Invention relates to mechanical engineering technology and can be used to manufacture screw blanks from cast iron, alloyed corrosion-resistant and heat-resistant metals and alloys for the production of extruder and injection molding machines, screw drills, and working parts of screw conveyors. The claimed method for manufacturing screw blank is carried out by means of air-plasma cutting along a helical path of the raw blank material to form coils and a helical groove in the resulting intermediate screw blank using an air-plasma jet directed tangentially to the concentric surface that follows the contour of the profile of such a helical groove. Simultaneously with the air-plasma cutting of the blank, a helical path of surfacing is performed using a hard alloy material to reinforce the outer edges of the formed coils of the intermediate screw blank, which have been heated by the air-plasma cutting process. The invention involves simplifying the structure of the manufacturing process, reducing the need for production space, separate process equipment, reducing the time required to implement this method, as well as ensuring the production of high-quality screw blanks by increasing the wear resistance of their outer edge and reducing the likelihood of crystallization and cold cracks in the deposited layer on the outer edge of the screw flight.