

Title (en)
EXTRUSION SYSTEM COMPRISING A BACK PRESSURE CONTROLLING BRAKE DEVICE

Title (de)
EXTRUSIONSANLAGE MIT STAUDRUCKREGELNDER BREMSEINRICHTUNG

Title (fr)
INSTALLATION D'EXTRUSION À DISPOSITIF DE FREINAGE POUR LA RÉGULATION DE PRESSION DYNAMIQUE

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Abstract (en)
[origin: WO2010084094A2] The invention relates to an extrusion system for producing cylindrical semi-finished plastic products. The extrusion system comprises an extruder (1) for making available a pressurized plastic melt, at least one extrusion die (7) arranged on the extruder (1) and allowing the melt to leave the extruder (1) as a substantially cylindrical plastic strand (8), a calibration unit (2) which is mounted downstream of the extrusion die (7) and through which the freshly extruded plastic strand (8) passes, said calibration unit cooling the plastic strand (8) and giving it an outer diameter (d), a brake device (3) mounted downstream of the calibration unit (2) and adapted to introduce a variable axial force (A) into the plastic strand (8), said axial force being opposite to the advance of the plastic strand, and a force transducer (9) measuring the axial force (A) introduced into the plastic strand (8) by the brake device (3). The aim of the invention is to improve said extrusion system in such a manner that a better standard quality can be obtained and that it is suitable for the processing of high-temperature resisting plastics. For this purpose, the brake device (3) comprises at least one brake block (16) having a friction surface (19) which brake block is guided so as to be radially movable relative to the plastic strand (8). A radial force (R) is applied to the radially movably guided brake block (16) with its friction surface (19) resting on the periphery of the plastic strand (8) to introduce the axial force (A) into the plastic strand (8). The friction surface (19) has the shape of a grooved section of the surface area of a cylinder.

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