

An air cleaning appliance for an internal combustion engine relates to the area of machine-building, in particular, to appliances for air coming to the CE purification. This appliance has installed in direction of air flow filtering element, deflector, inlet branch pipe, as a confuser, with a narrowing angle of 60° , inlet channel with inertia grid and inertial element, installed in opposite positions with respect to each other, cyclone block, to which dust collector and branch pipe for dust exhaust are connected. On the inlet branch pipe rim is installed, and a partition is fixed, at angle 55° to the rim, and with a gap between those. In front of the partition, at right angle to the rim deflector is fixed, with a gap with respect to the partition. To the deflector direction plate is fixed, at angle 10° to the plane of inertial element. Filtering element is installed at the edge of the rim, at the side of air inlet. Deflector is made as a plate with bended sides, to the side of the inlet branch pipe, and its flat part is parallel top the filtering element. Area of cross-section of the inlet channel at the side of air inlet is 5 – 7 times larger than the area of cross-section of the inlet channel at the side of dust discharge. Inertial element is made as corrugated plate, in which the crimps are directed along the long axis of the inlet branch pipe. Inertial grid is installed at angle 20° to the long axis of the inlet branch pipe. Area of the base of dust collector is parallel to the long axis of the cyclones, installed at right angle to the long axis of the inlet branch pipe. Each cyclone with the inlet branch pipe for polluted air is connected to the inlet branch pipe, with the outlet branch pipe for polluted air – to the branch pipe of the dust discharge, and with outlet branch pipe for cleaned air – to the outlet branch pipe for cleaned air. Technical result is in increase of efficiency of air cleaning.