

Method for manufacturing blades on screw flights using a calibration and bending tool, in which the blades are manufactured on the screw flights using a mandrel installed in the machine's chuck. The screw flight is mounted on the mandrel, on which the forming sleeve is placed, and the mandrel is installed in the machine's chuck. On the right end surface of the forming sleeve, recesses are periodically made to accommodate the bending of the screw flight blades. 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 calibration and bending tool is mounted on the sleeve using a keyed connection that allows axial movement. The right end surface of the tool is supported by a compression spring, the other end of which rests against a projection on the sleeve. The sleeve is placed in the machine's tool holder. The blades of the screw flight are manufactured by inserting a calibrating and bending tool into the inter-turn space of the screw flight and engaging the rotating motion of the machine chuck with the mandrel, as well as the feed motion of the machine tool holder with the calibrating and bending tool, which causes the blades to bend into the recess of the forming sleeve by means of a protrusion on the calibrating and bending tool. This protrusion is pressed against the forming sleeve via the screw flight by a compression spring and ensures its reciprocating motion during the blade bending process.