

ABSTRACT

TOOL HEAD WITH EXTERNAL POWER SUPPLY

A tool head (10) for use in machine-tools has a base body (11), a tool shaft (20) that axially projects on the base body (11) and may be coupled to a machine spindle (22) that rotates in a stator (24) on the machine side, at least one current consumer on the side of the tool head and an external current supply arrangement (18) for the current consumer. The current supply arrangement (18) has an inductive current transmission section with a primary coil arranged in a housing (34) on the machine side and a secondary coil arranged in a housing (26) on the side of the tool head that surrounds the tool shaft (20) like a ring. In order to mount the inductive current transmission section (26, 34) in a particularly easy manner, even at a later date, without forming a disturbing contour while allowing tools to be automatically exchanged, the coil housing (34) on the machine side engages on the stator side a free axial space between the machine spindle (22) and the tool head (10) that surrounds the tool shaft (20) like a ring, that partially surrounds only segments of the tool shaft (20) in the circumferential direction, leaving a free space (43) for radial access to the tool shaft (20), and that is separated from the coil housing (34) on the side of the tool head by an axial air gap (35).

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