

Title (en)

Edge grinding machine for plate-shaped workpieces, particularly plates of glass or stone.

Title (de)

Kantenschleifmaschine für plattenförmige Werkstücke, insbesondere Glas- oder Steinplatten.

Title (fr)

Machine pour meuler les bords de pièces en forme de plaques, en particulier des plaques de verre ou de pierre.

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Application

EP 81100704 A 19810131

Priority

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Abstract (en)

1. An edge grinding machine for plate-shaped workpieces, particularly plates of glass or stone or the like, comprising a gripping means for gripping the workpiece which is to be machined and which is disposed in a horizontal position with in particular edge portions thereof projecting freely on all sides, said gripping means being disposed on the upper end of a support (A) and comprising in particular a plurality of horizontally disposed suction grippers (C), a cantilever arm which is disposed horizontally radially with respect to the support (A) and which is rotatable around the support in particular through a full 360 degrees, and a grinding unit (1) which is guided displaceably by means of a carriage or the like on the cantilever arm, from and towards the workpiece, and which comprises a grinding wheel (M) which in particular is of a cup-shaped, annular or plate-shaped configuration and which is somewhat inclined with its underneath head surface relative to the plane of the workpiece and which can be pressed against the edge of the workpiece from above, a counter-pressure roller (R2) which is arranged in the region of the grinding wheel on the underside of the workpiece, a guide roller which bears laterally against the peripheral surface of the workpiece, and a drive motor for the grinding wheel, characterised in that the grinding unit (1) is secured to an intermediate holder (34) in such a way as to be pivotal and lockable about a horizontal pivot axis (29) extending parallel to the cantilever arm (E), that is to say, radially with respect to the workpiece (D), by means of a first arcuate guide (28, 30), which intermediate holder (34) is mounted on the carriage (F) which is displaceable in the longitudinal direction of the cantilever arm (E), in such a way as to be pivotal and lockable about a horizontal pivot axis (129) directed transversely with respect to the cantilever arm (E), that is to say, tangentially with respect to the workpiece (D), by means of a second arcuate guide (35, 36), wherein the grinding wheel (M) is secured to the lower end of a vertical grinding spindle (6) which is drivable by a hydraulic motor (10) and which is displaceable upwardly and downwardly in the grinding unit (1) by manual actuating means (16), and the downward stroke movement of the grinding spindle (6) is restricted by at least one adjustable abutment (19).

Abstract (de)

Das mit Hilfe eines waagerechten, drehbaren Auslegerarms um das Werkstück (D) herumführbare und mit Hilfe eines Schlittens (F) auf dem Auslegerarm vom und zum Werkstück (D) verschiebbare Schleifaggregat (1) ist durch eine erste kreisbogenförmige Führung (28, 30) auf einem Zwischenhalter (34) befestigt, der durch eine zweite kreisbogenförmige Führung (35, 36) auf dem Schlitten (F) gelagert ist. Das Schleifaggregat (1) kann infolgedessen um zwei zueinander rechtwinklig durch die Drehachse der Schleifscheibe(M) verlaufende, in der unteren Kopffläche der Schleifscheibe(M) liegende Schwenkachsen verschwenkt und in der gewünschten, zur Werkstückebene geneigten Arbeitsstellung festgelegt werden. Die handmässig auf und ab verschiebbare Schleifspindel (6) wird von einem Hydraulikmotor (10) angetrieben. Der Abwärtshub der Schleifspindel (6) wird von einstellbaren Anschlagsschrauben (19) begrenzt.

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IPC 8 full level

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Cited by

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