EUROINVENT 2021

MD.31.	
Title	MOLDS FOR PRODUCING PARTS FROM METAL POWDERS
Authors	Alexandru Mazuru, Alexei Toca, Sergiu Mazuru, Nicolae Trifan
Institution	Technical University of Moldova
Patent no.	MD 676 2013.09.30
Description EN	The invention relates to mechanical engineering technology, namely to molds for producing parts from metal powders. The mold for metal powders comprises a clamping sleeve (3), in which are located a matrix (2) and upper (4) and lower (5) forming elements, made helical with internal protrusions in the lower part, which in assembly form a cylindrical surface, and placed with the possibility of mutual movement by a curved trajectory along the axis of molding. The mold further comprises a rod (7) and a punch (6), which together with the forming elements (4, 5) form the molding cavity. The powder form for metal powders works as follows. The mold 2, together with the forming elements 4 and 5, is placed in the bushing 3, by tightening, then from the bottom of the mold 2 is transmitted advance to the core 7, after which the space created by the upper and lower forming elements 5 and the core 7 is filled with the required amount of metal powders 1. After filling, the forming elements 4 are moved relative to the forming elements 5 by 2/3 of the height of the metal powder 1, then the punch 6 and the forming elements 4 and 5 are communicates a pressing force. After the required pressure level has been reached, and the forming elements 4 and 5, under the action of pressure, have moved with the execution of the rotational movement around their axis until they have aligned, the

Class no.

extraction of the pressed part.

6. Mechanical Engineering - Metallurgy

bushing 3 is removed, after which the phase is executed.