

The invention relates to the diaphragm cells and may find its application in the dairy industry for protein extraction from whey.

The diaphragm cell comprises a dielectric body (1) with anodic and cathodic cells (2, 3), electrodes (5, 6), connected to a current source, branch pipes for supply (7, 9) and removal (8, 10) of the whey and of the anodic liquor. The body (1) is made in the form of semicylindrical trough, on the inside of which there is installed the cathode (5), and on the lateral sides there are fixed chutes (12), inside the body (1) onto a tubular shaft (13) it is placed the anode (6), made in the form of drum (14) with perforated longitudinal and transversal ribs (15) fixed onto its shell, and over the drum (14) there is passed the diaphragm (4) in the form of endless belt, passing through a system of rolls (17) and a treatment device (11). The surfaces of the cylinder (14) and the diaphragm (4) form the anodic cell (2), connected through radial pipes (16) and the tubular shaft (13) to the branch pipes for supply (7) and removal (8) of the anodic liquor, the body (1) and the diaphragm (4) form the cathodic cell (3), connected to the branch pipes for supply (9) and removal (10) of the whey.

Claims: 3

Fig.: 3

