

The invention relates to sampling equipment. Cyclic aspirator with explosion safe implementation has fixed lower and movable upper platforms. The last one is installed on the lower platform on beams with possibility of displacement with respect to it in vertical direction and fixation of given position prescribed by needed volume of sampled air sample in cycle. To the lower part of the upper platform bell is rigidly connected with the closed end. To the upper platform piston is connected by means of stoppers by the upper section, this is arranged as hollow cylinder with bottom, with possibility of separation of the last one from the upper platform at operation of stoppers. The bell is surrounded with the piston and with its open part it is immersed to circular peripheral cavity provided in the bottom of the piston. The last one is filled with liquid that together with the balls of the bell and the piston forms hydraulic gate. Intake cavity is formed by not immersed to liquid inner surfaces of the bell and the bottom of the piston and the surface of liquid. Opening for sampling is connected through back aspiration valve and air duct to absorbing elements placed on telescopic beam. Intake vessel is equipped with air valve and air duct – with calibrated aspiration valve. Technical result is in use of potential energy of lifted to upper position piston, this increases explosion safety, accuracy of operation and reliability of aspirator.