

Vibrating conveyor consists of an outer and inner oscillating mass, which are nested one inside the other, with their centers of mass aligned, two sets of flat springs connecting the outer and inner masses, a two-stroke electromagnetic vibration generator with path passing through the centers of mass, and vibration isolators installed under the tie rods at the ends of the spring sets. The conveyor contains an additional oscillating mass in the form of a closed frame with a conveyor trough; its center of mass coincides with the centers of the other two oscillating masses and is equidistant from the outer mass, and the additional mass is connected to the outer mass by four blocks of flat springs, arranged in pairs and symmetrically with respect to the centers of mass, and a two-stroke electromagnetic vibration exciter is installed between the additional and outer masses, with a path passing through the centers of mass, where two blocks of flat springs are additionally installed between the outer and inner masses, which are symmetrical relative to the other two blocks; the spring blocks between the outer and inner masses are installed at an angle (β) to the vertical, and the spring blocks located between the outer and additional masses are installed at an angle ($-\beta$) to the vertical, and the frequency of the vibrators located between the additional and outer masses is half that of the vibrators located between the outer and inner masses, where the end ties of the springs located between the additional and outer masses are rigidly connected in pairs by four plates, and the end ties of the springs located between the outer and inner masses are rigidly connected in groups of four by two plates, under which vibration isolators are installed.