi zonele critice în piese și măsurile ce sunt necesare.

**Abstract:** The purpose of this article is to present the results of a study regarding the process of fixing and rigging for a new designed die on a press. The subject can be a basis for further studies with the aim of reducing the number of steps until a proper part is obtained without difficulties and with time reducing. In a company a tight collaboration between the engineering and simulating departments, the 3D laboratory and the tryout tool shop must be considered in order to discover the critical areas in the parts and the measures that are required.

Keywords: die, parallelism block gauges, rigging block gauges, compensators.

## 1. Introduction

Stamping has a history of over 150 years and it is largely applied to a great variety of materials based on their metal working from common metals to rare alloys. Cold stamping represents one of the most modern branches in technology offering great economic and technical advantages in making a large scale of works [14].

At global level nowadays there is a strong competition in reducing time and costs for the entire process of production, from the step of realising the part to die tryout, mounting on press and series production.

The correct execution of dies represents one of the main items in fabrication, because their quality determines industrial products and that is why active parts must be properly executed because they are the most important for a die [1]. The main part of devices for stamping and cutting are subjected to a continuous process of wearing and to compression dynamic efforts [8].

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