

Abstract**Method for cutting a multiplicity of slices by means of a wire saw from workpieces during a sequence of cut-off operations**

5 A method for cutting a multiplicity of slices by means of a wire saw from workpieces during a sequence of cut-off operations divided into initial cuts and follow-on cuts, wherein the wire saw comprises a wire array of moving wire sections of a saw wire and an actuating device, and the wire array is tensioned in a plane between two wire guide rollers, wherein each of the two wire guide rollers is supported between a fixed bearing and a floating bearing. According to one embodiment, the method comprises, 10 during each of the cut-off operations, feeding the respective workpiece at a feed rate by means of the actuating device through the wire array along a feed direction perpendicular to a workpiece axis and perpendicular to the plane of the wire array in the presence of a working fluid and hard materials, which act abrasively on the 15 workpiece, which comprises during each of the cut-off operations, feeding the workpiece through the wire array with simultaneous axial movement of the floating bearings by adjusting the temperature of the fixed bearings with a cooling fluid in accordance with the specification of a first temperature profile, which specifies the temperature of the cooling fluid in dependence on a depth of cut and correlates with a 20 first correction profile, which specifies the travel of the floating bearings in dependence on the depth of cut; feeding the workpiece through the wire array while simultaneously moving the workpiece along the workpiece axis by means of an actuating element in accordance with the specification of a second correction profile, which specifies the travel of the workpiece, wherein the first and second correction 25 profiles are opposed to a shape deviation; determining the shape deviation during each of the cut-off operations and/or before each of the cut-off operations; and in dependence on the depth of cut, setting operating parameters such as the feed rate, the amount of working fluid fed to the wire array per unit time, the temperature of the working fluid, the wire speed, the wire consumption per cut-off operation and the 30 wire tension.

Drawing relating to abstract: Figure 1