

Title (en)

IMPROVEMENTS IN AND RELATING TO GRINDING MACHINES

Title (de)

VERBESSERUNGEN VON SCHLEIFMASCHINEN UND DIESE BETREFFEND

Title (fr)

PERFECTIONNEMENTS APPORTES AUX MACHINES A RECTIFIER

Publication

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Application

EP 04798452 A 20041108

Priority

- GB 2004004729 W 20041108
- GB 0327104 A 20031121

Abstract (en)

[origin: GB2408224A] A grinding machine comprising: a base; a wheelhead 10 with a grinding wheel 12 and wheel drive mounted thereon; a workholder 23 and drive means for rotating a workpiece 22 mounted therein about at least one axis 24; workholder drive means for moving the workholder 23 relative to the machine base; wheelhead drive means for moving the wheelhead 10 relative to the machine base and a programmable computer based control system for independently controlling the drives to perform a grinding operation by engaging the wheel 12 with the workpiece 22. The wheelhead 10 is moveable along two orthogonal x and z axes, 25 and 19, in a first plane in which movement along the x-axis 25 moves the wheel 12 towards or away from the workholder 23; the workholder 23 is rotatable about a c-axis 24 that is parallel to and in the same plane as the axis of rotation of the wheel 12. The common plane being coincident with or parallel to said first plane. During engagement between the wheel 12 and workpiece 22, the control system controls the rotational movement of the workpiece about the c-axis 24 and the movement of the wheelhead 23 along the x and z axes, 25 and 19, so as to determine how the workpiece 22 is to be ground. Varying oscillatory movement can be used to grind flat slots. A plurality of wheel dressing tools 26, 28 and 30 or additional machining tools (figures 3 and 4, 42, 43) may also be provided.

IPC 8 full level

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