Invention relates to mechanical engineering technology and can be used to manufacture screw blanks from low-ductility and high-alloy alloys for the production of working parts for screw conveyors, metal-cutting tools with helical blades, screw piles, and anchors.

Method for manufacturing screw blanks, in which, on a screw-rolling piercing mill, a long mandrel with a deforming tip is inserted into the body of a preheated solid cylindrical blank, which performs rotational and translational movements with the aid of rolls, which rotate until a hollow profile is formed in the workpiece being processed. Simultaneously with the penetration of the long mandrel with a deforming nose into the body of the solid cylindrical blank, through-air -plasma cutting of the wall of the formed hollow profile is performed along helical lines using at least two plasma jets offset from one another in the circumferential direction and directed radially, resulting in the simultaneous formation of at least two blanks.

Method involves reducing the need for production space and process equipment, decreasing the time required to implement this method, expanding the technological capabilities of the process for producing screw blanks with greater pitch heights, and improving the quality of the resulting blanks made from low-ductility and high-alloy metals and alloys.