

3D printer for construction comprises a base on which a vertical guide column is mounted, a replacement unit mounted on the guide column, a main jib attached to the replacement unit support and rotation mechanism, mounted so as to allow vertical movement and rotation in the horizontal plane, an auxiliary jib mounted on the outer end of the main jib and capable of rotating in the horizontal plane; and an extrusion unit secured to the outer end of the auxiliary jib and connected via a solution supply line to a mixing unit. The guide column is collapsible. The guide column, main jib, and auxiliary jib are made of square-section structural members. Replacement unit for vertical movement consists of a carriage; equipment for preparing the mixing unit solution mounted on a swivel support on the side opposite the one where the main jib is located. The base consists of an X-shaped four-legged frame, with an automated support mounted at each of its extended ends. Each support contains a lifting mechanism mounted inside the housing, which includes a stepper motor connected to an encoder; a gearbox is connected to the stepper motor, the shaft of which is connected to one end of the lead screw of the actuator, which also includes a movable plate with sliders mounted on the gearbox, and a support nut mounted on a flange that is rigidly secured to the lower part of the housing. The other end of the lead screw is connected to the support plate via a ball support, and the space between the support plate and the lower part of the housing is enclosed by a corrugated protective cover. The stepper motor is connected to the control and data processing unit.