Title (en)

Method of simulating the load dependent tilt of the slide of mechanical presses, on a hydraulic work-in press

Title (de)

Verfahren zur Simulation der lastabhängigen Stösselkippung von mechanischen Pressen auf einer hydraulischen Einarbeitungspresse

Title (fr)

Procédé de simulation du basculement du coulisseau en fonction de la charge dans des presses mécaniques, sur une presse hydraulique de préparation

Publication

EP 0652100 B1 19970312 (DE)

Application

EP 94114916 A 19940922

Priority

DE 4337825 A 19931105

Abstract (en)

[origin: EP0652100A1] 2.1. The tilt of the slide, caused by eccentric loading, on the mechanical presses is taken into account upon working-in of the die, the presses not being available from time to time for production tasks. Consequently, the dies are often worked in on a hydraulic work-in press. When using the dies on the production presses, time-consuming correction work is often still required as a result of the different load-dependent tilt of the slide. By virtue of the novel method, the tilting behaviour of production presses with different spring rates is intended to be simulated on a hydraulic work-in press. 2.2. The hydraulic work-in press contains at least four counter-retaining cylinders which act counter to the operating movement of the slide. In order to simulate the load-dependent tilt of the slide of mechanical presses, the oil pressure in the counter-retaining cylinders is regulated such that the slide is in each case counteracted at least in the operating region - starting from the tilt of the slide determined - by so much force that the tilts of the slide in the x-axis and y-axis are restricted to values which are given by parameterisable tilting characteristics $Mx = f1 (kx)$ and $My = f2 (ky)$. <IMAGE>

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