

The invention relates to vibration technology and can be used in the vibroimpact systems and manufacturing processes with frequency range up to few kHz, in particular in the vibration systems of cutting tool. A vibration unit contains n pairs of electromagnets, each of which includes the electromagnets 1, 2 located towards each other with individual excitation coils 3, 4 and armatures 5 installed between them with a clearance and connected with a basis 6 through a linear elastic system 7. The excitation coils 3 and 4 are connected through appropriate switches 8, 9 with a current source 10, a control input of each switch 8, 9 is connected through a system 11 of selection of a phase shift between start of the corresponding pairs of electromagnets to a source 12 of demand signals, and the control inputs of current source 10 and source 12 of demand signals are connected with the output of a setting device 13 of amplitude and frequency of excitation of the coils, in the case each of the armatures 5 is equipped with an elastic limiting system of motion of the armatures 5 with a fixed upper limitation 14 and lower limiting faces 15 rigidly connected with the armatures 5 installed with possibility of impact into an anvil of concentrator of impacts 16, which through the second elastic system 17 is connected with the basis 6.