

Abstract

Method of producing a load-bearing steel construction connection, wherein a clinch connection (13) connecting a first metal workpiece (6.1, 6.2) with a second metal workpiece (6.3, 6.4) is formed by local deformation by means of a die tool (20) and a counter-tool (30). In that case initially the first metal workpiece (6.1, 6.2) and the second metal workpiece (6.3, 6.4) are placed one on the other on a processing surface of the counter-tool and aligned. The die of the die tool is then advanced and sunk into the two metal workpieces (6.1, 6.2; 6.3, 6.4) placed one on the other until the clinch connection (13) has been formed by plastic deformation. The first metal workpiece (6.1, 6.2) has a first workpiece thickness (t_1) and the second metal workpiece (6.3, 6.4) has a second workpiece thickness (t_2), which together give a total workpiece thickness (t_t) which is thicker than 8 millimetres. The die is designed to be rotationally symmetrical with respect to its rotational axis (24) and has a conically shaped transition region (21, 22) narrowing at an angle (W, W_1, W_2) in the direction of sinking-in of the die.

(Fig. 7)