

Invention relates to the technology of finish machining of two butt ends of cylindrical components. The method of double-sided finish machining of the ends of cylindrical components includes the rotation of components around their axes and their displacement over circular arc between two abrasive disks, which rotate, each of which is turned for the angle  $\alpha$  relative to their rotational axis. According to the invention, flexible abrasive disks are used, and the angle of turning of flexible abrasive disks  $\alpha$  toward the axes of their rotation is such that the half of the difference between maximum and minimum distances between cutting edges of flexible abrasive disks is 2-10 times greater than the depth of the rounding of sharp edges. Invention provides for performance during machining the rounding of sharp edges upon transfer of flat butt end of component to the surface of flat for set value, improvement of the quality and output of operation.