The invention relates to a device for sharpening helical knives, used in the machines for corn cutting off the corn cobs in the milky-wax ripeness phase.

The device contains a frame 1, wherein there are installed an electric motor 2 with abrasive disk 3, the rotation plane of which is placed vertically and a guiding mechanism 5 for the knife 22 with drives of vertical, horizontal and rotary-helical motions. The drive of rotary-helical motion contains a body 20 with a shaft placed about the horizontal at an angle equal to the slope of the knife cutting edge. The frontal end of the shaft contains a knife 22 holder 6. Onto the cylindrical surface of the shaft it is executed a helical groove, the slope of which is equal to the sharpening angle of the knife edge. The knife part, containing the edge, is placed with its longitudinal part along the shaft axle.

The result consists in the possibility of attributing the knife a rotary-helical motion for sharpening knives with small radius of curvature.