

Method for manufacturing shaped screw blank involves performing air-plasma cutting along a helical line on a shaped cylindrical blank to form a helical groove using an air-plasma flow, tangent to the concentric surface that bends around the hole of the helical groove profile. Wherein, the shaped screw blank is produced in two processing steps. Prior to forming the helical groove, the shaped cylindrical blank is produced in the first processing step by air-plasma cutting of the initial cylindrical blank to form longitudinal grooves using an air-plasma flow, positioned at an angle of  $40^{\circ}$ – $60^{\circ}$  to the longitudinal axis of the blank and moving along said axis. After cutting one longitudinal groove, the initial cylindrical blank is rotated by the angular pitch of the longitudinal grooves.