

Method for manufacturing blades on screw flights using a forming roller, in which the blades are manufactured on the screw flights using a mandrel installed in the drive chuck of the machine and a forming roller. The screw flight is mounted on the mandrel that holds the forming sleeve, and the mandrel is installed in the drive chuck of the machine. On the right end surface of the forming sleeve, recesses are periodically made to accommodate the bending of the screw flight blades, and on the outer surface of the screw flight, there are slots cut out to form the blades. On the left end surface of the forming roller, there are projections with a matching profile that of the recesses on the right end surface of the forming sleeve; these projections correspond to the form of the blades. The forming roller is mounted on the sleeve using a keyed connection that allows axial movement, and its right end surface is supported by a compression spring, the other end of which rests against a projection on the sleeve. The sleeve is mounted on the shaft so that it can rotate freely in the bearing part, which is secured by an outer retaining ring on the sleeve and an inner retaining ring on the shaft. The shaft, on which the sleeve with the forming roller is mounted, is installed in the machine's tool holder. The blades on the screw flight are manufactured by inserting the forming roller into the inter-turn space of the screw flight and engaging the rotating motion of the machine's chuck with the mandrel, and by initiating the feed motion of the machine tool's tool holder with the forming roller, which causes the blades to bend into the recess of the forming sleeve by means of the protrusions of the forming roller, which is pressed by a compression spring through the screw flight against the forming sleeve and is caused to move in a circular path around the center.